

University of Tourism and Management in Skopje

INTERNATIONAL CONGRESS FOR BUSINESS,
ECONOMY, SPORT AND TOURISM, 2020

**ALTERNATIVE PATHS FOR DEVELOPMENT
OF EMERGING ECONOMIES IN GLOBAL
BUSINESS ENVIRONMENT**

Proceeding



Skopje, Macedonia

University of Tourism and Management in Skopje

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ECONOMY, SPORT AND TOURISM, 2020

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Ladies and Gentlemen,

It is my great honor and pleasure to welcome you to the Seventh International Congress, ICON BEST 2020, on the topic: „ALTERNATIVE PATHS FOR DEVELOPMENT OF EMERGING ECONOMIES IN GLOBAL BUSINESS ENVIRONMENT“. The Congress is organized by the University of Tourism and Management in Skopje which constantly monitors the educational, scientific and economic trends in the developed economies around Europe and all over the world, the idea is to create and implement innovations that will bring us closer to the standards of the European Union.

During the congress we want to open discussions with academicians how to foster economic development offering innovative approaches in the field of tourism, economy, entrepreneurship, human resources management, marketing management and information technologies. With working title of this congress we want to encourage scientists to provide solutions based on a strong academic foundation and highly specialized

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business knowledge bases in order to reach high productivity of emerging economies in dynamic global arena.

I am convinced that each of us will give an extremely high contribution to the exchange of information and its current scientific thoughts while sharing ideas about tourism, economy, education in the 21st century, managing intellectual capital as well as creating an entrepreneurial business environment. The best practices for improving the business climate in the region and wider will be presented at the Congress. At the same time you will have the opportunity to establish contacts with prominent leaders in the field of tourism and management.

Thank you for participating in the Congress.

Rector

Prof. Dr. Sci. Ace Milenkovski

INTERNATIONAL CONGRESS FOR BUSINESS, ECONOMY, SPORT AND TOURISM, 2020

ALTERNATIVE PATHS FOR DEVELOPMENT OF EMERGING ECONOMIES IN GLOBAL BUSINESS ENVIRONMENT

About the congress

International Congress for Business, Economy, Sport and Tourism - ICON BEST 2020 is an International congress regarding research in business, sport, economy and tourism organized by the University of Tourism and Management in Skopje. The ICON BEST is traditionally organized since 2008. It first started as a Scientific Conference and from 2009 was organized as a Scientific Congress and as a biennial event. This year we celebrate and organize the 7th Scientific Congress.

The main aim of the congress is to put emphasis on the importance of business, economy, sport and tourism as important factors for improvement of national economic development. This year the working title of the congress is **“Alternative paths for development of emerging economies in global business environment”**.

During the congress we want to open discussions with academicians how to foster economic development offering innovative approaches in the field of tourism, economy, entrepreneurship, human resources management, marketing management and information technologies. With working title of this congress we want to encourage scientists to provide solutions based on a strong academic foundation and highly specialized business knowledge bases in order to reach high productivity of emerging economies in dynamic global arena.

This international congress aims to support the academics, researchers and PhD students by offering them an opportunity to present their latest research results in the fields of education, social

sciences, sports, tourism, business & economics, finance and management through which they can contribute to the social development, building a higher level of awareness, and an appropriate approach to domestic and global problems. The knowledge and the professional skills are a vibrant and dynamic process that is always changing and improving, so the ability to keep up to date with it and enrich the professional competencies is inevitable in the academic and scientific world.

This year ICON BEST 2020 will be organized as a Virtual Congress, covering different topics in:

- **Tourism** (Socio Cultural Effects of Tourism, Cultural and Economic Effects of Events on Destination, Environmental Impacts of Tourism, Food Culture and Tourism, Tourism in Multimedia, Gastronomy as a tourism resource: profile of the culinary tourist, Safety and security in global tourism, Entrepreneurship in Tourism, Sustainable tourism and well-being),

- **Marketing & Integrated Marketing Communications** (Marketing (Product & Service, International Marketing, Marketing Logistics, Strategic marketing, Advertising, Integrated Marketing Communications, Strategies of Marketing Communication, Pricing Strategy, International Marketing Strategy and Sustainability, E-Business and Competitive Strategy, Branding, Marketing planning, Public relations, Strategic Marketing Management for Nonprofit Organizations),

- **Information technologies** (Software Engineering, Software Systems, Software Verification, Databases, Natural Language Processing, Applied Mathematics, Computer Networks, Cloud Computing, Distributed Systems, Management of Information Systems, Information Management, E-Business, E-Governance, ICT in Education, Digital Society),

- **HR Management & Leadership Skills and Competences** (Recruiting and Hiring Trends, Aligning Corporate Culture with Business Strategy, Effective HR Business Strategies, Talent Management Strategies, Performance Management Innovation, HR Technology, HR Innovation, Employee

Engagement, Aligning Corporate Culture with Business Strategy, Engagement & Culture),

- **Management & Entrepreneurship and New Technologies** (Strategic management, Innovation management, Investment management, Information management systems, Total quality management, Entrepreneurial management, Social entrepreneurship, Technological entrepreneurship, Entrepreneurial business, Business ethics, Globalization and business, Sustainable development, Competitive advantage, Information and communication technologies),

- **Economy & Finance** (Sharing Economy, Microeconomics, Macroeconomics, Finance and Banking, Labor Economics, International Economics, International Finance, Public Economics, Public Administration and Management , E-Business and Competitive Strategy),

- **Business education and Quality Assurance** (Teaching practices, Student performance, Learning environments, Accounting education, Finance education, Management education, Marketing education, Organizational behavior, Business curriculum development),

- **Politics and Legal aspects of Education** (How Should Politics Influence Education Policy, Reflections on the Future of Global Higher Education, New Century Education System: Cultural, Political & Social Influences, Contemporary Issues in Law and Politics of Education, Managing the law in education: Strategies for education leaders and the organizations that support them, The changing political terrain: Trends affecting higher education, Conflict Resolution and World Education),

- **Open Topics Related to Business Education** (Bridging the gap between education and business on global and local level, Digital media and business education, Innovation, entrepreneurship and education, Social responsibility and business strategy alignment, Learning by doing - reshaping the classroom).

- **The Challenges of global COVID-19 pandemic.**

The best ranked papers from the Congress should be published in the December 2020 issue of the International *UTMS Journal of economics*, indexed and abstracted in following databases: ABI/INFORM (ProQuest); ABI/INFORM Global (ProQuest), AP PLATFORMS; C.I.R.E.T.; DOAJ; EBSCO; EconBiz; Eonis; EconPapers; EconStor; EDRIC; EZB; GOOGLE SCHOLAR; IDEAS; Open J-Gate; RePEc; Socionet; ZBW, Business Collection (ProQuest), Business Premium Collection (ProQuest).

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CONTEMPORARY CHALLENGES OF TOURISM

Dejan Nakovski¹
Ace Milenkovski,
Mijalce Gjorgievski

Abstract

Tourism is an economic activity that is very sensitive to social, economic, political and security changes. Such changes can be both positive and negative. These may be in the tourist destination or the area from where the tourists come from. The changes may affect tourists, tourism workers, travel companies, stakeholders, the domicile population, the local community, etc. Tourism in the Republic of North Macedonia is no exception and is not immune to such changes. Ongoing changes that may occur are a challenge for the entire tourism industry but also for tourist destinations when it comes to their management and development. The authors aim in the paper to present the modern challenges of tourism in the country, and to propose models and new ways of understanding the need for flexible and adaptable tourist offers that will meet the contemporary challenge.

Keywords: tourism destination, tourism offer, policy, development

JEL classification: L83; Z32; I15; O18

INTRODUCTION

Tourism is changeable and dynamic, activity, adaptable to the contemporary needs of society. The factors that influence the change of tourism are various. Lifestyle, urbanization, standard of living, industrialization, working hours, transport, internet, safety, human health and many others factors as well affect tourism. When we talk about tourism today, we are actually talking about trends that will affect the medium and long-term plans for tourism development in the future. Global tourism will continue to grow along with world prosperity and well-being, but will be strongly influenced by contemporary trends such as: socio-demographic trends; economic trends expressed through declining poverty and a growing middle class; technological revolution and evolution; digitalization of tourism; health and healthy lifestyle; political tensions; security; threats of terrorism, etc.

In terms of socio-demographic trend, the aging population is one of the fastest growing segments of the tourism market. In 2050, 21% of the world's population is

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projected to be over the age of 60, and the majority will be in Europe, America and Asia, which are the most important emitting tourist destinations. This age group of tourists is characterized by some common features: they are financially secure, more purchasing power, free time, need for health and wellness trips, etc.

In addition to the mentioned socio-demographic trends, the presence of the Millennium Generation Y is especially important, which is expected to represent 50% of all travelers by 2025, the focus of this generation is research, interaction and emotional experience, and expect a greater connection between tourist services and everyday life. Also in the future, the impact of the Post-Millennium Generation Z on tourism will become crucial, as it is a generation that is fully integrated into the digital world, which will require a significant adjustment of the tourism sector.

Poverty reduction and the growing middle class will also have an impact on tourism. The middle class is expected to reach a population of 3.2 billion by 2021, while by 2030 that number will increase to 4.9 billion, so this increase in the middle class will significantly change the profile of the international tourist / traveler. With the growing middle class and their search for tourist offers that offer value for money and different tourist interests, there is a need for connection of destinations which in the future will be a very important trend in tourist travel.

The technological revolution and digitalization are trends that greatly influence the changes and shaping the future offer in tourism. The tourism industry is strongly influenced by the progress of technology, due to which the entire tourism industry must adopt new technological trends, rethink its strategies and reshape the way it provides its services.

At the same time, the importance of social networks in tourism is increasing. Facing our lives online today is more of a standard than a novelty. SoMo (Social + Mobile) (social networks + mobile phones) are channels that are part of our daily lives, so generally today the leisure process begins and ends with the Internet.

A particularly important segment of modern trends is taking care of the personal health of the modern tourist, it means prevention which is one of the key factors for improving health. Therefore, the integrated cooperation between the health and tourism sector in the future will open new opportunities for health tourism. For tourist destinations that will want to meet the needs of these tourists, a key step will be the integration of the additional offer in the destination, in order to create a homogeneous offer.

One of the priorities of the tourism industry in the future must be the safety in tourism from all aspects. The challenges in this area that need to be addressed by tourism are: ethnic, cultural, religious differences that lead to different tensions; political unrest; military actions; threats of terrorism; transport uncertainty; long security procedures at airports, etc.

Tourism is growing at a phenomenal rate and is one of the key socio-economic drivers around the world, thus affecting world development, prosperity and well-being. It is therefore necessary to monitor the future development of these trends and to achieve long-term sustainability in tourism through a balanced relationship between

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economic, environmental and social pillars, which is a continuous process that requires the participation of all relevant stakeholders.

Tourist offer of the Republic of Macedonia is still too traditional, i.e. it mostly consists of summer mass tourism and winter tourism as a major tourist forms. As a result of such tourist offer it is normal to have weak or insufficient tourism development in the state, which through statistical indicators will be presented in the paper. The authors in the analysis of this unsatisfactory situation proceed from the assumption that the level on which tourism is placed in the country largely depends on tourism product which is offered on the modern tourist that in terms of the product is becoming increasingly fastidious. This leads to the thinking that enrichment and expansion of the tourism product is necessary but with greater participation of some of the specific tourism forms. Such alternative authors perceive in manifestations - events, which with their specifics should contribute to the enrichment of the tourist product, the dispersion of tourist offer through other cities in the country as opposed to the current concentration in few cities - tourist destinations, time dispersion of tourist movement or initiation of tourist movement throughout the year. The great impact on events is emphasized by multiple authors. The world tourism, a growing importance is given to the event as a tourist product, which is best manifested through the new trends in the tourist supply aimed at increasing the interest in learning about cultures, customs and traditions of different countries and areas (Susic and Djordzevic 2011). In order manifestations - events in the Republic of Macedonia to become a major part of the tourism product, strategic management is necessary their and of course the appropriate PR - approach and strategy.

1. METODOLOGY

The methodological approach in the preparation of this paper consists of two parts. In the first part an analysis of the current level of tourism comprehension in the Republic of Macedonia is made, which is expressed through tourism statistical indicators, while in the second part solutions that should enrich and supplement tourism product of the country taken as a whole as a tourist destination are offered.

In preparing the paper more scientific research methods are used in order to obtain relevant results, such methods are: a statistical method for statistical presentation of data, comparative method to compare data, methods of analysis and synthesis with whose application the collected data have been processed, graphical methods for presentation of the results and so on.

2. REVIEW AND ANALYSIS OF THE TOURIST ARRIVALS AND OVERNIGHTS

The main indicators that indicate the level of tourism development in the Republic of Macedonia are the number of tourist arrivals, the number of realized tourist overnights and realized tourist turnover i.e. tourist consumption.

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Table 1. Tourist arrivals in the period from 2009 to 2019

Year	Tourist arrivals		
	Total	Domestic tourists	Foreign tourists
2009	465.015	299.709	165.306
2010	509.706	312.490	197.216
2011	499.473	297.116	202.357
2012	536.212	306.132	230.080
2013	605.320	350.363	254.957
2014	587.770	328.566	259.204
2015	586.241	324.545	261.696
2016	647.568	320.097	327.471
2017	663.633	312.274	351.359
2018	701.794	302.114	399.680
2019	735.650	310.336	425.314

Source: Data from Statistical review: Transport, tourism and other services. 2020. State statistical office of the Republic of Macedonia. 2020: 11, table 01.

From the data presented in Table 1, it is immediately evident that the general increase in the number of tourists who have visited the Republic of Macedonia for the ten-year period that has been processed. The total number of tourists who visit the country in over a year, is the largest in the last year 2019, while the lowest is in the first year that was analyzed i.e. in 2009, but the marked increase in the absolute number is 270 545 tourists i.e. expressed in a percentage it is a growth in the number of tourists for 58.2%. Sizable movement of tourist visits during the ten-year period, is with some oscillations in the period from 2009 to 2015, but then it is noticed a steady increase from 586,241 tourists in 2015, up to 735,650 tourists in 2019, it has increased by 149 409 tourists a year or in terms of percentage this represents an increase of 25.5%. What is particularly important in the analysis of the number of tourists who have visited the destination is the quantity of domestic and foreign tourists; here the data are quite optimistic, particularly in relation to the number of foreign tourists. The dynamics of the number of domestic tourists is quite less, so in 2019 compared to 2009 it has increased by only 10627 tourists expressed in absolute numbers or percentages that is an increase of only 3.5%, while during the examined period oscillations of 297,116 tourists are observed in 2011 and up to 350 363 domestic tourists in 2013, which is the best year in terms of the number of domestic tourists. But the situation is quite different when it comes to foreign tourists visiting the country, so there is an increase in the number and continuity of 165,306 foreign tourists in 2009 when their number increased to 425,314 tourists in 2019, in absolute numbers it is an increase of 260,008 tourists or in percentage it is an increase of 157.3%.

Such a large percentage of the growth in the number of foreign tourists, as well as in the total number of tourists in the ten-year period at a glance is an indicator of great tourist development of the country. However, to get a better idea of tourism development other indicators of tourism development must be analyzed, because tourism growth (*represented as the number of tourists*) does not always have to mean that there are developments that follow up the growth.

The following table presents the indicators of realized tourist overnights per year during the period from 2009 to 2019, which can be seen as the absolute number and so

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the average length of stay of tourists, which is an important indicator for the analysis of the country's tourism development.

Table 2. Tourist overnight in the period from 2009 to 2019

Year	Tourist overnight stays		
	Total	Domestic tourists	Foreign tourists
2009	1 865 434	1 504 845	360 589
2010	1 970 041	1 527 053	442 988
2011	1 917 395	1 474 550	442 845
2012	2 019 712	1 501 624	518 088
2013	2 235 520	1 648 073	587 447
2014	2 101 606	1 517 810	583 796
2015	2 020 217	1 461 185	559 032
2016	2 173 034	1 417 868	755 166
2017	2 151 692	1 339 946	811 746
2018	2 157 175	1 275 800	881 375
2019	2 195 883	1 273 370	922 513

Source: Data from Statistical review: Transport, tourism and other services. 2020. State statistical office of the Republic of Macedonia. 2020: 11, table 01.

The data in Table 2, reflected growth in the total number of realized overnight stays by tourists in the analyzed period. That growth expressed in absolute numbers is equal to 330,449 overnight stays in 2019 compared to 2009, which in percentage is 17.7%, if this data is compared to the growth in the number of tourists (Table 1) it may be noticed that the growth of realized nights does not follow the growth of realized tourist visits, the difference is 40.5%. Realized number of overnights by domestic tourists in the analyzed period it is recorded a decline and oscillations in the numbers throughout the period, i.e. in 2009 domestic tourists realized 1,504,845 overnight stays while in the last analyzed year there was a decline of about 231 475 nights, or in percentage it was 15.4%. But the situation with overnights spent by foreign tourists is considerably better, because there is the biggest growth for the analyzed period and is 155.8%, i.e. out of the realized number of 360 589 overnights in 2009, the number increased to 922,513 overnights realized in 2019. The evident growth realized by the foreign tourists is particularly significant in terms of the expected tourist trade (especially foreign exchange earnings) which should monitor the growth of realized overnight stays.

Next indicator of tourism development that can be obtained from the data analysis from Tables 1 and 2 is the average length of stay of tourists, as the total number of tourists and as well as individually on the domestic and foreign tourists. According to these indicators in relation to the total number of tourists, the average length of stay of tourists in 2009 in our country was 4.01 days, while in the last analyzed 2019, the number was 2.98 days, which shows a decrease in the average length of stay tourists to 1.03 days, or in percentage it is a drop of 25.6% which is not negligible. Domestic tourists in 2009 in destinations in the country stayed 5.02 days in average, while in 2019 their average stay was 4.1 days, which is a decrease in the average stay of 0.92 days, or in percentage decrease of 18.3%. The situation is similar among foreign

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tourists in 2009 staying in the country on average 2.18 days, while in the latest 2019 year; the average length of their stay was 2.16 days, an insignificant decrease.

The last indicator that is important in order to understand the country's tourism development is the realized tourism turnover, that besides being an economic indicator of income from activities it also indicates whether there is a real tourist destination development. The indicators of realized tourism turnover in the last five years from 2015 to 2019 are presented in the following table.

Table 3. Realized tourist turnover in the period from 2010 to 2014

Realized tourist turnover	
Year	Euros
2015	119 746 060
2016	127 302 001
2017	133 001 037
2018	137 118 387
2019	124 208 919

Source: Data from Statistical Yearbook of the Republic of Macedonia. 2020. State statistical office of the Republic of Macedonia. 2020: 589, table 14.02.1.

The data in Table 3 shows that the realized tourist turnover during the analyzed period, certain oscillations, but it generally marks certain increase in 2019, when the turnover was 119,746,060 Euros, compared to 2015, when the turnover was 124 208 919 Euros, the increase in turnover amounted to 4,462,859 Euros, or in percentage this increase was 3.72%. But it is also important to look at the movement of tourist turnover in the last four years from 2016 to 2019 when a decrease is noted, which is especially emphasized in 2019 compared to 2018 and to 12,909,468 Euros, or in percentage it a decrease of 9.4%.

The analyzed data from Tables 1, 2 and 3, the real conditions are perceived in the tourism development of the country, which indicates the following: in the analyzed period there is a continual increase in the number of tourist overnights and tourist movements, which indicates growth, but when the data for length of stay is analyzed and especially the realized tourism turnover, a decline of the same is noted. This indicates that the country, despite of the growth in the number of tourists who visit, there is no satisfactory tourist development i.e. has a small average length of stay of tourists, which normally results in a reduction of the actual tourist turnover.

3. THE MANIFESTATIONS – AN OPPORTUNITY TO ENRICH THE TOURIST OFFER IN THE REPUBLIC OF MACEDONIA

It is necessary to change the unfavourable spatial distribution of tourist movement in the country i.e. it is necessary to make efforts for a greater dispersion of tourist movement to other areas in the country (statistics recorded as Other resorts), in order to extend the tourist season, to reduce the emphasized seasonal nature of tourism in the country but also at the same time to increase the number of tourist arrivals and the

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realized tourist turnover. According to the authors it is possible to achieve enrichment of the diversity of the tourist offer in the country, taken as a whole in tourist terms, especially actualizing the events (all kinds of events) that are held in other cities and towns in the country in the Group - Other resorts. Events policy needs to recognize the complexity of stakeholder interests in events, and acknowledge that there are multiple motivations, needs, expectations and attitudes with respect to the development and implementation and management of events (Dredge and Whitford 2010). It means that in the country's tourist offer special attention should be paid to the specific tourism form - Event tourism, which the authors considered as one of the tourist forms through which the goals previously presented can be realized. This thinking is supported by the definition of events tourism by Yulan Y. Yuan, which event tourism defines as major one-time or recurring events of limited duration, developed primarily to enhance the awareness, appeal and profitability of a tourism destination in the short or long term, clearly, event tourism serves as an instrument in facilitating community-building, fostering urban renewal, and spurring tourism development to provide a better quality of life and environment (Yulan 2013). The manifestations that are traditionally held in towns and cities across the country, should be part of the overall tourism product or should be incorporated as an integral part of the tourist offer and thus to present a pull-factor to attract tourists to the destination, whether it comes to tourists who specifically attend the event or for tourists who are already in the country and the event would be an additional attraction, anyway manifestations have positive influence on tourism development at local and regional level. These festivals provide new opportunities to attract visitors to the festivals in order to increase the appeal of a tourist destination (Lopez-Bonilla, Lopez-Bonilla and Sanz-Altamira 2010).

The Republic of Macedonia as a small country, with a emphasized seasonal nature of the tourism movement and spatial concentration of tourists to several destinations, it should use the ethno-social characteristics of the population which is expressed through manifestations which are quite numerous and are organized in a number of settlements places, but also need to use the contemporary events in which are more promoted, organized and actualized in the country. Event planners need to create synergies among different events and integrate associated economic, tourism, leisure, sport, or socio-cultural objectives by formulating and implementing joint strategies (Ziakas 2010). Normally, all events are not all equally important to the development of tourism and each one of them do not have the same attractiveness to attract greater number of tourists, so special attention should be paid to major events and manifestations that are characterized by large and attractive attributes and can represent and independent tourists motives, the importance of major events in stresses by Getz, who says: all types of planned events have tourism potential, but larger events (in the domains of sport, festivals and other cultural celebrations and business) dominate in the literature and in event tourism development (Getz 2008). Therefore, the following table provides a basic overview of some of the major events in the country.

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Table 4. Some of the more important events in the Republic of Macedonia

Event	Location	Month	Visitors
Strumica Carnival	Strumica	II-III	over 50.000
Carnival „Prochka“	Prilep	II-III	over 30.000
Carnival „Bamburci“	v. Ratevo	I	over 4.000
Beer Fest	Prilep	VII	over 350.000
Pivolend	Skopje	IX	over 150.000
Vinoskop	Skopje	IX	over 20.000
Vevchani Carnival	v. Vevchani	I	over 10.000
Galichnik Wedding (Galichka svadba)	v. Galichnik	VII	over 5.000
Ohrid Summer Festival	Ohrid	VII - VIII	over 20.000
Skopje Jazz Festival	Skopje	X	over 5.000

Source: Data from Perishic Dushica. 2019. Catalog of cultural events ULC.

The data in the table presenting basic information on some of the most significant events in the country shows clearly that they attract a lot of visitors, in a very short period of time, because time character of the manifestations is short, usually they last one to two days. Another feature except large attendance is spatial dispersion, that many of the manifestations are held in places that are not traditional touristic. Next feature is the period when the manifestations are held, according to which they affect the extension of the tourist season or cushion the seasonal nature of the tourist movement in the rest of the year. Especially, the authors take into consideration the impact that manifestations have, particularly the larger and more massive visited ones (Beer Fest Prilep, Strumica Carnival- Strumica ...) on the establishment and recognition of these cities as manifestation - event or carnival cities, since these events are part of the tourist and cultural program of the same, this way they are branded i.e. the events brand the cities. City events can be seen as a tool of city branding, they are “planned events” or spatial-temporal phenomena, which are unique because of “interactions among the setting, people, and management systems-including design elements and the program (Gelders 2012). Despite the branding of cities and their greater tourist activation, manifestations and events have a major impact on the local community, its influence is evident in the economic, social, cultural, environmental and political terms. Festivals are emerging worldwide as a growing and vibrant sector of the tourism and leisure industries and are seen to have significant economic, socio-cultural and political impacts on a destination or host community (Arcodia and Whitford 2006).

CONCLUSION

According to the processed data and conducted analysis, it can be concluded that the understanding the condition of tourism in the Republic of Macedonia during the analyzed period is as follows:

A significant increase of 58.2% on the tourist movement, expressed in the number of arrivals of tourists, even more important it is that the increase in the arrival of foreign tourists is 157.3%.

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Also it is found an increase of 17.7% in the realized overnights by the tourists, which generated an increase in overnight stays by foreign tourists accounted for 155.8%.

The average length of stay of tourists in the analyzed period decreased by 25.6%.

Realized tourist turnover during the examined period marks an insignificant growth

Seasonality of tourist movement is visibly expressed, so most of the tourists visiting the country during the summer months of the year

Examining the analysis of the data it can be recorded and the spatial character of tourist movement, where it is evident that the tourist movement is so frequent in Other resorts.

The processed data suggest that although there is growth or an increase in the number of tourist arrivals, there is no evident tourist development that is also indicated by the other data. The reason for this unfavorable situation the authors detect in the less attractive and traditional tourist offer of the country, which is focused on a massive summer and winter tourism. The authors believe that it is necessary to enrich the tourist offer of the country with new, attractive tourist products, which will lead to spatial dispersion of tourists in other parts of the country and initiating the tourist movement throughout the year, it would lead to a greater number of visitors, increased tourist spending, which ultimately should result in greater tourism development due to better tourist offer.

One way to achieve the desired improvement of the tourism product in the country, the authors see in the increasing affirmation of events (all events) and their significant involvement in the strategies for tourism development on national and local level, and thus the aforementioned desired effects will be achieved.

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THE MOST INNOVATIVE SOLUTION FOR TRAVEL RESTRICTIONS IN THE COVID-19 PERIOD: VR TOURISM**Gonca Telli¹**
Deniz Altun**Abstract**

The purpose of this research is to examine the innovative tourism applications that can be provided with Virtual Reality (VR) technology in the tourism sector, which was adversely affected by social distance rules and travel restrictions imposed by the authorities during the COVID-19 pandemic, and to provide conceptual information about whether these applications are good alternatives. For this purpose, the infrastructure, features, applications, and case studies about VR technology, which is expected to reach a turnover of 62.1 billion US dollars in 2027, have been examined through literature review and the results have been revealed comparatively. While using VR technology, the concept of telepresence enables the user to feel as if "in there", and it has been revealed that this technology itself is a tool of experience. In addition, the tourism application areas such as cultural tourism, religious tourism, education tourism of institutions and worldwide private companies implementing VR tourism projects were scanned, the reasons for choosing this technology were examined. The research findings specify that the results of the tourism applications made with VR technology are successful in making people feel themselves in that experience. With VR tourism, it is considered that the user can recall the place/environment experienced again at a rate of over 90%. Remembering this experience is revealed that the strongest technology of experiential learning is VR technology. While the pandemic is going on, thanks to VR tourism applications, in education tourism: choosing a new school, enrolling in an academic program, participating in educational activities "as if you were there" are possible. In religious tourism: maintaining spiritual rituals and taking advantage of the supportive power of faith to help people cope with the challenges of the pandemic process are probable, additionally in cultural tourism: people who would not be physically able to visit under normal conditions may have the chance to access museums, historical places, and natural beauties. Especially, VR tourism allows disabled individuals to reach anywhere without any restrictions or difficulties. The findings reveal that VR tourism applications can be a strong alternative to classical tourism activities in the field of tourism sector during travel restrictions in the coronavirus pandemic period.

Keywords: COVID-19, experiential tourism, virtual reality, VR tourism*JEL classification:* L83; Z32; I15; O18**INTRODUCTION**

In most of the difficulties they face, people have developed new technologies outside of the applications in the age they live in, met their needs and adapted these new applications to their lives. The Covid-19 outbreak can also be considered as an obligation that we are facing and need various innovations. In addition to sectors such

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as the health and education sector, the tourism sector was also seriously affected by Covid-19.

In the tourism industry, which has been significantly affected by the global economic recession caused by the pandemic, it is necessary to discover creative practices and solutions to re-travel tourists and / or tourist candidates by overcoming their fears for the post-pandemic. The most useful method for this is to use VR, one of the disruptive technologies in tourism marketing. Thanks to its ability to make you feel like you are there, VR can be applied to the tourism industry in all areas from education to health, from culture to belief, and can be the lifeline for the industry with its positive impact on users. On the other hand, virtual tourism applications are seen as the only option due to travel restrictions during the pandemic process.

As with every new technology, some transformations can be expected in the industry due to VR tourism. In this period, when each mobile phone user has its own publisher, journalist or even video-blogger, it seems possible for tour operators or tourism companies to be able to take 360-degree VR videos and photos individually. Nowadays, this possibility is getting stronger with the introduction of high resolution 360 degree cameras to the end users.

Therefore, while VR tourism applications emerge as an inevitable solution in the Covid-19 period, it seems to change professions and specialties in the tourism industry and force transformation.

1. VIRTUAL REALITY TECHNOLOGY

People have been trying to convey non-existent things through mediums such as images and words and cave drawings by creating illusions and revealing the creations of imagination for centuries. Such as, past civilizations such as the Egyptians, Chaldeans, Jews, Romans, and Greeks used magic illusions to entertain and control the masses (Hopkins 1897). Although the applications and tools have changed in this process that has continued until today, such a concept of "immersion in the imagination" is the predecessor of the technology we think of as VR today.

The dream of the concept of "virtual reality", which we are exposed to as it has entered our lives today, is not new. It was the Wachowski brothers' film *The Matrix* in 1999 that made this technology a cult that almost everyone knew before it was named. The characters in the film lived in a simulated virtual world, many of whom were not completely aware of their real-world life. In spite of Huxley (1932) did not call it a virtual reality when he describes the phenomenon of "feeling like you are in the movies" in his book "Brave New World", after many technological studies on this subject over the years, Jaron Lanier, the founder of VPL Research, brought this name to the literature (Machover ve Tice 2001). After Lanier, the "virtual reality" term was used by Steuer (1992), Heim (1998), and Yoh (2001), respectively. Steuer (1992) defines virtual reality as a kind of experience, that is, a "real or simulated environment in which the sensor experiences telepresence" expressing the feeling of "being there" in a computer-mediated environment.

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Telepresence is the subjective experience of being in a computer-mediated environment, even when one is physically elsewhere. It also means sense of presence. The sense of presence effect can actually be seen in all environments, events, moments, or situations created by human imagination (Orth, ve diğerleri 2019). When reading a book, feeling as if you are entering the event in the book, perceiving as if you are in the movie as the protagonist while watching a movie, or even dreaming regardless of the trigger, and feeling mental as if you left the current location and went somewhere else a sense of presence. can be explained by the concept. Therefore, telepresence refers to enabling the person to feel the sense of presence through technological devices or environments. Briefly, the telepresence is the feeling of "being there" (Altun 2019).

Through a powerful feature like the telepresence effect, VR is a three-dimensional, artificially computer-generated 'micro-world' environment that can be discovered, navigated, and interacted with by users, supporting some similarity with reality (Karunasekera 2011, Fomenko 2006).

VR is the most immersive type of reality technology that integrates software and hardware on a local computer or network into a communication system and can convince human perception that it is somewhere where it really isn't. VR enables the user to immerse into a virtual world with the help of head-mounted displays (HMDs) that support the stereoscopic view of the computer-generated virtual scene according to the user's position and direction (Mazuryk ve Gervautz 1997). and these HMDs' are used to simulate all senses of the user as in the real world. The actual head-mounted display concept was patented by Heiling (1960) as stereoscopic television HMD. The most effective contents that can be experienced with VR technology are 360 ° films that are shot by recording at 360 degrees (360 °) viewing points thanks to panoramic cameras. In 360 ° movies that can be watched with HMDs, the audience (user or actor) does not watch a movie through 2D windows but is included in the scene, that is, it feels like a part of that movie (Jerald 2015). In summary, VR technology is an important experience tool thanks to these capabilities.

2. EXPERIENTIAL LEARNING

VR is used to convince the user as much as possible that what they are experiencing is "real". Kolb (2014) mentions that it is possible to learn from these experiences, which is described as "experiential learning", and especially these experiences are transformed into meaningful information. According to Edgar Dale (1946), "*Experiences can be direct or indirect and can be concrete and can be summarized as pictorial in abstract paintings*" (p. 37). Dale (1969) found that the more active and participatory understanding/learning activity, the longer the material remains in memory. Dale (1946) used visualization to explain his work, defined as the Experience Cone or Learning Pyramid, in which, reading, hearing, looking at pictures, watching movies - exhibitions - shows with the transition to short term memory; It coincides with the stage of participating in the discussion, making explanations and direct activities, processing information and recording it in long-term memory. According to Dale (1946, 1954, 1969), only 10% of the information learned by reading can be

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remembered 2 weeks after this study, while 90% of the acquired knowledge can be recalled when the experience is learned by making presentations, simulations or repetition.

While the Experience (Learning) Cone (1946) is a visual model that presents the scope of experience arranged according to the degree of abstraction, Charles Baukal (2013) proposed an update to Dale's Learning Cone including VR, named Multimedia Cone of Abstraction. Baukal (2013), by developing and updating the experiential learning model that Edgar Dale and his followers studied, revealed that today the most effective method for direct learning with the highest learning efficiency is VR. Content created by this technology is perceived by the user as a memory, not exactly a learning object. Therefore, any activity provided by VR technology is recorded by a user as a "like being there" effect as if it were a part of their memory.

Jerald (2015), explains that VR is essentially about approving to the understanding of the entertaining story by participating in an action, learning an abstract concept, or applying a real skill through engaging experiences. Altun (2019) indicates that VR is a new medium with the potential to show realistic simulations of complex environments such as aircraft cockpits, submarines, nuclear power plants, and operating theaters, which have high risks, high cost, or limited access. In this way, VR provides a direct and in-depth experience about products & services through "experiential learning" for people in daily life. The experience of this product or service, which is recorded as a memory close to direct experience with this technology, affects people's thoughts positively. Experiential marketing theory is explained by experiential learning theory, as the unique experiences of customers in experiential marketing are a learning activity. VR has become a very important tool and medium for marketing professionals to engage the customer, meaning experiential marketing activities influenced by experiential learning experiences. Therefore, the persuasion mechanism in experiential marketing, powered by visual, auditory, emotional, and tactile sensations, actually derives from experiential learning.

3. VR TOURISM

VR technology has many benefits specific to each field, such as providing a sense of reality in a virtual environment, creating different experiences, providing information and providing convenience. VR technology can be considered as a savior in terms of keeping tourism attractive under the conditions developed with Covid-19 and marketing of tourist facilities. VR Tourism can be defined as the realization of various tourism activities and applications in a virtual environment. This is the transfer of tourism or touristic activities to the virtual reality environment and keeping that reality alive at that moment and in the situation when it is not actually.

Keeping up with technological developments, like other sectors, is also vital for tourism (Middleton ve Clarke 2001). Otherwise, tourism activities will lose their attractiveness and cannot develop. Technology creates a sense of attraction and preference for both manufacturers and consumers, as it provides many conveniences and benefits. VR technology creates 360-degree and three-dimensional virtual

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environments in the field of tourism, providing tourists with the opportunity to experience tourism businesses, destinations, museums, historical, cultural and architectural places as if they were real in this virtual environment. It also guides and informs tourists in the destination. So; VR technology provides multiple benefits to all players in the tourism industry. The use of this technology in tourism, which is also shown as an innovation that will change tourism in the future, is becoming increasingly important (Demirezen 2019).

The visualization capability of VR makes it a unique option for visualizing spaces, creating photo-realistic and navigable virtual environments. It is widely used in tourism for environmental and architectural planning purposes, thanks to the possibility of observing the 360-degree 3D environments created inside VR from an unlimited number of perspectives. In addition, VR improves the travel experience by enabling tourists to experience digital tour information (Whyte 2017, Churchill, Snowdon ve Munro 2011).

VR technology has become a powerful tourism marketing tool (Tussyadiah, ve diğerleri 2017). VR's ability to provide pre-sales information by virtually experiencing this service is well suited for the tourism industry, as many tourism products are options that potential customers cannot pre-test and must decide whether to buy or not based solely on the information provided. The fact that VR is an experiential medium makes it the most suitable tool to provide rich data to potential tourists seeking information. For example; By using such a device, the winter holidays a person who wants to explore the destinations Sweden, Switzerland, Turkey, virtual winter destinations like Siberia and Asia can experience the never there and can get on more realistic information before you decide. Hotels now offer the opportunity to visit the hotel and rooms virtually thanks to 360-degree videos and photos using VR technology on their websites (Akram ve Kumar 2017, Demirezen 2019).

VR technology has been used by educators for years. According to the experiential learning theory, VR technology can be an effective way to transmit large amounts of information. Since VR allows the user to record the experience as a memory in the mind of the user, it can also be used for the purpose of learning tourism subjects, as well as experiencing the place and service to be used in the field of tourism. Today, interplanetary travel may not be among the current tourism topics yet, but with Google's Expeditions (2020) application, users can experience the Moon and Mars with cardboard without going there. Similarly, applications that teach the Egyptian pyramids by experiencing the Eiffel Tower without going to Egypt have been put on the market. Hong Kong Polytechnic University School of Tourism and Hotel Management creates a virtual campus on a platform with VR technology, both providing tourism education and marketing its services (Demirezen 2019). Turkey Red Basilica in Bergama Zeus, Athena and Asclepius temple modeled according to VR technology, 3D has to offer tourists the opportunity to visit the ancient city. Similarly, with the Techno Mersin Project carried out in Mersin, Mersin is promoted using virtual tour method in virtual environment (Ekici ve Güven 2017).

With VR technology, tourists can virtually visit destinations that do not have access or whose transportation is dangerous, expensive and even limited. In this way, tourists

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get a risk-free travel experience. Especially with such practices, examples of which have recently started to be seen frequently in faith (religious) tourism, the security of sacred places is also provided. For example, the pilgrimage visit, which is very precious to Muslims and also considered a religious order, can be fulfilled through VR Islamic projects. Thanks to the applications of Muslim3D company (2020), the lands where the Islamic prophet lived and the time period when Islam was spread are modeled in 3 dimensions and offers the opportunity to experience 360 degrees. In addition, this experience can be provided with 360 degree and HD quality videos taken during hajj and umrah rituals (Hanar 2017). Apps designed for Christianity also have similar features. With VR Church (ShapeofSoundLtd 2016) and Bible VR (bible-vr 2020) applications, both the birth and the first period of Christianity and the life of the prophet Jesus can be experienced. With the Jewish Education project, VR applications that are considered to be in accordance with the Jewish belief, even if they are not primarily religious applications, have been offered to users (Levy-Cohen 2018). David Museum, Jerusalem's "Step into History" and Jerusalem VR Tour are examples of applications produced on this subject (NoCamelsTeam 2018).

These applications offer the opportunity to visit these destinations not only for those who want to experience or learn about their religious belief, but also to disabled individuals who want to travel but have restrictions

Numerous historical objects, religious places and cultural heritage sites around the world have been digitized as VR. Thus, destruction of valuable and historical objects and destinations by tourists is prevented. Virtual reality also offers an opportunity to protect heritage sites in the destination.

4. VR TOURISM IN THE COVID-19 PERIOD

Since March 2020, during the process of the Covid-19 pandemic with the need to wear masks and travel restrictions, we have been experiencing an unprecedented global crisis in just a few months, with enormous effects on our political, social and economic systems. With its negative effects continuing to fluctuate around the world, governments at both regional and national levels have so far implemented policies that include travel restrictions, stay-at-home orders, self- or mandatory quarantine bans. As a result, travel and tourism have literally stopped. While some economies are slowly recovering, the overall situation still retains its status quo due to the high contagiousness of the virus and the lack of emergency treatment or vaccines.

The impact of Covid-19 appears to be more devastating so far than other crises in recent history, at least economically (Hall, Scott ve Gössling 2020). So new questions arise about how the tourism industry can respond and survive this crisis and ultimately re-develop travel and tourism as a socio-economic activity. Finding solutions and answers to these questions is becoming increasingly important to tourism stakeholders, including the research community, while technology plays a central role in all of these. With the features about the feeling of "being there" and being a direct experience medium if VR technology has the potential to replace physical travel, it can solve the problems of the tourism sector during the pandemic period. This is reminiscent of the

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American science fiction action movie *Surrogates* (2009) directed by Jonathan Mostow. There was an entertainment fair or medium to "be there" in that movie (wikipedia 2020).

These developments and challenges have created an environment for the tourism sector to use new technologies. VR technology can replace real travels using 360-degree videos of tourism destinations and help tourists dream or plan for their next vacation. VR undoubtedly stimulates the urge to travel and enjoy new experiences, allowing them to explore and interact with the envisaged environment with a sense of "being there". Tourist guides may provide VR 360-degree video and photo content in the near future for the tourism industry that tends to virtual travel. While this situation provides an additional income stream to the guides, it can also transform tourism expertise in the Covid-19 process.

However, due to the fact that 5G technology will come into our lives in the near future, the possibility of accessing high quality (high file sizes) content will increase with the increased internet bandwidth availability. The faster transmission of 3D environments used in VR technology or 360-degree videos shot in resolutions such as 4K and 8K to the users reveals that VR technology will cause significant changes in user acceptance.

Like smartphones and other wearable devices, VR technology will have a normal use in the near future and will become a very convenient and inexpensive tool for end users. Therefore, it is seen that this technology will become an important trend in tourism as in other industries, as the number of people who have experienced VR will increase too much. Until yesterday, some obstacles to VR advertising in the field of tourism marketing are necessarily bypassed in the Covid-19 period and reveal its potential for use as a marketing tool.

In fact, increased potential demand may appear on the horizon, as virtual reality offers a risk-free way to escape elsewhere during the pandemic. VR tourism can also be used as a powerful destination marketing tool to persuade people to travel again in the post-pandemic "new normal" era.

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**(UN)SUSTAINABLE AND (IR)RESPONSIBLE TOURISM IN OHRID:
RESIDENTS' PERCEPTION****Biljana Petrevska¹
Tanja Mihalič****Abstract:**

The aim of the paper is to identify the main factors that affect tourism development of Ohrid (North Macedonia) from the three-pillar sustainability dimension (socio-cultural, environmental and economic). Based on 630 questionnaires collected from residents in January 2020, exploratory factor analysis is conducted to assess residents' satisfaction with given impacts of tourism. The research revealed positive socio-cultural and economic factors and negative environmental impacts, indicating that Ohrid is practicing neither sustainable, nor responsible tourism development. Despite having legislation and an institutional framework to safeguard Ohrid's World Heritage property, many serious concerns were noted with regards to the sustainability values. The findings may assist policy makers in establishing tourism planning process and developing sustainable development strategies.

Keywords: sustainability, tourism development, locals, UNESCO

JEL classification: L83, Z32, Z38

INTRODUCTION

Tourism destinations that are World Heritage (WH) sites often provoke large interest and attract many tourists. Large number of visitors increase tourism expenditure, thereby local economy benefits. Yet, the risk is on endangering socio-cultural, and environmental resources that represent a base for gaining the WH label. So, being guided only by economic impacts of tourism, provokes severe changes to the destination and local community in terms of other dimensions of sustainability, i.e. socio-cultural and natural. As such, residents perceive differently tourism impacts in the line of the broad concept of the three sustainability domains as separate factors.

Besides contributing to the current state of the art on exploring residents' perception on tourism sustainability, this study posts some valuable directions on measuring both positive and negative tourism impacts on the real case of Ohrid (North Macedonia) as a WH tourism destination. Specifically, the study identifies the main factors that affect tourism development and growth from the sustainability dimension. For that purpose, it investigates the sustainability tourism paradigm from the perspective of residents' satisfaction living in the destination. Furthermore, it focuses on the importance of tourism sustainability and responsibility highlighting the value of things other than economic benefits.

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The paper is organized as follows. After the introduction, Section 2 presents a brief literature review on sustainable and responsible tourism along with residents' perception on tourism impacts. Section 3 outlines the background material on the case of Ohrid with a focus on its tourism development. Section 4 describes the methodology and data. Section 5 presents the results, findings and discussion, and finally, last section considers the main conclusion and research limitations.

1. LITERATURE REVIEW

Numerous studies discuss tourism sustainability from various aspects offering variety of interpretations. Regardless the level of inter-dependency, it is concluded as essential to understand the principles of sustainability in order to ensure sustainable tourism development (Harrill, 2004; Sharpley, 2014; Popescu et al. 2017).

Furthermore, many arguments are raised about measuring tourism sustainability by proposing different methodologies with various indicators (WTO, 2004; Cernat and Gourdon, 2012; Mahdavi et al. 2013), with no consensus on how the best is to reveal the sustainability level of tourism. However, critique revealed on the issue of balancing tourism impacts on the three sustainability pillars (UNWTO, 2005), which lead to defining new ways of improving sustainability efficacy. This resulted in suggesting tourism responsibility as a complementary concept being responsible tourism implementation based on the sustainability concept (Goodwin, 2011; UNWTO, 2012). This led to sustainable and responsible tourism (SRT) model which means implementing the sustainability concept along with the responsibility as action and behavior of many pillars and enablers for sustainability implementation, cooperation among all stakeholders, including residents, leadership, and visitor satisfaction (Mihalič, 2016). So, the SRT model means an action for sustainable tourism implementation, also known as "sustainability in action" (Mihalič, 2020).

The relationship between the sustainability and tourism development when it refers to a WH destination, is argued as uneasy. Maintaining balance between preserving WH and making it accessible to the public is a subject to ongoing debate. There are myriad concerns since UNESCO tries to simultaneously embrace both, sustainability and tourism in one hand, while marking them as threats to the WH with the other hand (Evans, 2001; Labadi, 2013; Schmutz and Elliott, 2016).

There has been a proliferation of research exploring residents' attitudes to tourism impacts with no result with universal validity or efficacy and by utilizing various theories. Among the most extensively employed are the social exchange theory (Ap, 1992), the tourist area life cycle (Butler, 1980), the Irridex model (Doxey, 1975), the stakeholders theory (Byrd, 2007; Byrd et al. 2009; Nicholas et al. 2009; Yu et al. 2011; Garrod et al. 2012), the dependency theory (Lepp, 2008), the place attachment theory (Gu and Ryan, 2008), the resistance theory (Chhabra, 2010), and many more (Nunkoo et al, 2013).

In addition, plenty is elaborated on residents' perception on negative tourism impacts. This is generally done by arguing dissatisfaction, irritation, tourist rejection or overcrowding (VALICON, 2017; Dioko, 2017; Hughes, 2018; Coldwell, 2018; Martin

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Martín et al. 2018; Seraphin et al., 2018). On the other hand, many studies highlight the favorable residents' perceptions of tourism impacts which lead to greater support of tourism (Látková and Vogt, 2012; Stylidis et al. 2014; Rasoolimanesh and Jaafar, 2017). One may conclude that it is very important to understand residents' perception on tourism impacts in order to gain their support necessary for developing tourism in a sustainable manner.

2. CASE DESTINATION OHRID

Ohrid (North Macedonia) is an old historical city with over 52,000 inhabitants and the most famous national tourist destination. It is one of the oldest human settlements in Europe, and with 365 churches has been referred to as "Jerusalem of the Balkans" (Vankovska and Wiberg, 2003; Petrovski and Talevski, 2004). Due to its natural outstanding value of the Lake Ohrid (UNESCO, 1979), and for its cultural and historical area (UNESCO, 1980), Lake Ohrid region is inscribed as a transboundary mixed WH property, one of only eleven in Europe. Its exceptional mixture of natural geographic and human action (UNESCO, 2015) creates a rare harmony making the region truly unique (UNESCO, 2019).

Over the years, Ohrid's historical heritage and natural resources, gastronomy, and numerous cultural events, generally constitute the basis for tourist attractions. Ohrid city authentic architecture (Kuzman et al. 2009; Panevski Nikoljski and Karanakov, 2013) is among the best preserved and most complete ensemble of ancient urban architecture in the region (UNESCO, 2019), while the Lake Ohrid is one of the world's few ancient lakes, along with the Lake Baikal (Russia) and the Lake Tanganyika (Africa) (MANU, 2009). Knowing that WH site provokes larger interest for natural than for cultural heritage (Su et al. 2014), the Lake Ohrid gains in additional value.

In 2019, Ohrid accounted almost one-third of all tourist arrivals (322,573) and overnights (1,101,563) recorded in the country (State Statistical Office of the Republic of North Macedonia, 2020). Generally, Ohrid has a traditional profile as a summer destination with strong and robust seasonality patterns (Petrevska, 2015). Particularly during the high season (July-September), the number of tourists exceeds by far the number of residents, indicating a tourism-based economy (Garay and Cãnoves, 2011). So, tourism became the main industry for local development and growth. As such, Ohrid often reaches its critical point for physical and social carrying capacity (Ashworth and Tunbridge, 2000; Russo, 2001; Weber et al. 2017) which provokes many changes for the city and its residents. Severe physical, environmental and anthropogenic pressure particularly in terms of heavy traffic, congestion and costal exploitation, resulted in urban transformation leading the Ohrid region to critical level of stress (Mitrović, 2015; Petrevska and Collins-Kreiner, 2017, 2019; Ohrid SOS, 2019). As a result, Ohrid as a destination was faced with real problems and UNESCO made strong consideration to put the site on the List of WH in Danger (UNESCO, 2019).

Yet, although being fully aware about the problem, local authorities and key-tourism stakeholders continue further and ignore UNESCO's alarms. They neither

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follow UNESCO's recommendation nor develop appropriate destination management plans for practicing responsible tourism development that will sustain its growth. This in return has an impact on the sustainable development of the local community (Galland et al. 2016)

3. METHODOLOGY AND DATA

The study is based on a quantitative method with data obtained from a survey. A questionnaire containing three groups of statements measured residents' perception on a broad range of impacts relevant to tourism development. The three main sustainability pillar impacts (socio-cultural, environmental and economic) were addressed through 22 items formulated following a set of sustainable indicators proposed within the European Tourism Indicator System (EC, 2016).

The survey was conducted in January 2020 among 630 randomly chosen residents who live in various locations in Ohrid. They were asked to evaluate each factor on a five point Likert scale (1=strongly disagree to 5=strongly agree). Collected data were transferred in the SPSS 24.0 and an exploratory factor analysis (EFA) was performed.

4. RESULTS, FINDINGS AND DISCUSSION

EFA confirmed seven factors (three from the socio-cultural impacts, two from the environmental impacts, and two from the economic impacts). The measurement variables for each impact factor in a form of a statement are presented in Table 1. Two items are not presented due to low loadings.

The socio-cultural sustainability impacts have a Cronbach's alpha value of 0.751 and are represented by three factors (one positive and two negative) (Table 1, numbers F1-F3), each represented by set of items. The first factor, "Socio-cultural benefits", has a Cronbach's alpha value of 0.679, a mean value of 3.87, and consists of four items. The second socio-cultural factor "Socio-cultural conflicts" has a Cronbach's alpha value of 0.753, a mean value of 3.13, and consists of three items. The third factor "Destructive human activities", has high Cronbach's alpha value of 0.820, the highest mean value of 4.20, and consists of two items.

The second dimension of sustainability refers to the environmental impacts with a mean Cronbach's alpha value of 0.745, represented by two negative factors (Table 1, numbers F4 and F5). So, the fourth factor of influence "Destruction of physical fabric" has a Cronbach's alpha value of 0.791, a mean value of 3.16, and consists of three items. The fifth factor "Pollution" has a Cronbach's alpha value of 0.699, a mean value of only 2.50, and consists of four items.

The third economic sustainability dimension has two identified factors (one positive and one negative) (Table 1, numbers F6 and F7) with a mean Cronbach's alpha value of 0.790. The sixth factor "Pricing" is consisted of three items with a Cronbach's alpha value of 0.800 and a mean value of 4.28. The last, seventh factor "Economic benefits" (two items) has a Cronbach's alpha value of 0.780 and a mean value of 4.16.

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On a five-point Likert scale it was found that Ohrid residents perceive the economic negative effects of pricing with the highest mean value (4.28), followed by the negative socio-cultural impacts in terms of destructive human activities (4.20), economic benefits (4.16), socio-cultural benefits (3.87), destruction of physical fabric (3.16), socio-cultural conflicts (3.13), economic dependency (3.05), and by far the lowest value for pollution (2.50) (details in Table 1).

Table 1. Factors of Ohrid

No	SRT Item	Loading	Mean	Std. Deviation
	Socio-cultural impacts	0.751	3.73	
F1	Socio-cultural benefits	0.679	3.87	
1	Tourism improves shopping...	0.766	4.17	1.034
2	Quality of public services is better ...	0.651	3.20	1.328
3	Community benefits from tourism and tourists...	0.703	4.33	0.944
7	Preservation of local culture.	0.596	3.79	1.195
	Socio-cultural conflicts	0.753	3.13	
F2	Socio-cultural conflicts	0.753	3.13	
4	Conflict between visitors and locals.	0.770	2.47	1.179
5	Crime is on the rise.	0.831	3.10	1.274
10	Traffic problems arise.	0.657	3.83	1.155
	Destructive human activities	0.820	4.20	
F3	Destructive human activities	0.820	4.20	
8	New facilities destroy Ohrid architecture ...	0.841	4.25	1.109
9	Tourism increases illegal building construction	0.798	4.14	1.166
	Environmental impacts	0.745	2.83	
F4	Environmental impacts	0.745	2.83	
	Destruction of physical fabric	0.791	3.16	
13	Tourism is likely to destroy green areas.	0.728	2.98	1.288
17	Tourism endangers endemic flora and fauna ...	0.823	2.86	1.414
18	Increased water traffic endangers natural ...	0.823	3.65	1.313
	Pollution	0.699	2.50	
F5	Pollution	0.699	2.50	
11	Tourists pollute with their solid waste.	0.531	3.33	1.263
12	Tourism increases air pollution.	0.811	2.19	1.180
14	I am annoyed by the night noise caused by tourism.	0.728	2.36	1.294
16	Tourism poses a threat for the National Park Galicica.	0.725	2.11	1.193
	Economic impacts	0.790		
F6	Economic impacts	0.790		
	Pricing	0.800	4.28	
22	Because of tourism, life is more expensive.	0.849	4.43	0.908
23	Due to tourism, prices in bars and restaurants in the city center are high.	0.863	4.42	0.935
24	Due to tourism, real estate prices are high.	0.687	3.99	1.149
	Economic benefits	0.780	4.16	
F7	Economic benefits	0.780	4.16	
20	Encourages production of local products.	0.809	4.34	0.901
25	Brings benefits to other economic sectors.	0.790	3.98	0.977

Source: Authors' calculations

Note: Extraction method: principal component analysis; Rotation method: promax with Kaiser normalization

The results from Table 1 point that negative impacts of tourism development in Ohrid are very much present and highly perceived by the residents. It is not surprising that negative economic effects in terms of pricing (increase in prices due to tourism) is found to be the most influential tourism factor. Namely, Ohrid is a famous tourism destination, which consequently leads to increase in all prices (bars, restaurants, real-

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estate properties, etc.) thus affecting everyday life of locals. In addition, the study found that Ohrid residents score the positive economic impacts with the third highest mean value (4.16). Thus, the economic environment in terms of benefits (tourism encouragement to production and sales of local products; tourism brings benefits to other economic sectors, etc) shapes directly the residents' satisfaction level with tourism. So, it is to be expected that economic environment may further enable creation of tourism development and shaping local business environment.

Furthermore, based on Table 1, it can be seen that residents are strongly affected by the negative socio-cultural factor "Destructive human activities". Namely, new facilities (tourism and housing) in the old city-center and along the lakeshore, illegal building construction, etc.) destroy the traditional architecture in Ohrid and irritate the locals. Obviously, this group of negative socio-cultural impacts must be a matter of serious consideration for the local government tourism policy. To this, one may add other set of negative socio-cultural effects (the factor identified as "Socio-cultural conflicts") being perceived with mediate influence (3.13). This factor covers items as: rise of conflicts and crime and traffic problems as a result of tourism rapid development. On the other hand, the socio-cultural benefits are found to be a factor with upper medium positive influence. Here, the perceived benefits mostly stem from the community benefits of tourism and tourists (4.33), and the power of tourism that improves shopping, restaurants and entertainment opportunities (4.17). This is not unusual since often residents positively value the fact that tourism positively influences services offered by the community (Andereck and Nyaupane, 2011) or preserve local culture (Oviedo et al. 2008).

What was found to be very interesting is the fact that negative economic and negative socio-cultural impacts are perceived much more intensively compared to the environmental negative impacts. Unlike Bujosa and Rosselló (2007) who confirm residents' concern from the negative aspects of natural environment, in the Ohrid case it is not found as a matter of serious concern. Surprisingly, the complete destruction of physical fabric in a natural manner (like: destruction of green areas due to tourism, endangerment of endemic flora, fauna and whole natural heritage of Lake Ohrid), along with pollution provoked by tourism, are not perceived as important to locals. Finding that locals do not perceive the environmental dimension of sustainability to be of priority (mean value of only 2.83 for the overall negative environmental impacts) is alarming when knowing that Ohrid region is under UNESCO's protection.

It seems that residents prefer to support tourism only if provides economic benefits, putting its advantages ahead of environmental damage (García et al. 2015). Such perception to live economically better as a priority concern ahead of living in an environmentally protected tourism destination, raises the need for reshaping current tourism development plans and strategies. One may speculate that further development of tourism in Ohrid may result in even higher degradation of natural resources pointing to unsustainable and irresponsible development.

CONCLUSION

The study explored the main tourism impacts perceived by residents of Ohrid and identified seven factors based on the SRT conceptual model. With regards to the socio-cultural sustainability impacts, three factors were identified: socio-cultural benefits, socio-cultural conflicts, and destructive human activities. When investigating the perception on the environmental sustainability dimension, two factors were identified: destruction of physical fabric, and pollution. As per the third, economic sustainability pillar, two factors were perceived: pricing, and economic benefits.

The study found that Ohrid residents are rather led by rational (economic motives) than emotional viewpoints (natural environment). Namely, locals are by far the most concerned with the negative economic factors, and the least with the environmental negative factors. Probably that is the reason why over the years and still, natural resources are neglected and put in the shed when it comes to protection and preservation.

Although many negative natural effects derive from tourism development (like: all types of pollutants, damage to the environment and ecosystems, as well as deterioration of the fabric of the heritage in natural connotation), residents seem not to be concerned. This points to conclusion that locals have low awareness for the significance and importance of the natural heritage they possess (Lake Ohrid, natural park Galicica, endemic flora and fauna, etc.). This results in lack of understanding and poor interlinks between nature, culture and values of the property (Aleksova and Miranda, 2017). With a lack of concern about the natural environment and its conservation, it may be expected less support in future sustainable development (Jaafar et al. 2015; Nunkoo and Ramkissoon, 2010).

Consequently, with no reaction on maintaining sustainability, Ohrid is seriously approaching to fail to practice sustainable development of tourism. This is the moment to remind that Ohrid is still a WH destination and in order to keep and maintain the UNESCO's status, inevitably must shift perception of locals from purely economic to environmental dimension of sustainability. This calls for urgent modification, adjustment and reshaping of current tourism policies along with strong collaboration among all stakeholders when it comes to effective tourism planning and sustainable development.

The research has several limitations which can be addressed in future work. First, it applies limited set of sustainability indicators which may be further expanded. Second, it addressed only residents' perception, so it may be extended with other aspects of investigation, like tourists, stakeholders, etc. Finally, the research was conducted before the official start of the tourist season (in January), so it may be repeated during the main season in order to observe any changes in the perception. Yet, these limitations do not diminish the significance of the findings. The study enables better understanding of the current residents' attitude on tourism development in Ohrid, as a destination which is obliged to practice sustainable and responsible tourism in order to keep and maintain UNESCO's status of WH property.

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**CYCLIST SATISFACTION FROM THE MOUNTAIN BIKING TRAILS ON
POPOVA SHAPKA****Ilija Zakoski¹****Abstract**

The benefits from cycling are endless. In addition to the ones in terms of health, there are mental and social benefits making cycling a more useful activity. The mountain could become even more attractive for the cyclists with the trails crossing through the untouched nature, clean air and a number of tourist attractions. Popova Shapka already offers eight mountain biking trails with proper signage (informative boards and panels, road maps, marks and marked pillars) manufactured in line with the regulations set forth by the Cycling Federation of Macedonia.

The purpose of this research is the level of satisfaction from the biking trails, the nature, and cultural, historical and anthropological motives. The research was done through an anonymous survey including 10 questions answered by cyclists using these trails. A total of 68 (sixty eight) cyclists were interviewed, presenting a high percentage of satisfaction related to the biking trail signage – 79,4% (54); information made available on the panels – 86,7% (59); nature 89,7% (61). These results indicate that Popova Shapka as a tourist destination with its mountain biking trails considerably adds to the tourist offer.

Key words: mountain biking, biking trails, signage, attraction, satisfaction

JEL classification: J16, J31, N30

INTRODUCTION

The contemporary tendencies in the global tourist development show that this is a phenomenon which continuously adds to its value. This can be noted through the increased number of tourists included in the activity and the generated profits as a result; from the number of new services providers; development of economic and non-economic active participants of the tourist offer, and so forth. The attention of the masses for new tourist offering becomes even more expressed. This means that tourism lately witnesses tourist services requests from various profiles. The heterogeneity of the requirements leads towards a more dynamic selection of the tourism development. This intention for selectivity derives the phenomenon for new and specific forms of tourism, which find their basis for development in the interactive relationship between the advanced and sophisticated requirements of the services users on one hand, and the available possibilities to respond to the same. Sports and recreational tourism represent one of the forms of selectivity which can respond to the contemporary conditions of the tourist market.

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The alternative tourism in Macedonia represents its wealth in natural resources, as well as the excellent geographic position of the country. This type of tourism is of an exceptional interest, putting on spot the new possibilities for satisfying the tourist needs, becoming more and more popular as it positively influences the people and the environment. The mountain biking as an adventurous activity is part of the alternative tourism. The paths for mountain recreational tourism must satisfy all of the tourist needs, including but not limited to the: recreational, cultural, informative, and the need to satisfy certain safety standards.(Ciriviri K 2012)

The mountain biking is an alternative to the classic cycling. Its basis consists of the need to overcome challenging, uneven areas and difficult-to-manage mountain slopes. The mountain paths of this type feature terrain and soil structure with different slopes and presence of rocks, water, vegetative and other type of obstacles, as well as communications leading to these types of terrains. This means that the cyclists belong to a group of people with recreational needs closely related to biking, nature-loving and the desire for overcoming challenges. (Planinarski klub Sara ski 2019)

The implementation of the paths for mountain biking on Popova Shapka and further in the Shar Mountain region will not only enrich the tourist offering, but will also satisfy the needs for sports and recreational activities of the visitors.

1. SUBJECT AND PURPOSE OF THE RESEARCH

Popova Shapka hosts the start of eight mountain biking paths, already marked in line with the previously set standards of the Cycling Federation of Macedonia. These are functional and intensively used by the cyclists. The paths feature roadmaps with information about the coordinates and characteristics of the paths; marked resting areas; maps for each of the paths with information; GPS routes; mobile phone application. When tracing the paths, the cyclists' safety is taken into consideration.

A subject of research of this thesis is the sports and recreational activities, that is, the mountain biking in the context of creating cyclist satisfaction from the mountain biking trails on Popova Shapka.

The purpose of this research is to empirically ascertain the quality of the mountain biking trails of the tourist destination Popova Shapka through a satisfaction validation of the cyclists regarding the markings, safety, environment, etc.

2. METHODOLOGY OF RESEARCH

The data of this research is gathered through secondary data sources regarding the mountain biking in the Republic of North Macedonia. The primary data of the quality of the mountain biking gathered from the direct opinions of the cyclists, is gathered through anonymous survey including a number of 68 (sixty-eight) cyclists. Only the cyclists who have cycled at least three different trails were being surveyed. The survey consisted of 10 (ten) questions, which define the group by gender, age and level of education; furthermore, it included questions on valuation of the standards for building trails, and the safety levels of their usage based on the Regulations Book of the Cycling

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Federation of Macedonia; valuation of the trails marking, their features (length, difference in altitude, time needed for passing); and the GPS data as important criteria for the cyclists' orientation. In addition, the advertising material on the cross-country biking trails and their influence of the increased tourist offer is being assessed.

In order to reach higher level of accuracy in researching this thesis, a statistical method was being used. The statistical processing of the data is done through the computer application Microsoft Excel, providing ranking, percentage calculations and graphic shaping of the processed data.

3. EXPECTED RESULTS

Based on the secondary data received from the literature review, the tourist destination Popova Shapka possesses an enormous potential to become a regional center for mountain tourism in the North-West part of the Republic of North Macedonia. Its potentials have not been exploited enough, resulting in the poor current position when it comes to valorization of the tourist resources.(Zakoski I ,2018)

The primary data which need to derive from the research is expected to define the current state of the mountain biking trails on Popova Shapka and their influence towards the enrichment of the tourist offer.

This research is expected to provide for:

- Marking of certain systemic weaknesses, difficulties and limitations when defining the mountain biking trails as a new tourist product;
- Marking the elements assessed by the cyclists as insufficient and inadequately implemented when marking the mountain biking trails;
- Indicating the conditions which might significantly improve the Popova Shapka tourism.

4. RESULTS

Out of the 68 cyclists surveyed for the mountain biking trails on Popova Shapka, 62 (sixty-two) or 91,2% were men and only 6 (8,8%) were women. This is a predominantly male sport, as indicated by the main part of the registered cyclists in the Republic of North Macedonia.

Regarding the age groups, the younger generation is predominant. From the surveyed cyclists, 9 (13,3%) were younger than 18; 45 (64,7%) were aged 19-40; 15 (22%) were aged 41-60; and none was older than 60 years of age. Having in mind that this is a sport which requires physical readiness and adventurous spirit above all, it is expected that the cyclists are represented by younger persons. The structure of the surveyed group by age is presented in Table 1.

Table 1. Division of the surveyed by gender and age (number and percentage)

<18	19-40	41-60	>60
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male %	13,3%	60,3%	17,6%	0,0%
male number	9	41	12	0
female %	0,0%	4,4%	4,4%	0,0%
female number	0	3	3	0

Division of the surveyed by gender and age graphically presented (Figure 1). From the overall surveyed population, 6 (8,8%) were women, 62 (91,2%) were men.

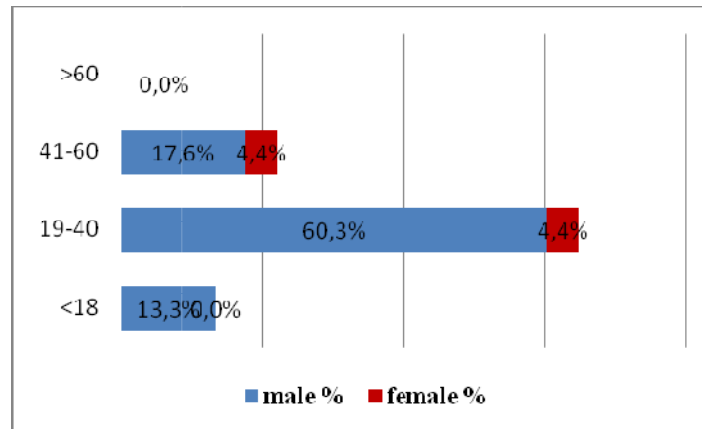


Figure 1. Division of the surveyed group by gender and age in percentage

Most of the cyclists using the trails on Popova Shapka are highly educated (university degree holders), 34 (50%); followed by a group with completed secondary education, 31 (45,6%); while 3 (4,4%) of the group had completed primary school education only (Figure 2).

The mountain biking results in terms of health can be easily noted in the balance provided from the benefits of exercising against the risks of air-pollution, accidents and injuries. In that sense, the awareness of the people with completed higher levels of education should be greater. (Johan de Hartog,J., Boogaard,H., Nijland,H., and Hoek,G. “2010).

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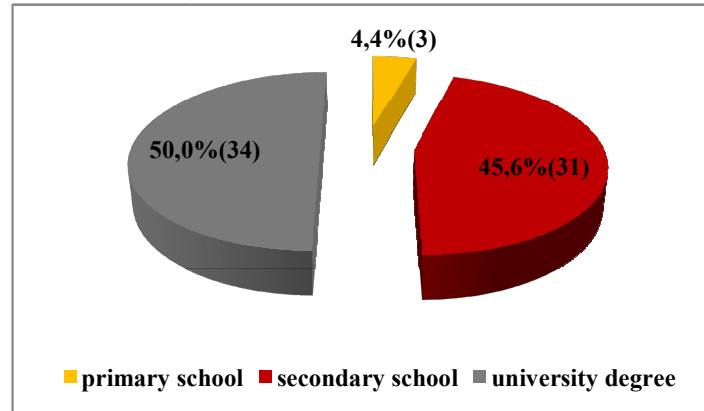


Figure 2. Division of the surveyed group by level of education

The mountain biking trails are built in accordance with the Regulations Book of the Cycling Federation of Macedonia, thereby, fulfilling the criteria for mountain biking trails. More than a half (60,3% or 41) of the cyclists-users of the Popova Shapka biking trails responded affirmative. A high percentage of 27,9% (19) users responded that the trails partially fulfill the conditions; while 11,8% (8) responded negative. However, more than 50% of the surveyed expressed satisfaction of the implemented standards for mountain biking trails (Figure 3).

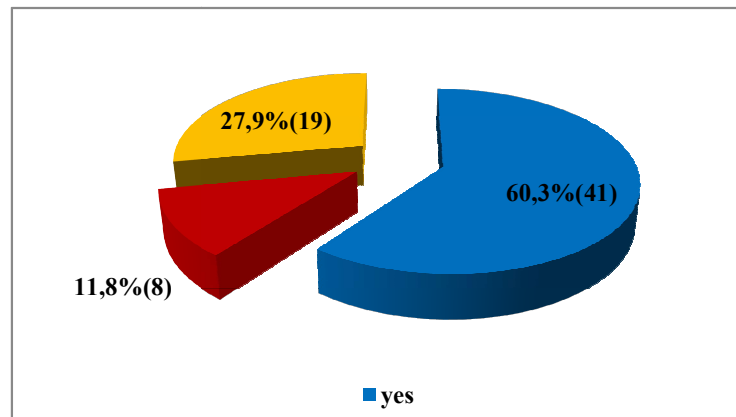


Figure 3. Cyclist satisfaction of the implemented standards for mountain biking trails

Regarding the safety when using the Popova Shampka biking trails, 48 (70,6%) of the surveyed responded affirmative; 8 (11,8%) believe were not completely safe; while 12 (17,6%) believe the trails were not safe. Certain areas were considered risky because of the terrain configuration.

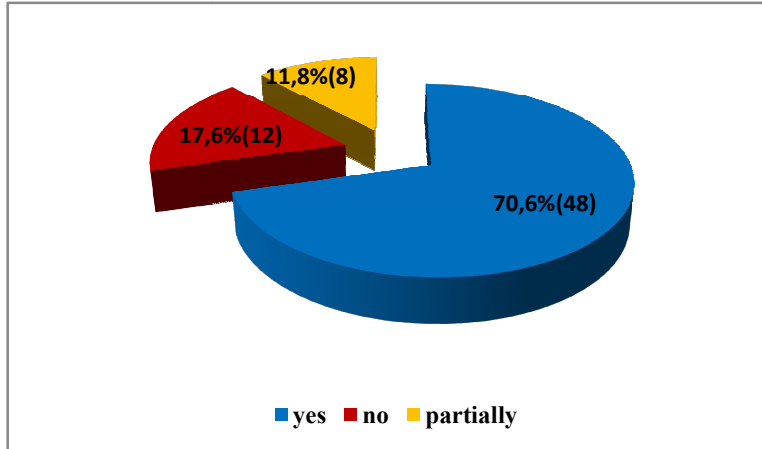


Figure 4. Cyclist satisfaction from trail safety

All of the cyclists-users of the biking trails of Popova Shapka were satisfied from the trail markings. Namely, everyone agreed that there are pathways, informative boards, marked resting areas, and similar in a trails' length. The satisfaction from the trail markings was confirmed by 86,7% (59) from the surveyed. Only 13,3% (9) responded negatively, meaning they were not satisfied from the way the trails are marked (Figure 5).

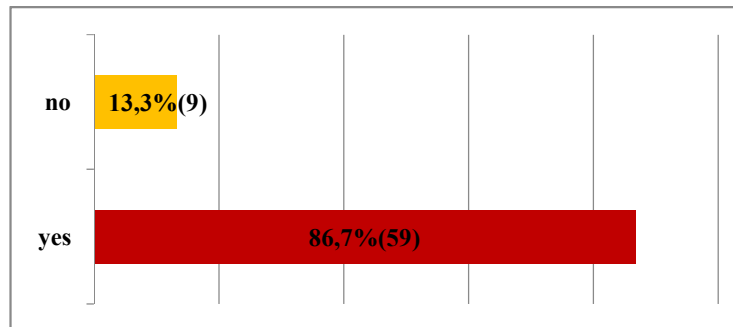


Figure 5. Cyclist satisfaction from the trail marking

The pathways are accompanied by GPS routes and mobile phone application. The satisfaction from the GPS routes was confirmed by 62 (91,2%) from the surveyed, while 6 (8,8%) were not satisfied because they haven't managed to use it, and believe there is none.

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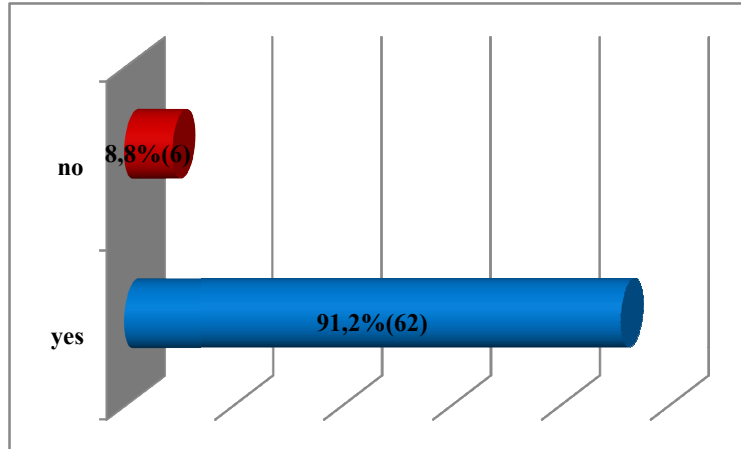


Figure 6. Cyclist satisfaction from the existence of GPS routes

The biking trails go through lively areas, untouched nature, many attractive resources (waterfalls, lakes, rivers, steep rocks, woods, etc.). The satisfaction of the cyclists from the environment where the biking trails are located is presented on Figure 7.

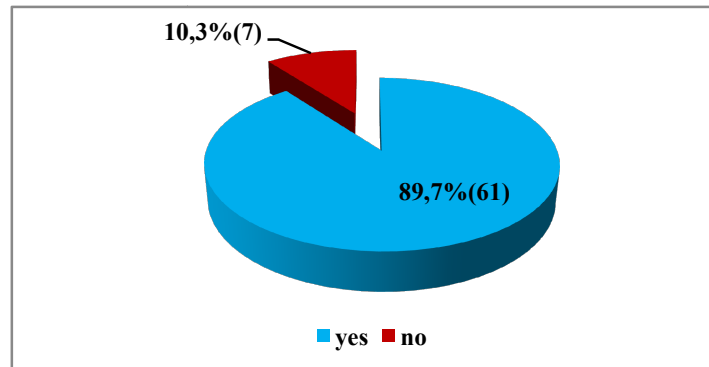


Figure 7. Cyclist satisfaction from the environment where the biking trails are located

Popova Shapka has prepared a brochure to promote these trails on the tourist market. These brochures include all the features of each of the trails. The existing of these trails should enrich the tourist offering of Popova Shapka, leading towards a higher interest for this tourist destination, having in mind the mountain biking is on the rise.

5. DISCUSSION

The sports and recreational tourism represent a social, economic and cultural phenomena derived from the interaction between the tourists, the activities and the destination. Sports and recreation include personal choice activities of the tourist, aiming to satisfy their need for motion, play, recreation and vacationing. The importance of the sports and recreation in tourism is reflected in satisfying the basic human need for physical activity. The Cycling Federation of Macedonia has set forth a Regulations Book of criteria which the biking trails need to fulfill, including the mount biking trails. According to the responses provided by the users of the cross-country trails for mountain biking on Popova Shapka, the criteria is completely fulfilled as 48 (70,6%) of the surveyed consider the trails safe.

Having in mind the mountain terrain, the large altitude differences and the terrain configuration, the safety conditions cannot be considered equal at all places. The question regarding the existence of pathways, informative boards, marked places and resting areas is positively responded by 86,7% (59) of the surveyed. The existence of used GPS routes is positively confirmed by 91,2% (62) from the cyclists. The environment where the biking trails are located was a cause of satisfaction for 89,71% (61) of the surveyed. When analyzing the mountain biking in the Republic of North Macedonia, it was noted that no similar researches were ever conducted on Popova Shapka. This research shall improve the image on the quality of the biking trails on Popova Shapka, resulting in increased number of visiting cyclists.

CONCLUSION

Having in mind the contemporary lifestyle and working conditions in today's industrialized and urbanized civilization, the working person feels the need to change the address of living and stay in clean and unpolluted spaces now more than ever before, satisfying the need to rebuild the physical and psychological condition. Each of the participants in the tourist movements, in addition to wanting to satisfy the basic needs of accommodation and food, shows an interest towards some other circumstances, such as: getting to know the area, the building, the people, the traditions, customs, sports, recreation, etc. Having that said, the bearers of the tourist offerings need to pay exceptional attention to the leisure time of the visitors, that is, to the time which needs to be fulfilled with various activities.

One of these activities is the mountain biking which has been intensively realized on the Shar Mountain slopes. The starting point for the eight marked trails for mountain biking is Popova Shapka. The cyclists using these trails more and more over time were surveyed for the quality of the same.

The cyclist satisfaction from the trail marking, the criteria of having pathways, informative boards and marked resting areas, existence of GPS routes and similar,

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points out the newly realized tourist offer. These biking trails as a new tourist product will surely enrich the overall tourist offering of Popova Shapka.

The advertising material with all the information on the trails printed out in three languages (Macedonian, Albanian and English) should inform the interested cycling clubs, tourist agencies and other entities organizing group mountain tours to visit Popova Shapka, thus increasing the number of tourists.

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THE POSITIVE IMPACT OF OUTSOURCING IN THE HOTEL INDUSTRY

Sashko Gramatnikovski¹
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Abstract

Human resources are very important in modern organizations because people are the ones who make the difference between successful and unsuccessful. Every serious organization to which the image is important emphasizes its employees as the most important resource of the organization, and the resources should be kept and invested in.

Their knowledge, approach to work, organization and motivation affect the success of the work. Therefore, it does matter who and how takes care of the employees. Today it is not a luxury but a sustainable business. When it comes to hiring outsourcing for human resources, it's not just about reducing costs and saving money, but it is also about much faster and more efficient placement on the market, faster than the competition, while maximizing the workforce, flexibility and access to employees in a different way.

Keywords: outsourcing, tourism, hospitality industry, human resource management

JEL classification: L83, Z32, Z38

INTRODUCTION

Although tourism is a non-productive branch, it is extremely important for the development of the country. The functioning of the hotel industry reflects the economic development of the country for two reasons. Firstly, it employs people in the tourist organizations themselves, and secondly because with its action in the environment it uses raw materials and services that have a positive impact on the economy.

The management of hotel organizations should take into account the increase of organizational effectiveness through appropriate engagement of human resources. Human resource management involves the implementation of policies and practices in the field of organizational design and development, the provision of employee benefits, learning and development, and the provision of services that improve the well-being of employees. All these strategies are integrated and harmonized with the business strategy of the organization.

The key fact for successful management of a hotel organization is focus on each activity, function or business process in a way that it is performed as quickly and efficiently and with lower financial costs. As one of the answers to the set bans appears the outsourcing which enables orientation of the hotel organization towards the basic activities of working and releasing the similar activities of other organizations that specialize in performing a certain type of activity.

The word outsourcing comes from the phrase "out sourced services using" which means "services we use outside the company".

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1. HUMAN RESOURCES AS A SOURCE OF COMPETITIVE ADVANTAGE OF HOTEL ORGANIZATIONS

Human resources are very important in modern hospitality because people are the ones who make the difference between successful and unsuccessful. Every serious hotel organization that has an important image, emphasizes its employees as the most important resource of the organization, invests in them and develops them.

The knowledge possessed by the human resources of the hotel organization, the approach to work, organization, motivation, affect the success of the work. For that reason, it does not matter who takes care of the employees and how. Today, caring for employees is not a luxury but a sustainable operation. In the hotel industry, human resources are of particular importance as they are in direct contact with customers. Depending on the human resources whether the clients will want to come to the same hotel again.

When it comes to outsourcing hotel management, it is not just about reducing costs and saving money. It is also about much faster and more efficient market placement, faster than the competition, maximizing the workforce, flexibility and the opportunity to access employees in a different way.

In hotels, outsourcing is a very useful tool because attendance is not linear throughout the year. Attendance varies at different annual intervals. Therefore, for certain positions it is good to use outsourcing. The bearers of the process of globalization are the large global organizations, which in modern economic conditions represent the skeleton of the world economy.

The hotel industry has a growing problem with finding quality staff who will be available in all seasons to get hired.

Human resource management is increasingly important in such conditions. For good human resource management in the hotel industry, it is necessary to use the tools available to human resource managers in such conditions. Of course, the lack of staff significantly reflects on the efficiency of the organization, i.e. on its profitability.

Competition and constant changes in the environment affect all areas of human life, even on Saturdays. In such an environment are successful only those organizations that develop the ability to learn quickly and use the available resources in order to create a competitive service.

In a competitive global economy in which all other facts of success can be copied, people in organizations will be the only source of constant competitive advantage. That is why global organizations can pay attention to this issue through which they can ensure competitive advantage over other organizations.¹

The global environment imposes the need for creative leaders and knowledge managers who provide a business-like atmosphere and create tourism organizations that base their work on teamwork. In order for the organization to be able to develop its global cadre, it can strive to create an atmosphere in which being in another country is

¹ Deresky, *International Management – Managing Across Borders and Cultures*, 156-220.

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a positive experience for managers. This means that careful cadmium planning can be practiced, the global caddis can be supported during their stay in another country and their experiences and skills can be used. The management of the organization can create an effective management team and maximize the cost of labor in different locations around the world.

The organization can benefit from developing new skills and experiences that a manager can gain. The organization can use that knowledge if it wants to create an experienced management team that will be a significant part of the organization's competitive advantage.

In order to help employees realize their greatest potential in the workplace, managers can develop a complete strategy on how to create a successful organization.¹

Modern organizations are increasingly focusing their efforts on education, ongoing training of employees and management of their offices. The ability of people to learn and apply their knowledge is an indispensable asset for the organization and its hidden competitive ability.

Employees' key competencies are explored through the learning process, further highlighting the importance of human resources as a valuable source of competitive advantage.²

2. OUTSOURCING IN THE HOTEL INDUSTRY

Outsourcing as a management strategy according to the hotel organization is outsourcing most functions of the specialized suppliers (small enterprises) is a strategic use of externally connected specialized small and friendly recycling enterprises in order to conduct the activities that were traditionally done by using the internal resources and the employees.

Essentially, outsourcing is based on the long-known concept of externalizing individual activities. The companies have always hired special external staff to carry out certain business activities, business relations have always been maintained and partnerships have been concluded with other complementary companies, and arrangements have been made only for joint attendance.

It can be said that all known business concepts and activities are elements of outsourcing, but outsourcing is still something more. Traditional e-specialization is a process of separating individual activities or entire business processes from the company in order to achieve financial savings (downsizing). Externalization is often accompanied by a transfer of part of the property, bathtubs, database and intellectual property.

A distinction should also be made between outsourcing and the usual contracting relationship with suppliers (contracting). Contracting is a process in which the company (buyer) procures products or services from another company (supplier). In

¹ Kitchin, *Leading your People to Success By Guiding Corporate Culture Change*, 203-225.

² Ибид, оп.цит.11, 141.

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this way, the supplier can in no way deviate from the instructions of the buyer, and the buyer can replace the supplier whenever he wishes. In this regard, the buyer has full control of the business process, ie. dictates to the supplier exactly what he wants from him and how he wants the service to be performed.

In outsourcing, the outsourcing company concludes a long-term contract (usually between 5 and 10 years) that specifies the outsourced products or services. The outsourced manager leaves the choice of methods for performing and controlling the manner of performing business activities.

In the hotel industry, outsourcing services are most commonly used for activities such as: accounting, internet access, web design, etc.

Hotel companies use outsourcing in their business, when it comes to activities with large investments, and use smaller hotels that due to lack of funds are not able to cover the high fixed costs, so they apply outsourcing. Furthermore, hotels use outsourcing only for those activities that require a lot of effort, time and resources, and the profit is not significant.

Outsourcing is commonly used at the lowest operating levels such as indoor and outdoor maintenance, laundry, security and surveillance. Hotel companies, almost always, independently manage outsourcing activities, finance-related activities, payments and account management, and manage human resources.

Canadian research shows that the biggest motivator for using outsourcing is cost reduction, although, as a rule, outsourcing does not always lead to savings.¹ Another study shows that out of all the jobs where employees have contact with guests, outsourcing does not work well. After the research, the hotel management decided not to hire outsourcing for all activities that involve contact with customers, but to work exclusively with their own human resources.²

3. ADVANTAGES AND DISADVANTAGES OF OUTSOURCING IN THE HOTEL INDUSTRY

When making a decision to use outsourcing as a business strategy, a detailed analysis of the situation in the organization and its structural elements should be performed. After making a decision, one can consider the composition and processes that can be left to the outsourcing organization, how to create communication channels for better implementation and support, how to establish a new partnership and how to ensure the best in success.

When making an outsourcing decision, it is necessary to analyze certain rules that the organization should support when conducting outsourcing. The positive aspects of outsourcing is that the activities are performed by specialized organizations that

¹Barrows, C. W., Giannakopoulos, E. (2006), „Istraživanje eksteralizacije pripreme hrane u kanadskim hotelima“, Turizam, Vol. 54, br. 4, 417-424.

²Vučur G., (2013): Pozicioniranje outsourcinga u hotelskom poslovanju, Economics & Economy; Vol 1, No. 1 (March, 2013), 225-234

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increase the value; there is no need to evaluate employee performance for outsourced activities; the management of the organization can be dedicated to the more important activity because the outsourcing does the ancillary work; less is invested in equipping, training and educating employees for outsourcing activities and services; engaging in outsourcing reduces the risk of outsourcing work.

The application of outsourcing also has some negative applications such as outsourcing there is a risk of leaking important or confidential information about the organization; ignorance of the activities performed by the outsourcing can lead to a bad impression on the associates; there is a possibility to make a bad assessment of the collaborators, and then to lose in quality;

The biggest potential failure of outsourcing is the inadequate approach to assessing the physics associated with outsourcing activities. In order to adequately manage these physics, it is necessary to regularly evaluate the physics related to the outsourcing processes and activities. Following the good report, the assessment of the physics of outsourcing activities should be carried out at regular intervals.

The reasons for the negative phenomena can be found in the poor preparation for the use of outsourcing, by the outsourcing manager, which resulted in incorrect selection of the issuer, but also the emergence of a monopoly on certain issues.

The other important phenomena that follow outsourcing are particularly different. According to the latest research of the most successful companies in the world markets, outsourcing brings significant financial benefits to companies that operate in this way. All jobs are moved, they are performed at new levels, in countries that have a proven labor force, cheap and with fees that are several times lower than those in developed countries. This leads to the expansion of outsourcing, so that according to the latest estimates of economists, the most powerful companies are committed to using outsourcing at 30-70% of their business and services and products. Both public and state companies are divided into this step. Namely, all Putin activities, but also bookkeeping, accounting, etc., are relocated to other continents and countries. In addition to this, it has been noticed that many new ideas and technical solutions originate from these separate parts of the companies or only from the outsourcing platform. All this additionally encourages the fasting of the company, and in a special way leads to new divisions of the work. Small and specialized companies for certain products or services can be significantly effective, can develop innovative solutions, increase flexibility, increase the portfolio of services and continuously participate in the improvement of the product.

Therefore, the question of whether to use outsourcing should not be asked at all, but as the best to use.¹

In the United States, only 12-14% of organizations' work is devoted to outsourcing, while in Europe the percentage is doubled. The need for outsourcing providers will further increase due to the expansion of markets in underdeveloped countries in Southeast Asia and Eastern Europe.

¹ Porter, *The Value Chain and Competitive Advantage*, 50-66.

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CONCLUSION

In order to make a quality plan for the management of human resources, the direct managers or the managers of the cadastral function can recognize the things that need to be done in the planning period in order to realize the defined goals of the hotel. and the skills needed to get the job done and how many people are needed to get the job done. Planning aims to harmonize planning options and align views on plans. Important decisions cannot be made without a plan.

In conditions of globalization, the process of outsourcing is experiencing a rapid development. This process involves the transfer of certain functions and processes from the parent companies to external companies that will perform them better, faster and cheaper, while all available human and material resources are the main focus of the business.

For the survival and development of hotel organizations, outsourcing is a great range of opportunities and development chances in the next period. It is desirable to take advantage of all the opportunities for outsourcing that exist in the domestic markets, but an attempt should be made to include in the global outsourcing trend in areas where competitive competitiveness can be achieved, which is mainly related to quality and quality. providing services.

It can be said that outsourcing is a global trend, and should be taken into account, and that business start-ups, if they start outsourcing, can focus more on and dedicate themselves to everything they do. purpose and aspiration of each company.¹

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FACTORS DETERMINING GENDER PENSION GAP IN EUROPE: A CROSS NATIONAL STUDY

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Abstract

The objective of this paper is to investigate the factors that determine the gender pension gap in Europe. In particular, we focus on understanding how and which risk factors create the pension gap among the two genders. To extract the risk factors that determine the gender pension in Europe, we use EU-SILC and LFS data from Eurostat. For our analysis we engage descriptive and inferential statistics and the software IBM SPSS. EU countries are clustered in two groups based on the gender pension gap. Women working part time, and gender differences in working life duration, were found to be the two most significant factors that determine the pension gap. Gender pay gap, was not found to be significant due to the paradox that some countries exhibit, high gender pay gap and low pension gap.

Keywords: gender pension gap, gender pay gap, working life patterns, gender differences

JEL classification: J16, J31, N30

INTRODUCTION

According to the 2nd principle of The European Pillar of Social Rights, equality of treatment and opportunities between women and men must be ensured and fostered in all areas, including participation in the labour market, terms and conditions of employment, and career progression. The differences in the labour market between the two genders are recorded in various levels: men are getting paid more than women, they work more hours, and their jobs are more highly esteemed than those of the women (Reskin and Bielby, 2005).

The 15th European Pillar of Social Rights ensures that a) workers and the self-employed in retirement, have the right to a pension commensurate to their contributions and ensuring an adequate income, b) women and men shall have equal opportunities to acquire pension rights and c) everyone in old age has the right to resources that ensure living in dignity. However, currently these rights are not ensured properly, as there are big differences among the two genders. The average gender pension gap in the EU is above 35% (Dessimirova & Bustamante, 2019). The demographic challenge of an ageing population and the increasing diversity of working life, call for a greater focus and deeper analysis of the current situation among genders and across Europe.

In general, the factors that determine the gender pension gap can be classified in two main categories (Dessimirova & Bustamante, 2019): the employment history characteristics of someone, and the pension systems and policies of a country. The first group is consisted of factors such as the years in employment, the work intensity and

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the remuneration while the second group is consisted of policies such as career break compensations or penalties on early retirement.

In particular, gender pay gap at EU level can be considered as a potential risk factor to the gender pension gap. Gender pay gap is defined as the difference between average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. According to Eurostat (2013) “for the economy as a whole, women's gross hourly earnings were on average 16% below those of men in 2011 in the European Union (EU-27) as well as in the euro area (EA-17)”. Bayard, Hellerstein, Neumark, and Troske (2003) claimed that sex-segregation in the labour market accounts for high percentage of the wage differences between women and men. According to Blau and Hendricks (1979) this phenomenon is viewed as a type of inequality between the two genders and therefore is worth to examine the relationship between gender pay gap and gender pension gap.

The current study aims to identify and understand which factors contribute to the gender pension gap across the member states of European Union. Eurostat EU-SILC is used as database to extract useful information on gender pension gap. To formulate a comprehensive picture of the factors that determine the level of pensions in Europe and the reflection on gender inequalities we involve descriptive and inferential statistics, and the software IBM SPSS v.20.

The paper is structured as follows: in the next section we present some literature, Section 3 describes the methodology used and databases, in Section 4 we outline the analysis conducted and the results, and finally in Section 5 we present the discussion and the conclusion.

1. LITERATURE: Factors that contribute towards the level of pensions

Pension can be defined as a benefit, usually money, paid regularly to retired employees or their survivors by private businesses and federal, state, and local governments. Pensions aim to protect retired people from poverty and allow them to enjoy decent living standards. They are the main source of income for about a quarter of the EU population, with the main source of income for older citizens in Europe being state pensions. The share of older people in Europe's population and life expectancy are both increasing. European pension systems will need to adapt to stay financially sustainable and be able to provide Europeans with an adequate income in retirement.

The topic of the gender gap in pensions has only recently gained the attention of academia and policy-makers (Adami, Gough and Theophilopoulou, 2013; European Commission, 2013a; Folbre, Shaw and Stark, 2005). For the first time in-depth the gender gap in pensions was examined in a report published by the European Commission in 2013a.

According to Samek et al. (2011), the single most important component of older people's income, and especially for women are pensions. The pension is an important determinant of the economic independency of the retired female. The research on pension gender inequalities is important as women constitute the majority of the ageing population due to their higher life expectancy. For the EU as a whole, the average pension of women stood at 60 percent of the average pension of men in 2012 (European Commission in 2013a). Importantly, these calculations do include survivors'

benefits, which protect women to certain degree against poverty following the loss of their partner.

This work outlines significant structural gender differences that contribute to the gender gap in pensions, including employment history such as number of years in employment and intensity of employment (part-time vs. full time employment) and the gender pay gap paradox.

The gender pay gap

The often substantial gender gap in pensions reflects the gender gap in remuneration, working hours, duration of working lives that women faced during their working lives. In particular pay differences may be rooted in education and skills levels, as well as various forms of gender segregation and discrimination. The gender pay gap is defined as the difference between average gross earnings of male and female employees as % of male gross earnings. The average pension gap in Europe in 2018 was 14.8 % (Eurostat 2020) with Estonia exhibiting the highest pension gap (22.7%) and Romania (3.0%) exhibiting the lowest. According to the literature there does not appear to be a simple correlation between gender pay gap and pension gap across all EU countries (Dessimirova & Bustamante, 2019). The two indicators are associated with a paradox as at some countries high pay gap corresponds to high pension gap and in other countries low pension gap are associated with high pay gap. The consideration of the gender pay gap in pensions constitutes a paradox that can only be explained with the fact that countries may have specific policies to decrease the gender pension gap.

Work experience and work profile

The gender pension gap mostly reflects gender pay inequalities, which according to the literature lead to lifetime earnings inequalities and result from differences in past employment, including work intensity and career breaks. The gender pension gap in some countries also, reflects the extent to which pension designs, mitigate these differences or in other countries the features of the pension system and coverage gaps can be a driver of the gender pension gap. Currently pension systems manage to reduce these inequalities only to a limited extent in the EU.

As mentioned above, the links between labour market income and pensions are being strengthened. Even though retirement ages between men and women are being equalized, the differences in the pension systems in the EU are very significant. In countries like the Netherlands, Austria and Italy, high labour market inequalities translate into high gender gaps in pensions. On the other hand, Denmark, Estonia, Slovakia and the Czech Republic manage to achieve a low level of the gender gap in pensions, even though the gender gap in total labour earnings remains high.

Across the EU countries, women work on an average 4.49 years less than men in full-time jobs. The average duration spent in employment is lower for women than for men, because women spend around five years more on care activities such as supplying large amounts of childcare for grandchildren and they stay longer in education (OECD, 2017). Women work more years in part-time employment and are still much less likely than men to be self-employed and are less likely than men to employ staff (OECD, 2017). Even when working in similar positions to men, women face lower wages and lower promotion opportunities. Thus, women are less likely than men to be employed; and when they are employed, they earn less, work fewer hours and have shorter careers on average. However, women spend more time in retirement, as they live longer.

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Gender gaps in the employment rates of older workers are also considerable in many Member States. In 2016, the employment rate of women aged 55-64 ranged from a low 26.3 percent in Malta, to the high 73.5 percent in Sweden, while the EU-28 average employment rate for all working ages was at 66.5 percent (Eurostat 2017). While in three countries, Estonia, Latvia, and Finland, the employment rate of older women exceeds that of men, in two countries, Malta and Greece, the employment rate of older women was below 30 percent. In many countries, the employment gender gap remains roughly stable, both at high levels (e.g. Malta) and at low levels (e.g. Sweden). In general, EU employment rates in the 55-59 year-group are higher for men than for women. Exceptions to this pattern, are found in countries that were formerly part of the Soviet Bloc such as Lithuania, Estonia, Latvia and Bulgaria, where employment rates are higher for women than for men in the 55-59 age group. These relatively high rates of women's employment could be explained by the fact that this generation of women under state socialism had to work, either for economic or political reasons (Ogg and Rašticová, 2020).

Several Member States have, or used to have, lower statutory pension ages for women than for men, suggesting that pension legacies may play a role in gender employment discrepancies among older workers. Generally, gender disparities are narrowing as successive age cohorts – with steadily higher female labour force participation rates – reach the ranks of older workers.

All these labour market outcomes translate into differences in pension income, which in turn translate into an average gender pension gap. Based on previous studies and as mentioned above we have isolated some risk factors we consider are worth examine in order to investigate if they contribute and how they contribute towards the increase of the gender pension gap. These risk factors are, work intensity, gender differences in working life duration and gender pay gap.

2. METHODOLOGY AND DATA

The main sources we have used to create the dataset, is the EU-SILC and EU-LFS of 2016 Eurostat database. In particular, for the gender pension gap, data for pensioners aged 65-79 of the year 2016 were taken as they are reported in the Pension Adequacy Report of 2018 (European Commission 2018 DG for Employment, Social Affairs and Inclusion p. 69). Data on the unadjusted gender pay gap were retrieved from Life Force Survey (Eurostat) for the year of 2016 and is calculated on a population that consists all paid employees in enterprises with 10 employees or more (Eurostat 2018a). The latest year that Greece has reported the unadjusted gender pay gap was in 2014 and therefore for Greece we have used the value of 2014. Data for the gender gap in the working life duration, were taken by the Pension Adequacy Report of 2018 and refers to 2016 (European Commission 2018 p. 75). It is worth mentioning here that for all EU countries, with the exception of Lithuania and Latvia, the duration of working life is higher for men than for women. Finally, the data set on the percent of part-time employment and temporary contracts of women in EU-28 was extracted from the Life Force Survey (Eurostat) for the year of 2016 and is calculated for women aged 15 to 64 using as a basis the percentage of total employment (Eurostat 2018b). Here we also need to note that all data include UK as a member of EU-28.

At the beginning we have engaged mainly descriptive statistics for the variables under study such as mean, median and standard deviation to map the current situation. We also used the agglomerative hierarchical method for cluster analysis (buildup method) where each object or case starts out as its own cluster and in subsequent steps, the two closest clusters or cases are combined into a new aggregate cluster, that reduces the number of clusters by one, step by step. The method to compute the clusters is the Ward’s method and distance measure the Euclidean squared distance. Ward’s method uses an analysis of variance approach by calculating the total sum of squared deviations from the mean of a cluster. As actually there is no best method to use for clustering, Ward’s method and Euclidean squared distance has been chosen as the most efficient and used ones (Burns & Burns, 2009).

Finally, one-way ANOVA is employed to identify further which variables are determining the gender pension gap.

3. ANALYSIS AND RESULTS

The main predictors for the gender pension gap under study are the gender pay gap, women working part time and gender differences in working life duration-women work a lower average number of years in comparison to men due to career breaks and mainly related to child care. In the next table some descriptive results are shown (Table 1).

Table 1. Descriptive statistics for the variables under study for EU-28^a

	Mean	Median	Std. Deviation
Gender pension gap (%)	27.16	27	12.42
Gender pay gap (%)	14.18	14.4	5.37
Gender gap in the working life duration (in years)	4.49	4.4	2.7
Employment intensity status (part-timers, age group 15-64) (%)	23.68	17.90	17.13

Source: Eurostat, EU-SILC 2016

^a Authors’ calculations

As a next step we attempt to find significant correlations using inferential statistics between gender pension gap and the variables under study i.e. the gender pay gap, the gender gap in the working life duration (in years) and the employment intensity status (working part-time, age group 15-64). While some significant correlation was found between gender pension gap and gender gap in the working life duration and the employment intensity status, any attempt to find significant correlation between gender pension gap and gender pay gap across EU countries failed. This paradox may be attributed to the fact that some countries, such as Estonia, exhibit very high pension gap but at the same time very low gender pay gap. For example, Estonia has the widest pay gap of 26 %, but has the lowest pension gap of 3% (Dessimirova & Bustamante2019). The following figure (Figure 1) clearly demonstrates a “scissors graph” that confirm the different country-cases across EU.

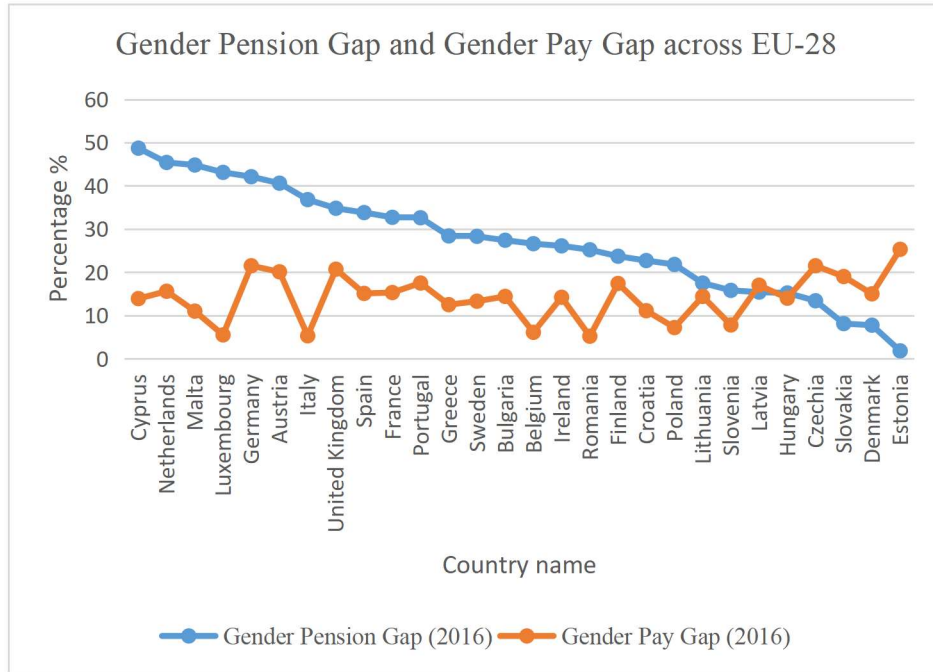


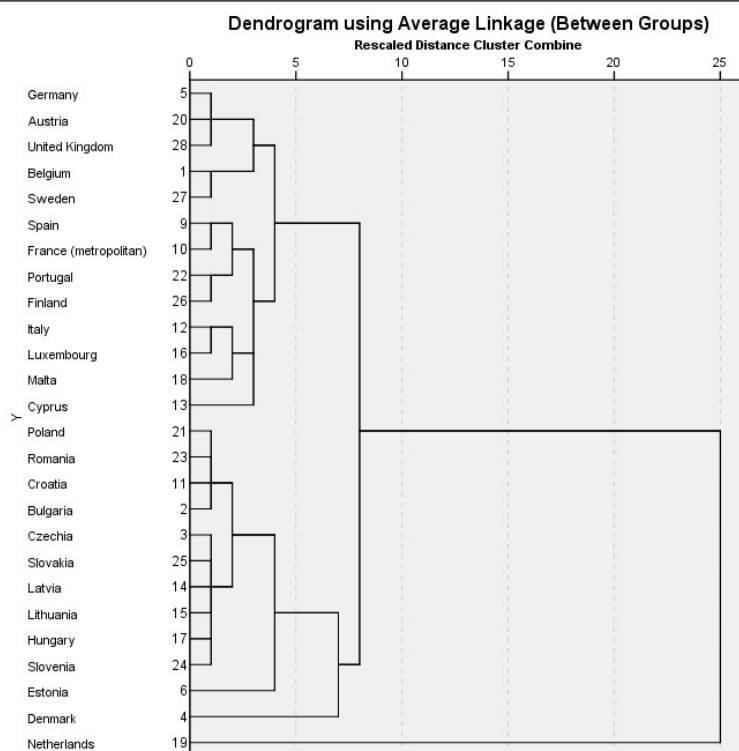
Figure 1: The gender pension gap and gender pay gap across the EU-28.

Source: Eurostat, EU-SILC 2016

^a Authors' calculations

Using cluster analysis, EU countries were clustered in two significantly different groups (Table 2). The first group is consisted by countries with higher mean gender pension gap (38.14%), higher mean percent of women working part time (37.62%), higher mean gender differences in the working duration life (5.46) but with lower mean gender pay gap (13.62%). In the first group, Belgium, Germany, Spain, France, Italy, Cyprus, Luxembourg, Malta, Netherlands, Austria, Sweden and United Kingdom are included. In the second group the countries that are included are those with lower gender pension gap (17.74%), lower percent of women working part time (11.90%), lower gender differences in the working duration time (3.33) but higher gender pay gap (14.77%). The countries included in this group are Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, and Lithuania.

Table 2. Cluster analysis



The paradox of the gender pay gap not being significant can be seen also in Table 3 where is the only variable that does not contribute significantly to the gender pension gap. The paradox of the gender pay gap not being significant can be attributed to each country's policies and schemes which is the case of the post-soviet countries in eastern Europe.

Table 3. Analysis of Variance for the variables under study for EU-28^a

	Cluster 1 (%)	Cluster 2 (%)	Significant value	F-value
Gender pension gap 2016	38.14	17.74	<0.0001***	43.803
Part-time employment of women 15-64 2016	37.62	11.90	<0.0001***	29.315
Gender gap in working life (years)	5.46	3.33	<0.042***	4.617
Gender pay gap 2016	13.62	14.77	0.608	0.27

Source: Eurostat 2016 EU-SILC

Note: Authors' calculations,

* p-value = 0.10.

** p-value = 0.05.

*** p-value = 0.01

CONCLUSION

Trying to understand how and which risk factors create the pension gap among the two genders in countries across EU, we have classified the countries in two groups where working life duration of women and intensity of employment (working part time) can contribute positively to the gap. Paradoxically we have found that the gender pay gap is not considered as a risk factor across all EU countries. Based on the analysis EU countries are classified in two groups where the first group of countries exhibit higher gender pension gap, higher percent of women working part time and higher gender differences in the working duration life, but lower gender pay gap. The second group of countries exhibit lower gender pension gap, lower percent of women working part time, lower gender differences in the working duration time, but higher gender pay gap. The paradox of the gender pay gap not being significant can be attributed to each country's policies and schemes which is the case of the post-soviet countries in eastern Europe.

A limitation of the study is the small number of variables taken in consideration when designing the model. This work is on-going so to tackle this limitation further research is required to explore which other factors are determining the pension gap in order to minimize this gender inequality.

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FRANCHISING IN MACEDONIA – OPPORTUNITIES AND THREATS

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Abstract

Franchising as a business model is present in the global economy in the current form from the 1950-ties and from the moment Ray Kroc started with McDonald's franchising system. Worldwide, this business model has proven itself an excellent way to grow and geographic expansion of the business. Many different and famous companies are using franchising to grow their business, but since the 1990-ties franchising has been part of the western and developed world.

Franchising in Macedonia is present since the beginning of 1990-ties and starting the market economy and its independence. But although there are some movements, franchising as a way of growing business and creating new ventures did not develop in Macedonia. Thus, the paper aims to understand this situation's reason and identify opportunities and threats franchising in Macedonia face.

The first part of the paper gives a literature review on franchising and research on franchising in Macedonia. In the second part of the paper, a current franchising situation in Macedonia is provided. In the third part, empirical research is presented. The study investigated the measurement of perceptions about the perspectives of the development of franchising in Macedonia. Short empirical survey results were compared with similar research conducted in Croatia in 2006 (Alon, Alpeza and Erceg, 2007) and 2014 (Alpeza, Erceg and Oberman Peterka, 2015). The research results were presented in the form of a PEST analysis. Finally, in the last section, conclusions and the proposals for further research are given.

Keywords: franchising, business model, growth opportunities, Macedonia

JEL classification: M19, M21

INTRODUCTION

Franchising is present in the world economy already for a long time. In the beginning, it was more connected to collecting taxes than with commercial matters. Although the franchising started in Europe, its real growth and success are connected to the USA. In the late 19th-century, the first franchise systems began with operations (Singer, Coca-Cola, General Motors, etc.) Soon other companies started to use franchising as a growth method. But all these systems were not with standardizes products and services. Franchising in a current form is present in the world economy from the mid-1950-ties when Ray Kroc became an exclusive McDonald's franchisee. He introduced the so-called "sellers suite" (Erceg, 2017), which, in addition to the appearance and atmosphere of the business decor, includes every detail based on which business is done. That created the boom in the franchise industry. Franchising, as a business model, started to grow and expand to all parts of the world.

After Central and Eastern Europe opened to the market economy, franchising came to the Balkan area (Slovenia, Croatia, Serbia, Macedonia, Bulgaria, Albania, etc.) (Erceg, 2019; Grünhagen et al., 2019). Although it is essential to state that there were franchising systems in the mid and late 1980-ties) (Alpeza, Erceg and Oberman Peterka,

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2015), there were franchising systems in the former Yugoslavia. Franchising soon started to expand business (as franchisor) and create new ventures (as franchisees). But still, franchising never developed in this area as in some of the countries of Central and Eastern Europe.

Thus, the paper's central research question is the current franchising development situation in Macedonia and the opportunities and threats for further franchising development. In the first part of the paper, a literature review about franchising is given with a particular view of Macedonia's franchising research. In the second part, based on the empirical research among bankers, lawyers, and consultants, an overview of franchising opportunities and threats in Macedonia is given. In the final part of the paper, conclusions and proposals for further research are presented.

1. LITERATURE REVIEW

Franchising as a growth model is used for a long time in the global economy. Some authors state that franchising can be seen in old China and the Roman Empire (Senate-Governors relation) (Tarbuton, 1986). During the Middle Ages, it was used in continental Europe to allow cities to hold fairs. In the 18th and 19th century it was used for enabling pubs selling certain beer brands. Modern franchising was first time used at the end of the 19th century when Isaac Singer started his franchise (Dougan, 1998). Soon after, the big companies began to use franchising for their growth. The major push for the development of franchising was in the mid-1950-ties and the McDonald's story. Boroian and Boroian (2001) defined that franchising occurs when a company (franchisor) licenses its brand and way of doing business to another company (franchisee), which agrees to work following the franchising contract. Michael (2000) stated that both parties involved in franchising are legally dependent but economically interdependent. Therefore, Emmerson (1990) noted that franchising as a business model is examined from a legal and economic perspective as a possible alternative for different distribution and production integration into a single enterprise.

Many authors researched the advantages and disadvantages of the franchising business model. Shane (2005) states that rapid growth enables economies of scale to be achieved with minimal investment. With the essential advantage, the three primary resources, managers, money, and time, are provided by the franchisee. Murray (2003) adds faster growth, better managerial characteristics, and local knowledge advantages. On the other side, Spasić (1996) states the following benefits for franchisees: lack of knowledge and experience can be compensated by training, use of a successful and well-known business name and reputation, and smaller initial capital to start a business.

Similar to the growth of franchising use in the global economy, researchers started examining franchising and its influence on the economy. In their studies, they discussed different franchising viewpoints and perspectives. Some researchers tried to explain the reasons for franchising through other theories such as resource scarcity theory (Oxenfeldt and Kerry, 1968; Castrogiovanni, Combs and Justis, 2006), agency theory (Norton, 1988; Eisenhardt, 1989; Lafontaine, 1992), property rights theory (Mumdziev and Windsperger, 2011), institutional theory (Combs, Michael and Castrogiovanni, 2009), strategic deviance theory (Kidwell, Nygaard and Sillkose, 2011), etc. The theories used to explain the use of the franchise business model as a

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method of growth and expansion of companies can be viewed through three perspectives: the perspective of the franchisor's company, the perspective of the franchise system, and the perspective of the franchise system environment (Erceg, 2017). All these studies gave additional insight into franchising from different theoretical perspectives. The diversity of new theoretical directions in the franchise business model study indicates the further need to research the franchise business model by asking new questions and research implications.

Besides studies on why franchising is used as a growth model and way to start new ventures, other authors also examined various franchising models. From 2000 to 2010, there are more than 80 different scientific papers about franchising covering different viewpoints from entrepreneurship, finance, management, and marketing (Dant, Grünhagen and Windsperger, 2011). Similar research conducted by Young and McIntyre (2011) presented a list of research papers where the majority investigated the business model's franchisor side but from different perspectives. (Table 1)

Table 1. International Society of Franchising conferences 1986-2010 paper topics

1986-1999		2000-2010	
Topic of paper	Number of papers	Topic of paper	Number of papers
Franchise Management	69	Franchise Management	106
International Franchising	67	Performance & Growth	92
Relational Issues	57	International Franchising	53
Performance & Growth	50	Legal & Political	52
Legal & Political Issues	43	Relational Issues	47
Marketing	36	Marketing	33
Nature & Scope Franchising	35	Entrepreneurship	18
Economics	12	Modelling & Methodology	15
Entrepreneurship	12	Knowledge Transfer	13
Modelling & Methodology	9	E-Commerce/Internet	9

Source: adapted from Young and McIntyre, 2011: 15

The previous table shows the ranking of different franchising research topics and papers presented at conferences organized by the International Society of Franchising. As can be seen, most papers relate to franchise management, performance and growth, and international franchising. These three topics are the essential characteristics of the franchise business model since to have good performance and development, and franchisors have to take care of franchise management. After the franchisor has become a recognizable brand on the domestic market, it is crucial to growing further to the international market where the franchise system sometimes needs to be adapted. Thus, this topic is of great importance for the further success of the franchising system.

Another important research topic is the relationship between franchisor and franchisees. During the duration of the franchise business model, the franchisor learns and grows in business. The franchisee changes his relationship with the franchisor, thus creating an interdependence that develops more and more with the duration of the franchise relationship (Che, Liu and Zeng, 2010). For the franchise system's success, the franchisor needs to be one step in its development ahead of the franchisee to influence the franchise system's further development positively. Since this is a changing relationship, there is a clear understanding that building equity is a significant aspect of purchasing a franchise. That means a productive franchisor-franchisee relationship is a long-term strategic relationship that brings value to both parties. When the franchisee does not earn more than his salary, the association is terminated (Spinelli, 2000).

Many authors examined opportunities and threats for the development of franchising worldwide. Alon (2004) found that lack of capital, lack of entrepreneurial and managerial talent, and insufficiently developed infrastructure affect franchising development. Sanghavi (1998: 38) found that in transitional economies, there are many substantial obstacles for the development of franchising, and some of them, among others, are incompatible business practices, infrastructural deficiencies, underestimated costs of imported ingredients, tariff barriers for input components, the absence or misjudgment of the required demand, the lower purchasing power of the target group, investors, etc. According to Hoffmann and Peble (2004), there are different political barriers, including economic stability concerns and political environment, possible changes. Franchising development is also influenced by socioeconomic barriers (i.e., low income, weak currency, etc.) and technological barriers (i.e., sanitary measures, standards, different regulations, etc.)

1.1. FRANCHISING RESEARCH IN MACEDONIA

Franchising in Macedonia started in former Yugoslavia in 1969 when Diner Adriatic became a franchisee for Diners International for the Balkans area. Their example was soon followed by another credit card company – American Express (Erceg, 2019). Other big companies like Hertz, Intercontinental, Coca-Cola, Pepsi Co, Levi's, Hyatt, and McDonald's started opening their franchise location until the end of 1980-ties (Erceg, 2018; Damoska-Sekuloska, 2018; Vidanović and Milenković-Kerković, 2018). After Macedonia gained independence, a new phase of development in franchising started. The first international franchise system to enter the Macedonian market was McDonald's (Boškowska, 2017).

Similarly, with the start of franchising in Macedonia, researchers started to examine this critical topic for the national economy from different viewpoints. So, we have more than several studies that looked legal side of franchising. Dabovik-Anastasovska (2011) compared franchising agreement in law and practice between Croatia and Macedonia, Jashari and Osmanaj (2016) compared to franchising's legal treatment Macedonia and Kosovo. Sotiroski and Filiposki (2016) conducted the first study, which looked at the Macedonian franchising model's legal and economic aspects. The main research topic was still connected to franchising's legal side, but this research showed that franchising should be examined from an economic viewpoint. They also noted that

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in Macedonia, due to the lack of adequate information sources, the promotion of franchising attractiveness is disabled.

Besides these legal studies in recent years, there were more than several franchising studies from the economic viewpoint. (Table 2)

Table 2. Research about franchising in Macedonia

Authors	Topic
Jordanovska and Polenakovikj, 2013	Franchising as a form of starting SMEs
Boškovska, Nikolovski and Polenakovikj, 2016	Influence of the relationship between franchisees and franchisor on franchising system success
Sofijanovska and Stoimilova, 2016	Franchising as a support for the growth of small businesses
Terpo, 2016	Administrative conditions for the use of franchising for SMEs
Damoska Sekuloska, 2018	Review of franchising situation in Macedonia
Musliu, 2018	Specification of the franchising relationship
Damoska Sekuloska and Erceg, 2018	Use of smart contracts in Franchising

Based on the previous table, one can notice that franchising research is still a novelty in Macedonian academic circles. That can be related to the fact that franchising as a business model is still in development. There were two studies in the last two years (Erceg, 2019; Grünhagen et al., 2019) that looked at the Balkans area's franchising situation. Both studies examined the situation in Macedonia and got similar results. The research studies on franchising are relatively new in Macedonia, which can be related to the number of franchising systems and their novelty in the Macedonian economy.

2. FRANCHISING IN THE MACEDONIAN ECONOMY

As was previously stated, McDonald's was the first international franchise in the Macedonian market after Macedonia gained independence. There are currently more than several known franchises operating in Macedonia, and they include Dominos, Mango, American Express, Burger King, Fornetti, and Coca-Cola (Sotirovski and Filipovski, 2016; Terpo, 2016; Boškovska, 2017). Master franchisees for most Macedonian franchise systems are from Turkey, while the Fashion Group holds franchise rights for most fashion franchise systems. Although McDonald's was the first to enter the Macedonian market in 1997, in 2012, they decided to stop their operations in Macedonia. At that time, they had six operating locations.

There is no database of franchise systems operating in Macedonia, and none of the institutions is overseeing collecting franchising data (Damoska Sekuloska, 2018). Sofianovska and Stoimilova (2016) indicated that ten franchises were operating in Macedonia, Boškovska, Nikolovski, and Polenakovikj (2016) presented data gathered from 30 systems. Their findings revealed that franchise systems have two or fewer

outlets. The latest research (Boškovska, 2017) showed 70 franchises present in Macedonia at 130 locations in 8 different sectors (Figure 1). Another study by Sotiroski and Filiposki (2016) stated that franchising systems are currently operating in 9 sectors in Macedonia.

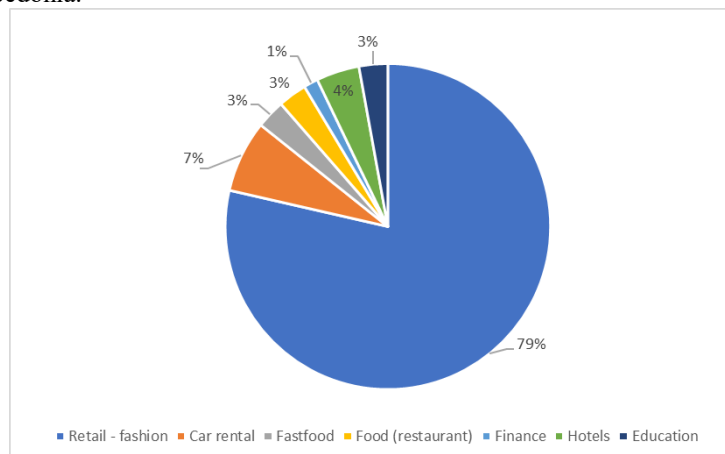


Figure 1. Franchising systems in Macedonia

Source: adapted from Boškovska, 2017

Based on available data, there is no domestic franchise in Macedonia. Macedonian national association for the franchise was founded for the second time in 2018 to promote further franchising use. Grünhagen et al. (2019) state a lack of large shopping centers and modern retail structures is one reason for the low development of franchising in Macedonia. Sotiroski and Filiposki (2016) further state unclear rule and lack of loans, while national government policy is still not promoting entrepreneurship and franchising.

3. METHODOLOGY AND DATA

For this paper, we conducted a survey used in qualitative longitudinal research in Croatia (Alon, Alpeza and Erceg, 2007; Alpeza, Erceg and Oberman Peterka, 2015). Croatia's survey was used to measure perceptions of franchising development perspectives in Croatia in 2006 and 2014. The same population was used for questioning (consultants for SMEs, bankers, and lawyers) with the same predefined questions. The questionnaire had eight open questions in which participants were free to put their opinions on the set questions.

This paper's research results represent five SME and franchise experts' attitudes, five bankers, and five lawyers (in total, 15 participants). The results were presented in the form of a SWOT and PEST analysis. After that, we have compared results from Croatia with results from Macedonia to establish similarities between seen opportunities and threats for franchising development in respective countries. Based on

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the noticed similarities and differences between countries, conclusions and policy recommendations were identified and presented.

4. RESEARCH RESULTS AND DISCUSSION

In the first part of our research, we asked all three groups of participants (bankers, lawyers, and consultants) to name sectors where they see the best potential for franchising business. (Figure 2)

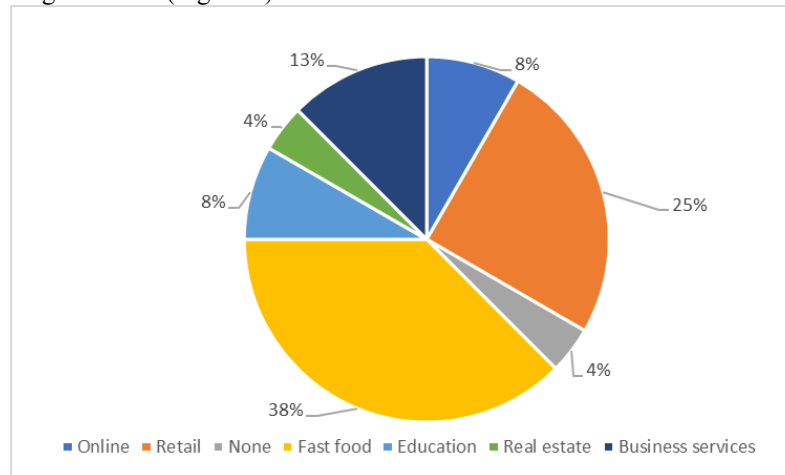


Figure 2. Sectors with the best potential for franchising in Macedonia

Participants see the most significant franchising opportunity in the fast food and retail sector, followed by business services. It is substantial to see that there are participants who are not seeing any industrial sector in which franchising could grow. Besides industrial sectors, participants identified the main operational problems for the development of franchising in Macedonia. Among others, they include high franchise fees, low purchasing power, small territory, low level of education and knowledge about franchising, etc. These answers are almost identical to the results from the studies conducted in Croatia in 2006 and 2014.

In the second part of our research, we asked participants to identify opportunities and threats that franchising faces in Macedonia. (Table 3)

Table 3. Research about franchising in Macedonia

	Bankers	Consultants	Lawyers
Opportunities	<ul style="list-style-type: none"> • New business model • Unsaturated market • Smaller franchises with lower investment 	<ul style="list-style-type: none"> • New business model • Unsaturated market • Not so many systems in the market 	<ul style="list-style-type: none"> • There are not so many systems

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Threats	<ul style="list-style-type: none"> • Low standard • Low purchasing power • Small territory 	<ul style="list-style-type: none"> • Interesting way for business expansion • High fees • Low standard 	<ul style="list-style-type: none"> • Small territory • No legal regulation • There is no tradition and culture • High fees
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All three groups identified more than several opportunities and threats for further development of franchising in Macedonia. Opportunities include an unsaturated market, not so many franchise systems currently present in the market, the possibility to have a smaller franchise with lower investment. On the other side, threats include the small territory of Macedonia, high franchise fees for buying a franchise, the low purchasing power of inhabitants, and the point that franchising has no legal regulation in Macedonia.

During the research, we asked contributors to identify factors according to PEST analysis (political/legal, economic, social, and technological), which influence their opinion development of the franchising in Macedonia. Answers collected in our research are presented in Table 4 and systemized in a matrix overview. At the same time, we have compared them with a similar study conducted in Croatia in 2014.

Table 4. PEST analysis of factors influencing franchise development in Macedonia

	Results of research in Macedonia, 2020	Research results from Croatia in 2014
Political factors	<ul style="list-style-type: none"> • there is no legal regulation of franchising, • frequent political changes • the economy is under political influence • intellectual rights protection 	<ul style="list-style-type: none"> • the slow and inefficient legal system with consistent changes in legal and tax laws, • inadequate and too slow intellectual property rights protection, • lack of legal experience in regulating franchise as a business concept • franchise agreement non-existent in state regulations, • corruption, • no registry of franchising networks • the potential of franchising for the development of entrepreneurship not recognized at the policy level,
Economic factors	<ul style="list-style-type: none"> • low purchasing power • the economy is not stable • banks not willing to finance start-ups, • the unwillingness of banks for participating in franchise purchase financing, • lack of non-traditional financial products in the market, 	<ul style="list-style-type: none"> • too expensive labor force, • the decrease in purchasing power because of crisis, poverty, • the long time needed for the return of investment, • lack of structural reforms of the economy and its influence in the decrease of GDP, • too small market, • the low capital potential of investors, • banks not willing to finance start-ups, • the unwillingness of banks for participating in franchise purchase financing, • lack of non-traditional financial products in the

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Social factors	<ul style="list-style-type: none"> • small market • lack of workforce • migrations • lack of knowledge about franchising • lack of education for business • no tradition of franchising, • aversion to accepting new ways of doing business • lack of knowledge and willingness for self-employment 	<ul style="list-style-type: none"> market; • lack of knowledge on franchising, • refraining from the investment – fear of future, • the high rate of unemployment, • no tradition of franchising, • mistrust of foreign franchisors, • fear of long-term binding by agreement, • fear of undertaking the entrepreneurial activity, • considerable differences in the market potential of different parts of Croatia, • aversion to accepting new ways of doing business • lack of knowledge and willingness for self-employment
Technological factors	<ul style="list-style-type: none"> • small market for technology development • low investments in new technology 	<ul style="list-style-type: none"> • numerous regulations that increase insecurity, • the undeveloped industrial sector, • the decrease in the production of different goods which directs entrepreneurs to import many ingredients in some industries, • low level of computer and internet skills among the population for collecting information on business opportunities

As it is possible to see, there are more than several same factors in PEST analysis between Croatia and Macedonia. However, there is a difference of six years between the two studies. Political factors show that doing business in Macedonia is under the influence of frequent political changes, lack of intellectual rights protections, and a lack of franchising business model regulation. Economic factors are not only unsupportive for franchising but also for any kind of business. Social factors are under the influence of migrations, lack of franchising knowledge, and lack of knowledgeable workforce. Technological factors show no technological development due to the small market, and there are no significant investments in new technologies.

Our research's last question was connected to the participants' prognosis of Macedonia's franchising development in the next five to ten years. Although many franchising development threats and PEST analysis showed additional obstacles, most research participants believe that franchising will be accepted in Macedonia as a business model for business expansion or starting a new venture. But it is essential to state that participants named several activities needed for franchising development, and they include additional education on franchising so entrepreneurs will recognize opportunities franchising can offer.

CONCLUSION

Franchising is entering Macedonia and will become popular worldwide to grow and expand business (as franchisor) and start new ventures (as franchisees). Although franchising is present in Macedonia for more than twenty years, it is still in its early development phases. This can be seen from research (number of franchising systems) and the point that there is still no local, Macedonian, franchising systems.

The conducted research aimed at the identification of opportunities and barriers franchising faces in Macedonia. The identified obstacles can be divided into franchising specific obstacles and general business obstacles. It is essential to state that most of the identified barriers are general, affecting all business entities, no matter

which business model they apply. But at the same time, opportunities show that franchising has potential due to the unsaturated market and the fact that there are not so many systems present in Macedonia.

The PEST analysis showed similar results from the Croatian market results, although there are six years between the two studies. The results from research are not showing obstacles for franchising. Still, business in general and thus the future success of franchising in Macedonia is dependent on the implementation of policy recommendations for increasing entrepreneurial activities in general. Based on the research, we could propose the following policy recommendations: removing administrative barriers for entrepreneurial activity, increased focus on entrepreneurship education, creating an informal model of business venture financing, better protection of intellectual rights. To further grow franchising activities in Macedonia in the future, it is necessary to solve the obstacles mentioned above. Thus, it is not realistic to expect a more significant increase in franchising model use.

We propose to continue with the same research within the next five years to find if the situation has changed. Second research should be focused on finding the exact number of franchising systems operating in Macedonia together with their influence on the national economy (i.e., output, number of locations, number of employed people, etc.)

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GRANGER CAUSALITY TEST FOR THE GOVERNMENT'S CAPITAL EXPENDITURES ON THE GDP OF THE REPUBLIC NORTH MACEDONIA IN VAR ENVIRONMENT

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Vesna Korunovska

Abstract

In this paper, we test Granger causality in VAR environment of the State Budget's capital expenditures on the GDP. There is no doubt that capital expenditures for infrastructure projects, energetic, communications and similar have direct and indirect impact on the GDP growth, but non-essential capital spending raise the question if this part of public consumption as well part of the State Budget resources have influence on the Macedonian GDP growth. We are testing the impact of capital expenditures on the GDP by using econometric model of the Granger causality in VAR environment in order to determine if there is two-ways connections between GDP and capital expenditures from the Budget of the Republic of North Macedonia. We did not find Granger Causality between capital expenditures and GDP of the Republic of North Macedonia for the analyzed period 2006-2019. It implicates that capital expenditures cannot be used for the accurate GDP forecasts with acceptable level of certainty.

Key words: Granger causality, VAR, environment, capital expenditures, probability

JEL Classification: C1, C32, C35

INTRODUCTION

Theoretical literature for fiscal economy prevails with attitudes for the importance and positive impact of the state's capital expenditures on the GDP (Ilzetzki, and all, 2010), (Ostry and all, 2010), (Hebous, 2010), (Rahman, 2010).

However, we can find many evidences in the countries that public expenditures are using for financing different expenditures (e.g. monuments, facades, vehicles, furniture and similar spending for the public administration needs) and are all classified as capital investments in the Budget, as it was a case with the project "Skopje 2014".

There is no doubt that capital expenditures for infrastructure projects, energetic, communications and similar have direct and indirect impact on the GDP growth, but non-essential spending like mentioned above raise the question if this part of public consumption as well part of the State Budget resources have influence on the North Macedonian GDP growth.

We are testing the impact of capital expenditures on the GDP by using econometric model of the Granger causality in VAR environment in order to determine if there is

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two-ways connections between GDP and capital expenditures from the Budget of the Republic of North Macedonia. We are testing Granger Causality between capital expenditures and GDP of the Republic of North Macedonia for the analyzed period 2006-2019. The main task of this paper is to determine if capital expenditures can be used for the accurate GDP forecasts with acceptable level of certainty.

1. METHODOLOGY

Granger causality is the concept usually used for analysis of multiple time series and interaction between them. The main question here is to determine causality between series and how each series influence other series, or if one series have causal impact on the other series. By answering this question can help us for future forecast, in a case when we are able with certainty to determine one variable.

This mean that when Granger causality exists, as a impact of one variable on the other variable, by determination of one variable, as independent variable in the model, we can predict dependent variable(Lutkepohl, 1993).

Granger causality can be determined between variables, between lags and variables, as well between variables and their own legs. Same, if we know the values of one time series and its legs, and we already have detected connection and influence between time series, we can easily forecast the values of another time series. If time series are connected on that way, we can say that one time series has Granger causality on the other time series.

It is important to emphasize that during model development we are not sure if one time series influence another time series, but we know with certainty that if we know one of them, we can predict another time series. In our analyze we will try to answer the question is if capital expenditures as a part of total budget expenditures have Granger causality on the GDP, or vice-versa GDP have Granger causality for the capital expenditures.

We will answer this question by testing the following main hypothesis:

H_{1.0.}: There is no two-ways impact between capital expenditures and the GDP of the Republic of North Macedonia.

H_{2.0.}: There is two-ways impact between capital expenditures and the GDP of the Republic of North Macedonia.

In fact, by using Granger Causality in VAR model we will focus to determine existence of two-ways influence and that is connection between GDP and capital expenditures from the Budget of the Republic of North Macedonia.

Main hypothesis is testing through two individual hypothesis, stated as null and alternative hypothesis:

Individual hypothesis 1.1.:

H_{1.1.0.}: Capital expenditures are not Granger causal with the GDP.

H_{1.1.1.}: Capital expenditures are Granger causal with the GDP.

Individual hypothesis 1.2.:

H_{2.1.0.}: GDP is not Granger causal with capital expenditures.

H_{2.2.0.}: GDP is Granger causal with capital expenditures.

In order to test null hypothesis we use F-statistics. For the VAR model testing we use the method of ordinary least squares- OLS (Lack, C. and Lenz, C. 2000). If p-

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value $> 0,05$ we can not reject null hypothesis, that means we accept null hypothesis. In a case when p-value $< 5\%$ we reject null hypothesis and accept alternative hypothesis that capital expenditures have Granger causality on GDP, and for the second individual hypothesis that GDP has Granger causality on capital expenditures(Lane, 2003).

2. DATA

In our research we use time series with 56 observations, quarterly data for the GDP and capital expenditures from 2006Q1 to 2019Q4, as shown on the following Table:

Table 1. GDP and Capital expenditures of North Macedonia 2006Q1- 2019Q4

Years	GDP	Capital Exp
2006Q1	76991,00	1087,12
2006Q2	79988,00	2120,45
2006Q3	81024,00	2750,65
2006Q4	86289,00	3307,71
2007Q1	77365,00	1106,00
2007Q2	83626,00	1672,00
2007Q3	89439,00	2381,00
2007Q4	94855,00	8582,00
2008Q1	83620,00	2600,00
2008Q2	91196,00	3446,00
2008Q3	92996,00	2977,00
2008Q4	96367,00	11039,00
2009Q1	86104,00	2592,13
2009Q2	89708,00	3670,00
2009Q3	89512,00	2792,00
2009Q4	97549,00	4374,00
2010Q1	90878,00	3228,80
2010Q2	91270,00	2730,40
2010Q3	97119,00	4941,00
2010Q4	95795,00	4434,00
2011Q1	91638,00	4015,00
2011Q2	96665,00	4884,00
2011Q3	96417,00	4273,00
2011Q4	99117,00	4538,00

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Table 1. (continued)

2012Q1	90713,00	4215,00
2012Q2	97105,00	3715,00
2012Q3	96710,00	4419,00
2012Q4	97558,00	6408,00
2013Q1	93617,00	4045,00
2013Q2	99844,00	3980,00
2013Q3	101440,00	3954,00
2013Q4	98362,00	4632,00
2014Q1	96746,00	4308,00
2014Q2	104229,00	4139,00
2014Q3	103324,00	3147,00
2014Q4	103236,00	6029,00
2015Q1	99679,00	4144,00
2015Q2	105177,00	3466,00
2015Q3	108275,00	3748,00
2015Q4	110118,00	7309,00
2016Q1	101100,00	3142,00
2016Q2	107841,00	2999,00
2016Q3	111758,00	4730,00
2016Q4	114605,00	6103,00
2017Q1	105084,00	5055,00
2017Q2	107915,00	3628,00
2017Q3	111969,00	2842,00
2017Q4	115045,00	8338,00
2018Q1	105440,00	1794,00
2018Q2	109714,00	2227,00
2018Q3	114645,00	2576,00
2018Q4	122183,00	5550,00
2019Q1	109446,00	1615,00
2019Q2	113443,00	3665,00
2019Q3	118781,00	3275,00
2019Q4	126360,00	9258,00

Source: State statistics of the Republic of North Macedonia

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Time series analysis was performed by using Eviews software for statistical analysis, as shown on following figures.

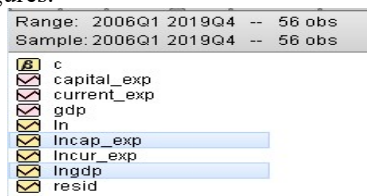


Figure 1. Variables in Eviews
Source: Eviews software

In order to determine non-stationarity of time series we use Logs for the GDP and capital expenditures. Calculated logs are shown on the following Table:

Table 2. Calculated logs for the GDP and capital expenditures

	LNGDP	LNCAP_EXP
2006Q1	11.25144381088757	6.991290956052084
2006Q2	11.28963190240489	7.65938266609569
2006Q3	11.30250068606379	7.919591799266365
2006Q4	11.36545740660683	8.104012595332194
2007Q1	11.25628976092377	7.00850518208228
2007Q2	11.33410975550552	7.421775793644648
2007Q3	11.40131210764664	7.775275846486862
2007Q4	11.46010468878664	9.05742226555147
2008Q1	11.33403800491055	7.863266724009574
2008Q2	11.42076631545144	8.144969417087875
2008Q3	11.44031176045772	7.998671361015776
2008Q4	11.47591909834107	9.309189736018352
2009Q1	11.36331114694413	7.860235210535466
2009Q2	11.40431523024618	8.207946941048616
2009Q3	11.40212797348756	7.934513463882264
2009Q4	11.48811009484546	8.383433201236712
2010Q1	11.41727322667057	8.07986583015929
2010Q2	11.42157742551092	7.912203397592498
2010Q3	11.48369230969995	8.50532301884575
2010Q4	11.46996577053009	8.397057390176256
2011Q1	11.4256013117985	8.297792626380861
2011Q2	11.4790066717666	8.493719835230595
2011Q3	11.47643781359878	8.360071435644025
2011Q4	11.50405624950116	8.420241665339788
2012Q1	11.41545595549073	8.346404870435956
2012Q2	11.48354814625955	8.220133957151859
2012Q3	11.47947208871101	8.39366870513074
2012Q4	11.48820235191472	8.765302488748196
2013Q1	11.44696726990568	8.305236829492592
2013Q2	11.51136424690327	8.289037098278482

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Table 2. (continued)

2013Q3	11.52722276967105	8.282483003730561
2013Q4	11.4964098295923	8.440744019252831
2014Q1	11.4798442663681	8.36822903827628
2014Q2	11.5543456805206	8.328209491748731
2014Q3	11.54562496113324	8.054204897064408
2014Q4	11.54477290840935	8.704336438489406
2015Q1	11.50971030186823	8.329416783939319
2015Q2	11.56339992420376	8.150756470275551
2015Q3	11.59242956608283	8.228977643358312
2015Q4	11.60930779708653	8.896861744480391
2016Q1	11.52386540500856	8.052614818815566
2016Q2	11.58841319910017	8.00603417874901
2016Q3	11.62409109828038	8.46168048148598
2016Q4	11.64924671232847	8.716535732544495
2017Q1	11.56251530931022	8.528133131454572
2017Q2	11.58909915919307	8.196436811235028
2017Q3	11.62597732625071	7.952263308657046
2017Q4	11.65307863515363	9.028578658440742
2018Q1	11.56589734973633	7.492203042618741
2018Q2	11.60563225890444	7.708410667257368
2018Q3	11.64959567634509	7.853993087224244
2018Q4	11.71327519983913	8.62155320674048
2019Q1	11.60318655591497	7.387090235656758
2019Q2	11.63905578711444	8.206583614320752
2019Q3	11.68503674046016	8.094073148069352
2019Q4	11.74689025491602	9.133243321591216

Source: Authors' calculations in Eviewssoftware

We present calculated log values for the GDP and capital expenditures in a chart in order to determine if time series are stationary:

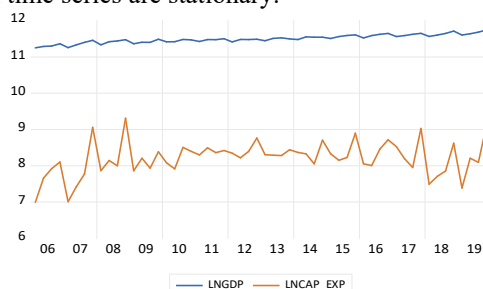


Figure 2. LNGDP and LNCAPEX

Source: Authors' calculations in Eviewssoftware

We need chart's presentation to see if time series are stationary, due to the fact that if time series are non-stationary, regression is spurious and the model is not correct. Stationarity means that variables' mean, variance and covariance are constant through

the time and there is no seasonality (Kilian, 2011). We can notice from the chart that LNGDP time series has moderate growth, which implies that its mean is not constant through the time, and this means that time series are non-stationary. It is difficult to determine stationarity of capital expenditures time series. In order to determine stationarity of time series we also use following measures: R^2 and Durbin-Watson statistics, and we develop following equation with following variables: lngdp, c and lnpcap_exp.

We proceed with analysis with Equation estimates, as shown on following Figure:

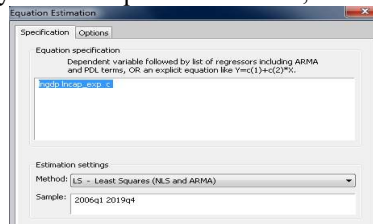


Figure 3. Equation estimates
 Source: Eviews software

Equation estimates results performed by the method of Least Squares-NLS and ARMA are shown on following table as follows:

Table 3. Caption Least Squares Method

Dependent Variable: LNGDP Method: Least Squares Date: 03/30/20 Time: 22:00 Sample: 2006Q1 2019Q4 Included observations: 56				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCAP_EXP	0.115276	0.029216	3.945631	0.0002
C	10.55274	0.240186	43.93580	0.0000
R-squared	0.223781	Mean dependent var		11.49893
Adjusted R-squared	0.209407	S.D. dependent var		0.113381
S.E. of regression	0.100813	Akaike info criterion		-1.716041
Sum squared resid	0.548815	Schwarz criterion		-1.643707
Log likelihood	50.04914	Hannan-Quinn criter.		-1.687997
F-statistic	15.56800	Durbin-Watson stat		0.242990
Prob(F-statistic)	0.000232			

Source: Authors' calculations in Eviewssoftware

The main rule of the method of Least Squares is if $R^2 >$ Durbin-Watson statistics it is spurious regression. If we determine spurious regression, we can not use it for hypothesis testing as well for the forecasting, or the result of a such regression is useless. Equation estimates results confirmed that R^2 (0,223) $<$ (0,2429), as it is value of the Durbin-Watson statistics. It confirms that regression is not spurious and variables can be used in the model, which means that one or both of the variables are non-stationary.

Time series non-stationarity is determined if time series have unit roots. In order to determine non-stationarity of the time series we use ADF Test (Augmented Dickey-

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Fuller Test), which is test for unit roots. Unit roots are important for time series proper modeling. If we determine time series to have unit roots, they are non-stationary and we can not use typical autoregression models like AR, ARIMA, VAR and others. This means that we need to make certain transformations to eliminate unit roots from the time series. If we are not able to eliminate unit roots, at least we need to be aware that time series have unit roots and to use another methods of analysis. Unit roots are synonyms for non-stationarity of time series or for variables' random walk. Unit root test is applicable for all time series models. We use in our analysis logs data for GDP and will perform ADF unit root test. We make evaluation by the levels, using intercept and Akaike Info Criterion that automatically offers 10 lags, and ADF test are shown on the Figure below as follows:

Augmented Dickey-Fuller Unit Root Test on GDP				
Null Hypothesis: GDP has a unit root				
Exogenous: Constant				
Lag Length: 3 (Automatic - based on AIC, maxlag=10)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-0.231091	0.9276
Test critical values:			1% level	-3.562669
			5% level	-2.916779
			10% level	-2.597295
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(GDP)				
Method: Least Squares				
Date: 03/30/20 Time: 22:02				
Sample (adjusted): 2007Q1 2019Q4				
Included observations: 52 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DDPc1)	-0.009683	0.041903	-0.231091	0.8183
D(GDP(-1))	-0.872364	0.089506	-10.19519	0.0000
D(GDP(-2))	-0.879171	0.089082	-9.871419	0.0000
D(GDP(-3))	-0.884822	0.092165	-10.76879	0.0000
C	3488.820	4172.642	0.836119	0.4073
R-squared	0.788355	Mean dependent var	770.5962	
Adjusted R-squared	0.786173	S.D. dependent var	575.9897	
S.E. of regression	2769.491	Akaike info criterion	16.78193	
Sum squared resid	3.60E+08	Schwarz criterion	18.96955	
Log likelihood	-453.3301	Hannan-Quinn criter.	18.65396	
F-statistic	43.24750	Durbin-Watson stat	1.538509	
Prob(F-statistic)	0.000000			

Figure 4. Augmented Dickey-Fuller Test results

Source: Authors' calculations in Eviews software

Null hypothesis of Augmented Dickey-Fuller Test is: GDP has unit root. ADF test use 3 lags from the maximum 10 lags, based on Akaike Info Criterion. ADF test results are represented in t-statistics and p-value. ADF test statistics result for t-statistics is -0.231 and is less than test critical values for 1%, 5% and 10%, which means that null hypothesis can not be rejected. Same, p-value > 5%, which indicates that null hypothesis can not be rejected. This means that this time series has unit root. The lower part of result is regression of unit root, where we can see that ADF uses 3 lags and where p-value of constant c > 5%, and we can not reject null hypothesis, which confirms time series non-stationarity. We proceed testing with Augmented Dickey-Fuller Unit Root Test by using GDP first difference, with 2 lags, based on Akaike (AIC), with maximum 10 lags as well as on intercept.

Augmented Dickey-Fuller Unit Root Test is shown as follows:

Augmented Dickey-Fuller Unit Root Test on D(GDP)				
Null Hypothesis: D(GDP) has a unit root				
Exogenous: Constant				
Lag Length: 2 (Automatic - based on AIC, maxlag=10)				
	t-Statistic	Prob.*		
Augmented Dickey-Fuller test statistic	-18.09180	0.0000		
Test critical values:				
1% level	-3.582699			
5% level	-2.919778			
10% level	-2.597285			
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(GDP,2)				
Method: Least Squares				
Date: 03/30/20 Time: 22:03				
Sample (adjusted): 2007Q1 2019Q4				
Included observations: 52 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	-3.646921	0.201579	-18.09180	0.0000
D(GDP(-1),2)	1.788158	0.147167	12.01463	0.0000
D(GDP(-2),2)	0.895562	0.081289	10.99395	0.0000
C	-2.292104	493.9883	0.274566	0.0000
R-squared	0.921451	Mean dependent var	44.50000	
Adjusted R-squared	0.918541	S.D. dependent var	9491.590	
S.E. of regression	2742.048	Akaike info criterion	19.74460	
Sum squared resid	3.81E+08	Schwarz criterion	18.89470	
Log likelihood	-483.3596	Hannan-Quinn criter.	18.89214	
F-statistic	187.6935	Durbin-Watson stat	1.542049	
Prob(F-statistic)	0.000000			

Figure 5. Augmented Dickey-Fuller Unit Root Test Results
 Source: Authors' calculations in Eviewssoftware

Null hypothesis of ADF test is: LNGDP first difference has unit roots. We use 2 legs in the test. ADFtest statistics result for t-statistics is -18,09, but we use absolute value which means that is bigger than test critical values for 1%, 5% and 10%, which means that null hypothesis is rejected.

We can see that p-value = 0 and is < 5%, which indicates that null hypothesis: First difference of LNGDP has unit root, is rejected. This means that time series has no unit roots, and that by using 2 legs this time series is non-stationary. The lower part of the result is regression of the unit root test where ADF test uses 2 legs and where p-value of constant $c < 5\%$, which confirms variable is significant and that $R^2 <$ Durbin-Watson, and we can reject null hypothesis, and to prove that time series DLNGDP is stationary after 2 legs.

This can be seen on the following Figure with First difference LNGDP results:

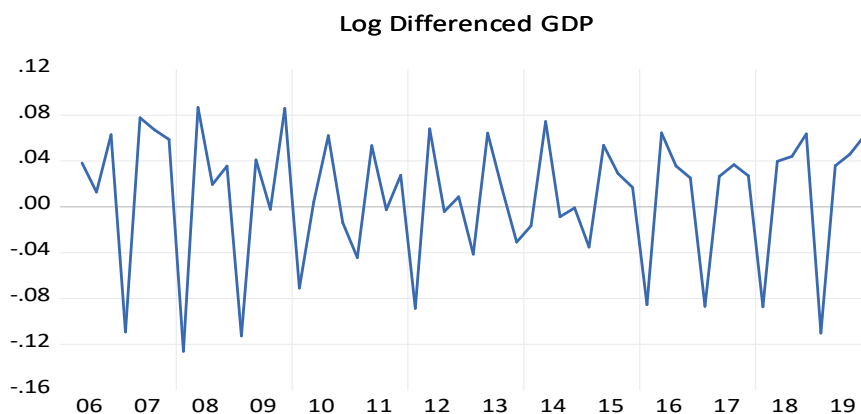


Figure 6. First Difference LNGDP
 Source: Authors' calculations in Eviewssoftware

We can clearly see that that first difference of LNGDP is stationary and that has clear mean reversion, which means that oscillates around 0,000.

3. EMPIRICAL RESULTS

Analysis proceed with VAR estimates. For the VAR estimates we use unrestricted VAR model, due to the fact that we need to use time series first difference in order to avoid non-stationarity. On the next Figure we present the model with 2 legs:

Vector Autoregression Estimates		
Date: 04/01/20 Time: 17:41		
Sample (adjusted): 2006Q4 2019Q4		
Included observations: 53 after adjustments		
Standard errors in () & t-statistics in []		
	D(LNGDP)	D(LNCAP_EXP)
D(LNGDP(-1))	-0.114815 (0.17150) [-0.66949]	5.747680 (1.71341) [3.35453]
D(LNGDP(-2))	-0.108113 (0.17172) [-0.62959]	5.571455 (1.71593) [3.24747]
D(LNCAP_EXP(-1))	-0.065104 (0.01661) [-3.91932]	-1.111412 (0.16596) [-6.69691]
D(LNCAP_EXP(-2))	-0.024902 (0.01845) [-1.34953]	-0.510912 (0.19439) [-2.77138]
C	0.011137 (0.00649) [1.71563]	-0.039897 (0.06496) [-0.61571]
R-squared	0.439100	0.496724
Adj. R-squared	0.392359	0.454784
Sum sq. resid	0.090688	9.890854
S.E. equation	0.045426	0.453938
F-statistic	9.394201	11.94377
Log likelihood	91.27029	-30.71989
Akaike AIC	-3.255483	1.347875
Schwarz SC	-3.069606	1.537752
Mean dependent	0.008385	0.022899
S.D. dependent	0.058286	0.614769

Figure 7. VAR Estimates
Source: Authors' calculations in Eviewssoftware

Dependent variables in the model are GDP and capital expenditures, while independent variables are GDP (-1) and (-2), and capital expenditures (-1) and (-2).

Null hypothesis of the model is: Capital expenditures (-1) and (-2) have no impact on GDP. Model results are presented and in the first row are coefficients of Vector Autoregression, in the second row are standard errors (shown in small brackets), while in the third row is t-statistics (shown in medium brackets), as a value calculated as quotient between coefficient and standard error. Main condition for the statistical significance is $t\text{-statistics} > 2$.

Before the coefficients analysis and t-statistics, we additionally analyses the structure of legs (VAR Lag Order Selection Criteria), in order to determine exact number of legs in the model. Results are on the following Figure:

VAR Lag Order Selection Criteria						
Endogenous variables: D(LNGDP) D(LNCAP_EXP)						
Exogenous variables: C						
Date: 04/01/20 Time: 17:43						
Sample: 2006Q1 2019Q4						
Included observations: 50						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	44.26983	NA	0.000632	-1.690793	-1.614312	-1.661669
1	63.04339	35.29428	0.000350	-2.281735	-2.052293	-2.194362
2	80.86080	32.07134	0.000202	-2.834432	-2.452027	-2.688810
3	104.8548	41.26972*	9.09e-05	-3.634193	-3.098826*	-3.430322*
4	108.9730	6.753852	9.08e-05*	-3.638921*	-2.950593	-3.376802
5	110.5994	2.537152	0.000101	-3.543976	-2.702686	-3.223608

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Figure 8. VAR Lag Order Selection Criteria
Source: Authors' calculations in Eviewssoftware

Model offers different criterions like:LR (sequential modified LR test statistic), FPE (Final Prediction Error), AIC (Akaike information criterion), SC (Schwarz information criterion) andHQ (Hannan-Quinn information criterion). We can see that FPE andAICinformation criterion suggest 4 legs, while LR, SC andHQindicates 3 legs. We accept FPE andAICinformation criterions, and in following analysis we will estimate VAR model with 4 legs..The change of VAR specification and determination of maximum 4 legs in accordance with Akaike (AIC) is shown on the following Figure:

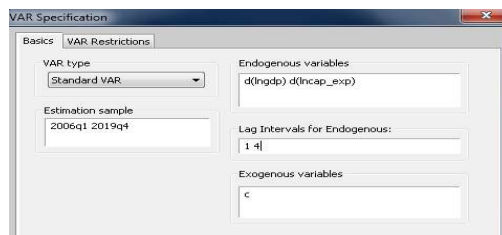


Figure 9. VAR specification
 Source: Authors' calculations in Eviewssoftware

VAR estimates with 4 legs are presented on the following Figure:

Vector Autoregression Estimates		
Vector Autoregression Estimates		
Date: 04/01/20 Time: 17:45		
Sample (adjusted): 2007Q2 2019Q4		
Included observations: 51 after adjustments		
Standard errors in () & t-statistics in []		
	D(LNGDP)	D(LNCAP_EXP)
D(LNGDP(-1))	-0.406524 (0.17341) [-2.34428]	5.973586 (2.19298) [2.72396]
D(LNGDP(-2))	-0.409227 (0.19013) [-2.15239]	5.626257 (2.40437) [2.34002]
D(LNGDP(-3))	-0.243744 (0.19997) [-1.21888]	2.643153 (2.52889) [1.04518]
D(LNGDP(-4))	0.353998 (0.16459) [2.15077]	4.195384 (2.08144) [2.01562]
D(LNCAP_EXP(-1))	-0.029765 (0.01393) [-2.13669]	-1.020964 (0.17616) [-5.79554]
D(LNCAP_EXP(-2))	-0.027130 (0.01780) [-1.52435]	-0.736358 (0.22507) [-3.27162]
D(LNCAP_EXP(-3))	-0.029270 (0.01746) [-1.67609]	-0.531533 (0.22084) [-2.40686]

D(LNCAP_EXP(-4))	-0.001808 (0.01411) [-0.13525]	-0.003654 (0.17843) [-0.02048]
C	0.013212 (0.00577) [2.29107]	-0.085917 (0.07293) [-1.17812]
R-squared	0.806632	0.730841
Adj. R-squared	0.769799	0.679573
Sum sq. resid	0.030897	4.941235
S.E. equation	0.027123	0.342999
F-statistic	21.90024	14.25521
Log likelihood	116.5614	-12.84350
Akaike AIC	-4.218094	0.856608
Schwarz SC	-3.877183	1.197518
Mean dependent	0.009620	0.041662
S.D. dependent	0.056530	0.605938
Determinant resid covariance (dof adj.)		6.56E-05
Determinant resid covariance		4.45E-05
Log likelihood		110.7735
Akaike information criterion		-3.638178
Schwarz criterion		-2.956357
Number of coefficients		18

Figure 10. VAR Estimates

Source: Authors' calculations in Eviews software

During analysis of the VAR model we need to estimate coefficients that are “blue” (best linear unbiased estimators), which means that offer the best answer for the VAR character. Model determined 18 coefficients and we have to determine their significance. In order to do that, we need to determine *p-value*. Testing and interpretation of coefficient significance will be done by VAR system development and estimation of autocorrelation of the residuals, residuals normality and residuals' heterostedacity.

We have used unrestricted VAR method, because we assume that time series are cointegrated (have no long term causality, which means that we assume short-term causality. Moreover, this model use time series first difference in order to avoid non-stationarity of variables. In order to determine cointegration we use Johansen cointegration test or any other cointegration tests and if there is no cointegration we can proceed with the use of the model.

VAR results will be confirmed after residuals autocorrelation estimation. In order to do that we test residuals with two methods. First, we make VAR Residual Portmanteu Test for Autocorellations) and results are shown on the next Figure:

VAR Residual Portmanteau Tests for Autocorrelations
 Null Hypothesis: No residual autocorrelations up to lag h
 Date: 04/01/20 Time: 17:46
 Sample: 2006Q1 2019Q4
 Included observations: 51

Lags	Q-Stat	Prob.*	Adj Q-Stat	Prob.*	df
1	0.545254	---	0.556159	---	---
2	1.459705	---	1.507934	---	---
3	5.430554	---	5.726962	---	---
4	7.540648	---	8.016638	---	---
5	8.814352	0.0659	9.428788	0.0512	4

*Test is valid only for lags larger than the VAR lag order.
 df is degrees of freedom for (approximate) chi-square distribution

Figure 11. VAR Residual Portmanteu Test for Autocorellations

Source: Authors' calculations in Eviews software

Null hypothesis of VAR Residual Portmanteau Test for Autocorrelations is: there is no autocorrelation between residuals and lags - h.

There is no values for the first 4 lags, due to the fact that model use 4 lags. The value for the p-value for the fifth lag is $>0,05$, which indicates that null hypothesis can not be rejected, or we can confirm that there is no autocorrelation between residuals.

In order to make additional check for residual autocorrelation we use VAR Residual Serial Correlation LM. Test results are shown on the following Figure:

VAR Residual Serial Correlation LM Tests
 Date: 04/01/20 Time: 17:47
 Sample: 2006Q1 2019Q4
 Included observations: 51

Null hypothesis: No serial correlation at lag h

Lag	LRE* stat	df	Prob.	Rao F-stat	df	Prob.
1	4.449593	4	0.3486	1.129837	(4, 78.0)	0.3486
2	1.800844	4	0.7723	0.449617	(4, 78.0)	0.7724
3	5.758140	4	0.2180	1.474393	(4, 78.0)	0.2180
4	3.383122	4	0.4959	0.853213	(4, 78.0)	0.4959
5	2.049639	4	0.7266	0.512544	(4, 78.0)	0.7267

Null hypothesis: No serial correlation at lags 1 to h

Lag	LRE* stat	df	Prob.	Rao F-stat	df	Prob.
1	4.449593	4	0.3486	1.129837	(4, 78.0)	0.3486
2	9.698289	8	0.2868	1.241604	(8, 74.0)	0.2874
3	10.95738	12	0.5326	0.917642	(12, 70.0)	0.5343
4	18.01574	16	0.3230	1.154635	(16, 66.0)	0.3271
5	21.76017	20	0.3537	1.111772	(20, 62.0)	0.3616

*Edgeworth expansion corrected likelihood ratio statistic.

Figure 12. VAR Residual Serial Correlation LM
 Source: Authors' calculations in Eviews software

First null hypothesis of the VAR Residual Serial Correlation LM test is: there is no series correlation for the lags - h.

The calculated p-value for all 5 lags are $>0,05$, which indicates that we cannot reject null hypothesis, which means that we can confirm no autocorrelation between residuals. Second null hypothesis of the VAR Residual Serial Correlation LM test is: there is no serial correlation for the lags 1 to h. The calculated p-value for all 5 lags are $>0,05$, which indicates that we cannot reject null hypothesis, which means that we can confirm no autocorrelation between residuals for the lags 1 to h.

The analysis proceed with Multivariate Normality Test in order to test residuals normality and we use orthogonalization method of Cholesky of covariance (Lutkepohl), as presented on the following Figure:

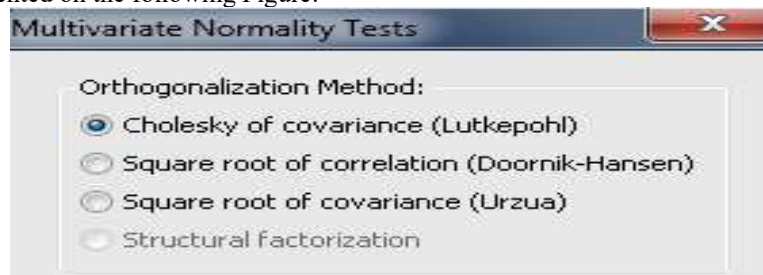


Figure 13. VAR Multivariate Normality Test
 Source: Eviews software

VAR Residual Normality Test (Cholesky) results are presented as follows:

VAR Residual Normality Tests
 Orthogonalization: Cholesky (Lutkepohl)
 Null Hypothesis: Residuals are multivariate normal
 Date: 04/01/20 Time: 17:48
 Sample: 2006Q1 2019Q4
 Included observations: 51

Component	Skewness	Chi-sq	df	Prob.*
1	-0.112236	0.107075	1	0.7435
2	-0.132969	0.150286	1	0.6983
Joint		0.257360	2	0.8793

Component	Kurtosis	Chi-sq	df	Prob.
1	2.530987	0.467443	1	0.4942
2	2.100856	1.717976	1	0.1900
Joint		2.185419	2	0.3353

Component	Jarque-Bera	df	Prob.
1	0.574517	2	0.7503
2	1.868262	2	0.3929
Joint	2.442779	4	0.6549

*Approximate p-values do not account for coefficient estimation

Figure 14. VAR Residual Normality Test (Cholesky)
 Source: Authors' calculations in Eviewssoftware

Null hypothesis of VAR Residual Normality Test is: residuals are multi-variant normal. The calculated values for the a p-value for Skewness (0,8223), andKurtosis (0,4443), as well for the series normal distribution, as Jarque-Bera(0,7337) are > 0,05, which indicates that null hypothesis can not be rejected, which means that we confirm residuals normality. This is also confirmed on the Figure of the model unit roots, where we can see that all roots lies in unique circle, which means that VAR model variables are stationary.

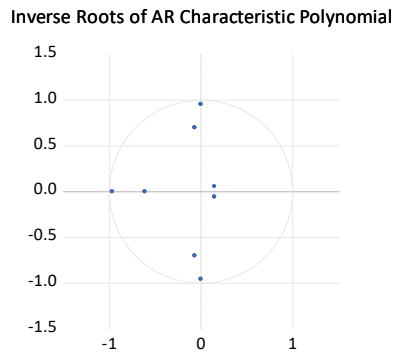


Figure 15. Model Unit Roots
 Source: Authors' calculations in Eviewssoftware

In order to use VAR model we need to confirm that there is no residuals heteroscedasticity. We use VAR Residual Heteroscedasticity Test (Levels and Squares), list square method, and test results are shown as follows:

VAR Residual Heteroskedasticity Tests (Levels and Squares)
 Date: 04/01/20 Time: 17:48
 Sample: 2006Q1 2019Q4
 Included observations: 51

Joint test:

Chi-sq	df	Prob.
37.14656	48	0.8718

Individual components:

Dependent	R-squared	F(16,34)	Prob.	Chi-sq(16)	Prob.
res1*res1	0.280256	0.827441	0.6481	14.29308	0.5769
res2*res2	0.203143	0.541726	0.9040	10.36029	0.8471
res2*res1	0.304372	0.929792	0.5460	15.52295	0.4867

Figure 16. VAR Residual Heteroscedasticity Test (Levels and Squares)
 Source: Authors' calculations in Eviewssoftware

Null hypothesis of VAR Residual Heteroscedasticity Test is:residuals are not heteroscedastic. The p-value is > 5%, and we can not reject null hypothesis, which means that we confirm that residuals are heteroscedastic(Akgiray, 1989).

Model residuals are homoscedastic, and it fulfills another one model of least squares assumptions. Finally, we proceed with Granger causality test and results are shown on the following Figure:

VAR Granger Causality/Block Exogeneity Wald Tests
 Date: 04/01/20 Time: 17:50
 Sample: 2006Q1 2019Q4
 Included observations: 51

Dependent variable: D(LNGDP)

Excluded	Chi-sq	df	Prob.
D(LNCAP_EXP)	6.647071	4	0.1558
All	6.647071	4	0.1558

Dependent variable: D(LNCAP_EXP)

Excluded	Chi-sq	df	Prob.
D(LNGDP)	12.13904	4	0.0163
All	12.13904	4	0.0163

Figure 17. VAR Granger Causality/Block Exogeneity Wald Test
 Source: Authors' calculations in Eviewssoftware

Null hypothesis of the model is:capital expenditures and all capital expenditures legs together are not Granger causal on GDP.

The value of Chi-sq test, as well probability(p-value=0,1558> 5%) confirms that null hypothesis can not be rejected, even for the first leg, nor by all 4 legs for the capital expenditures.

This leads us to conclusion that capital expenditures are not Granger causal on GDP. The second dependent variable are capital expenditures.

Null hypothesis is: GDP, for the first leg and all other 4 legs are not Granger causal on capital expenditures.

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The value of Chi-sq test, as well probability(p-value=0,0163>0,05) confirms that null hypothesis can be rejected and to accept alternative hypothesis that GDP, first leg and other 4 legs are Granger causal on the capital expenditures.

We can conclude that GDP has Granger causality on capital expenditures.

For the VAR system estimation we use the Ordinary Least Square Method, as shown on the following Figure:



Figure 18. System Estimation
Source: Eviewssoftware

System estimation results are shown on the following Figure:

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.406524	0.173411	-2.344277	0.0214
C(2)	-0.409227	0.190127	-2.152393	0.0342
C(3)	-0.243744	0.199974	-1.218892	0.2263
C(4)	0.353998	0.164591	2.150773	0.0344
C(5)	-0.029765	0.013930	-2.136689	0.0355
C(6)	-0.027130	0.017798	-1.524355	0.1312
C(7)	-0.029270	0.017463	-1.676088	0.0974
C(8)	-0.001908	0.014109	-0.135248	0.8927
C(9)	0.013212	0.005767	2.291068	0.0245
C(10)	5.973586	2.192982	2.723956	0.0078
C(11)	5.626257	2.404365	2.340018	0.0217
C(12)	2.843153	2.528994	1.045191	0.2989
C(13)	4.195384	2.081439	2.015617	0.0470
C(14)	-1.020964	0.176164	-5.795544	0.0000
C(15)	-0.736358	0.225075	-3.271618	0.0016
C(16)	-0.531533	0.220841	-2.406860	0.0183
C(17)	-0.003654	0.178428	-0.020479	0.9837
C(18)	-0.085917	0.072927	-1.178117	0.2421
Determinant residual covariance	4.45E-05			
Equation: D(LNGDP) = C(1)*D(LNGDP(-1)) + C(2)*D(LNGDP(-2)) + C(3)*D(LNGDP(-3)) + C(4)*D(LNGDP(-4)) + C(5)*D(LNCAP_EXP(-1)) + C(6)*D(LNCAP_EXP(-2)) + C(7)*D(LNCAP_EXP(-3)) + C(8)*D(LNCAP_EXP(-4)) + C(9)				
Observations: 51				
R-squared	0.806632	Mean dependent var	0.009620	
Adjusted R-squared	0.769799	S.D. dependent var	0.056530	
S.E. of regression	0.027123	Sum squared resid	0.030897	
Durbin-Watson stat	2.094188			
Equation: D(LNCAP_EXP) = C(10)*D(LNGDP(-1)) + C(11)*D(LNGDP(-2)) + C(12)*D(LNGDP(-3)) + C(13)*D(LNGDP(-4)) + C(14)*D(LNCAP_EXP(-1)) + C(15)*D(LNCAP_EXP(-2)) + C(16)*D(LNCAP_EXP(-3)) + C(17)*D(LNCAP_EXP(-4)) + C(18)				
Observations: 51				
R-squared	0.730841	Mean dependent var	0.041662	
Adjusted R-squared	0.679573	S.D. dependent var	0.605938	
S.E. of regression	0.342999	Sum squared resid	4.941236	
Durbin-Watson stat	2.118886			

Figure 19. System Estimation Method of Least Square
Source: Authors' calculations in Eviewssoftware

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System shows model with 18 coefficients (C), from whom first nine are for defining the model of GDP as dependent variable: C(1) to C(9), and another nine from C(10) to C(18) are for defining capital expenditures.

VAR model results confirms:

- Coefficients for the first, second and fourth legs of GDP are statistically significant for the current GDP;
- Coefficient for the first leg of the capital expenditures is statistically significant for the current GDP;
- Coefficients for the first, second and fourth legs of GDP are statistically significant for the capital expenditures;
- Coefficients for the first, second and third leg of capital expenditures are statistically significant for the capital expenditures;
- Coefficient for Durbin-Watson statistic for both variables is 2, that indicates that there is no serial correlation in the regression.

For the VAR model testing we use Wald statistical test, where for the coefficients from C(5) to C(8) we give them value =0, which means that in accordance with null hypothesis capital expenditures are not Granger causal on GDP:

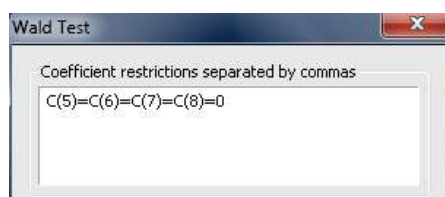


Figure 20. Wald Test

Source: Eviewssoftware

Wald Test results are as shown below:

Wald Test			
System: (%system)			
Test Statistic	Value	df	Probability
Chi-square	4.176192	2	0.1239
Null Hypothesis: C(6)=C(7)=0			
Null Hypothesis Summary:			
Normalized Restriction (= 0)	Value	Std. Err.	
C(6)	2.822289	1.575555	
C(7)	-2.086689	1.638377	

Restrictions are linear in coefficients.

Figure 21. Wald Test Results

Source: Authors' calculations in Eviewssoftware

Null hypothesis is: capital expenditures coefficients = 0, and null hypothesis could not be rejected, in accordance with Chi-square value, as well as p-value=0.1239, and that is >0,05. In accordance with that we confirm the null hypothesis that capital expenditures have no Granger causality on the GDP. We give values for the

coefficients from C(10) to C(13) that are = 0, which is in accordance with the null hypothesis that GDP is not Granger causal on capital expenditures:

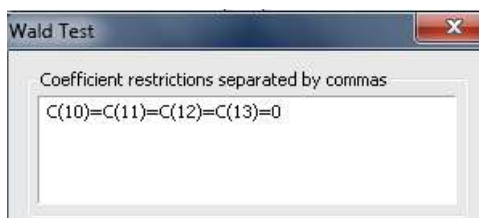


Figure 22. Wild Test
Source: Eviewssoftware

Wald Test results are shown on the following figure:

Wald Test			
System: {%system}			
Test Statistic	Value	df	Probability
Chi-square	12.13904	4	0.0163
Null Hypothesis: C(10)=C(11)=C(12)=C(13)=0			
Null Hypothesis Summary:			
Normalized Restriction (= 0)	Value	Std. Err.	
C(10)	5.973586	2.192982	
C(11)	5.626257	2.404365	
C(12)	2.643153	2.528894	
C(13)	4.195384	2.081439	

Restrictions are linear in coefficients.

Figure 23. Wild Test Results
Source: Authors' calculations in Eviewssoftware

Null hypothesis is: GDP coefficients are =0, and this hypothesis can be rejected, in accordance with Chi-square value, as well as p-value=0.0163, and that is <0,05. In accordance with that we confirm null hypothesis that GDP is Granger causal on capital expenditures.

Based on explained research results:

Individual hypothesis 1.1.:

$H_{1.1.0}$: Capital expenditures are not Granger causal on GDP – is accepted.

$H_{1.1.0}$: Capital expenditures are Granger causal on GDP – is rejected.

Individual hypothesis 1.2.:

$H_{1.2.0}$: GDP is not Granger causal on capital expenditures – is rejected.

$H_{1.2.0}$: GDP is Granger causal on capital expenditures – is accepted.

Based on accepted individual hypothesis we can confirm that:

Main hypothesis:

$H_{1.0}$: There is no two ways impact between capital expenditures and GDP of the Republic of North Macedonia – is accepted.

$H_{1.1}$: There is two ways impact between capital expenditures and GDP of the Republic of North Macedonia – is rejected.

CONCLUSION

This paper research finding confirms that capital expenditures, as main instrument for the GDP growth and overall economic growth, as well as a most used tool for contra cyclical economic policy, do not have Granger causality impact on the GDP of the Republic of the North Macedonia for the analyzed period 2006-2019.

This mean that determination of capital expenditures in Macedonia does not provide accurate GDP forecast.

That finding absolutely confirms that not only scope and dynamic of capital expenditures are important for providing stabilization and development effects, but more important became the structure and the quality of capital expenditures. This definitely mean that there is clear need for capital projects selection in order to select projects with propulsive influence on the national economy. This is the only way for capital expenditures can became important and crucial factor for dynamic and sustainable GDP growth.

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INCREASING USE OF DIGITAL TECHNOLOGIES IN FUNCTION OF ECONOMIC GROWTH IN EUROPEAN COUNTRIES

Valentina Mucunška Palevska¹
Blagica Novkovska

Abstract

Impact of the Information and Communication Technologies (ICT) on economic growth has been a subject of different studies (Vu et al. 2020). It has been found in (Fernández-Portillo 2020) that in the case of developed European economies the considered impact is significant. In general, ICT diffusion has significant impact on the economic growth in high-income countries while no clear effect is observed in middle-income countries (Cheng et al. 2020).

Part of the economic development connected with ICT is the internet usage in online purchases of goods and services. The case of the online purchases in South East European countries in comparison with EU-28 countries have been studied in a previous work (Novkovska and Dumčić 2019).

In the present work we study multiple aspects of the impact of ICT as a factor of the economic growth of European countries, both EU-28 and South East European countries.

The internet usage across the regions is discussed in details. Social networking, online banking, e-government and e-commerce aspects are considered separately. Values for EU-28 are compared with these for Republic of North Macedonia, Montenegro, Serbia, Albania and Turkey. Digital gap between the elderly persons urban and rural areas is also studied. Rather low presence of online banking in some countries outside of EU-28 has been found.

Finally, European policies for shaping of the unique digital market have been discussed in the light of above listed analyses.

Keywords: E-Business and Competitive Strategy, Information and communication technologies

JEL classification: L86, O14, O33

INTRODUCTION

Impact of the Information and Communication Technologies (ICT) on economic growth has been a subject of different studies (Vu et al. 2020; Wibowo et al., 2020; Nair et al., 2020). It has been found in (Fernández-Portillo 2020) that in the case of developed European economies the considered impact is significant. In general, ICT diffusion has significant impact on the economic growth in high-income countries, while less significant effect is observed in middle-income countries (Cheng et al. 2020). However, it is found that the effect of ICT spread on economic development is definitively positive for lower middle income and low income countries (Bhattacharya and Ghosh, 2020).

Part of the economic development connected with ICT is the internet usage in online purchases of goods and services. The case of the online purchases in South East

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European countries in comparison with EU-28 countries has been studied in a previous work (Novkowska and Dumcic 2019).

Concerning the internet use, it is observed that among the elder persons there are substantial undesirable effects, such as greater anxiety following online discussions (Hunsaker et al., 2020). Substantial concerns about the engagement of children in online social activities have been raised (Symons et al. 2020). In view of these undesirable effects, the ICT indicators (described further in this work) are defined for individuals aged 16 to 74.

In the present work we study multiple aspects of the impact of ICT as a factor of the economic growth of European countries, both EU-28 and candidate countries, further referred as the region.

The internet usage across the regions is discussed in details. Social networking, online banking, e-government and e-commerce aspects are considered separately. Values for EU-28 are compared with these for the countries from the region. Digital gap between the elderly persons urban and rural areas is also studied. Rather low presence of online banking in some countries outside of EU-28 has been found.

Finally, European policies for shaping of the unique digital market have been discussed in the light of above listed analyses.

1. RESULTS AND DISCUSSION

1.1. Comparison of countries from the region with Euro area

First, in this section we compare main indicators relevant for this study between Euro area and countries from the region: North Macedonia, Montenegro, Serbia, Albania and Turkey. Indicators for the economic development level and ICT use are presented and discussed.

As the main indicator for the economic development level is used the GDP per capita in PPS, which is the volume index of GDP per capita in Purchasing Power Standards (PPS) as expressed in relation to the European Union average set to equal 100 (EU27_2020 = 100). This indicator is intended for the use in comparison between the countries and not for temporal variations. Below we use it in order to compare the development level of countries from the region to the Euro area – 19 countries (2015), (<https://ec.europa.eu/eurostat/databrowser/view/tec00114/default/table?lang=en>)

For the ICT use several indicators are selected:

a) (Internet use) Percentage of individuals frequently using the internet (% of individuals aged 16 to 74; Frequent use: every day or almost every day on average within the last three 96months before the survey. Use includes all locations and methods of access and any purpose (private or work/business related)). (<https://ec.europa.eu/eurostat/databrowser/view/tin00092/default/table?lang=en>).

b) (Social networks) Individuals who used the internet for participation in social networking (% of individuals aged 16 to 74). (<https://ec.europa.eu/eurostat/databrowser/view/tin00127/default/table?lang=en>).

c) (Online banking) Individuals using the internet for internet banking (% of individuals aged 16 to 74). (<https://ec.europa.eu/eurostat/databrowser/view/tin00099/default/table?lang=en>).

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d) (E-government) Individuals using the internet for interaction with public authorities (% of individuals aged 16 to 74).

(<https://ec.europa.eu/eurostat/databrowser/view/tin00012/default/table?lang=en>).

e) (E-commerce) Individuals using the internet for ordering goods or services (% of individuals aged 16 to 74).

(<https://ec.europa.eu/eurostat/databrowser/view/tin00096/default/table?lang=en>).

The values of all above listed indicators are displayed in the Table 1.

Table 1. Main indicators related to economic growth and ICT use for the year 2019

Geo/Time	GDP per capita in PPS*	Internet use	Social networks	Online banking	E-government	E-commerce
Euro area	106	77 %	82 %	55 %	53 %	89 %
North Macedonia	38	73 %	68 %	15 %	25 %	29 %
Montenegro	60	71 %	62 %	3 %	23 %	16 %
Serbia	49	75 %	55 %	18 %	29 %	44 %
Albania	40	54 %	48 %	2 %	13 %	5 %
Turkey	68	78 %	60 %	35 %	51 %	41 %

Source: Eurostat database (<https://ec.europa.eu/eurostat/data/database>)

Note: *Index (EU27_2020 = 100)

Substantial differences between the Euro area and listed countries are observed for all of the considered indicators. For the GDP per capita in PPS, Republic of North Macedonia and Albania perform the worst (index 38 and 40, almost a third of the value for Euro area). The best from the region perform Serbia and Turkey (indices 60 and 68 respectively).

For the case of internet use, the differences shown in Table 1 are much smaller than in the case of GDP per capita in PPS. Again, the lowest performance is observed for Albania (54 %), while Republic of North Macedonia exhibits high value (73 %), comparable to this for the Euro area (77 %); the value for Turkey is even higher (78 %) and for Serbia close to the value for Euro area (75 %). However, the elevated values of the indicator for internet use (Percentage of individuals frequently using the internet) is not correspondingly reflected in other ICT indicators. Thus, only the percentages for participation in social networking (Social networks) are comparable to the value for Euro area (82 %), with the lowest value observed for Albania (48 %) and the highest for Republic of North Macedonia (68 %). Values for internet banking and e-government are low even for the Euro area (55 % and 53 %, respectively). Rather low values are observed in the case of internet banking. For Montenegro and Albania (3 % and 2 %, respectively), while the highest one from the region, for Turkey (35 %) is still substantially lower than this for Euro area. For e-government Turkey performs as good as Euro area (51 %), while other countries from the region show much lower values, with the lowest one for Albania (13 %).

Differences are very high in the case of e-commerce. The percentage of the individuals using the internet for ordering goods or services in Euro area is very high (89 %), while for the countries from the region it is markedly lower: from 44 % for Serbia and 41 % for Turkey, down to 16 % for Montenegro and only 5 % for Albania.

Particularly interesting is the case of Republic of North Macedonia; while the indicator for the economic development level is one of the lowest in the region, the ICT indicators are in the middle between these for the countries from the region and the

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social networking is the highest one (68 %). Above finding indicates that the potential for economic growth relying on the ICT use in Republic of North Macedonia is fairly high and has to be considered as an asset for accelerated growth in the next period.

1.2 Digital gap between urban and rural areas

This section examines the digital divide between urban and rural areas. We compare the main indicators relevant to this study on aspects of the use of information and communication technology in urban and rural areas between the Euro area and the countries of the region. Indicators of the level of economic development and use of ICT are presented and discussed.

Euro area countries are intensifying investment in improving information and communication infrastructure. Internet access in urban areas is at a much higher level than in peripheral cities and rural areas.

In EU-27 countries, the percentage of adults who use the Internet on a daily basis is relatively high in urban areas, while generally lower in remote regions. This disparity is particularly noticeable in Eastern Europe. The analysis shows that in 2019, 81 % of adults aged 16-74 in cities in the EU-27 used the Internet on a daily basis, 77 % in the suburbs and 70 % in rural areas. This analysis shows that the share of daily Internet users living in the cities of the EU member states is higher. In North Macedonia in 2019 77 % of the adult population living in urban areas use the Internet on a daily basis, 72 % in small towns and 68 % in rural areas. The disparity in the daily use of the Internet among adults living in urban and rural areas is relatively small in most EU Member States, which have been characterized by a relatively high overall use of the Internet, which means that there is widespread Internet access. In contrast, the difference is usually much larger in the Member States, characterized by lower overall levels of Internet use.

The values of all above listed indicators are displayed in the Table 2.

Table 2: Daily internet users during the three months preceding the survey, 2009 and 2019 (% of people aged 16-74 years, by degree of urbanisation)

	Cities		Towns and suburbs		Rural areas		Total	
	2009	2019	2009	2019	2009	2019	2009	2019
EU-27	52	81	47	77	36	70	46	77
North Macedonia		77		72		68	37	73

Source: Eurostat database (<https://ec.europa.eu/eurostat/data/database>)

Note: *Index (EU27_2020 = 100)

Advances in technology contribute to the digital empowerment of the individual, regardless of age, access and use required (Sirotnin and Arkhipova, 2018). The relatively high value of using the Internet in the urban regions is due to the high-quality infrastructure that enables faster connection, the relatively young age of the population by structure or the larger number of passengers.

In figure 1 are displayed the daily internet users (% of individuals aged 16 to 74) during three months preceding the survey, for 2009 and for 2019, by country, for the cities. It is seen that the indicator rapidly rises towards the maximum possible value of

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100 % for all countries considered and the differences between the countries substantially diminish simultaneously.

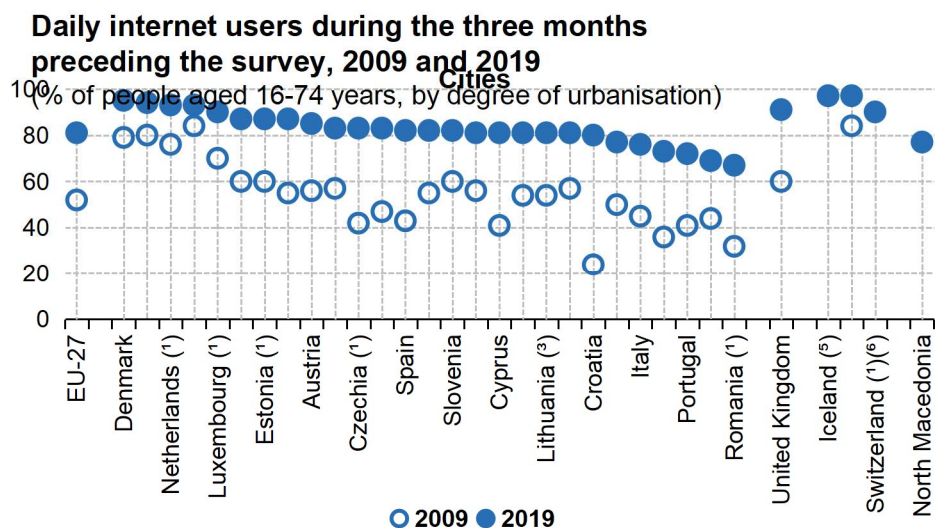


Figure 1. Daily internet users during three months preceding the survey, 2009 and 2019, by country, for the cities.
Source: Eurostat

1.3 Participation in social networking

Social networks play an important role in today's Internet. They contain huge amounts of data and are challenging (Rehman and Asghar, 2020). Social networks are an excellent source of information that reflects the real life of people in the digital space (Kalinin et al., 2020). They make it possible to discover various aspects of the socio-economic behavior of the user (Kalinin et al., 2020). The use of social networks, primarily Facebook, Instagram, TikTok or Twitter, is closely related to the user's age. These digital tools are mostly used by the younger population who embrace new applications and services because they are looking for alternative ways to exchange text, pictures, sound, video and other information.

Table 3. People participating in social networks during the three months preceding the survey, 2019 (% of people aged 16-74 years, by NUTS 2 regions)

	Lowest region	National average	Highest region	min	mid	max
EU-27	30	54	82	0,0	30,0	52,0
Denmark	77	81	82	0,0	77,0	5,0
Belgium	73	76	82	0,0	73,0	9,0
North Macedonia		68		0,0	68,0	0,0
Montenegro		62		0,0	62,0	0,0
Turkey	43	60	73	0,0	43,0	30,0
Serbia	52	55	59	0,0	52,0	7,0
Albania		48		0,0	48,0	0,0

Source: Eurostat (online data codes: isoc_r_iuse_i and isoc_ci_ac_i)

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According to the analyzed indicators in 2019, 54 % of the adult population of EU-27 used social networks. The use of social networks differs significantly between age groups. Approximately 9 out of 10 people aged 16-24 used social networks, compared to less than one in five people aged 65-74. At least half of the adult population used social networks, 138 out of 197, NUTS level 2 regions in 2019. The share of adults who participated in social networks reached 82 %, or three quarters, in 15 regions in the EU. The lowest level of use was observed in the regions of France (34 %) and Italy (40 %). Compared to the EU countries, in the countries of the Southwestern Balkans, Turkey has the highest level of use of social networks with 73% of the population, while R. N. Macedonia is second with 68 % of the population. The lowest level of use of social networks is observed in Albania with 48 %.

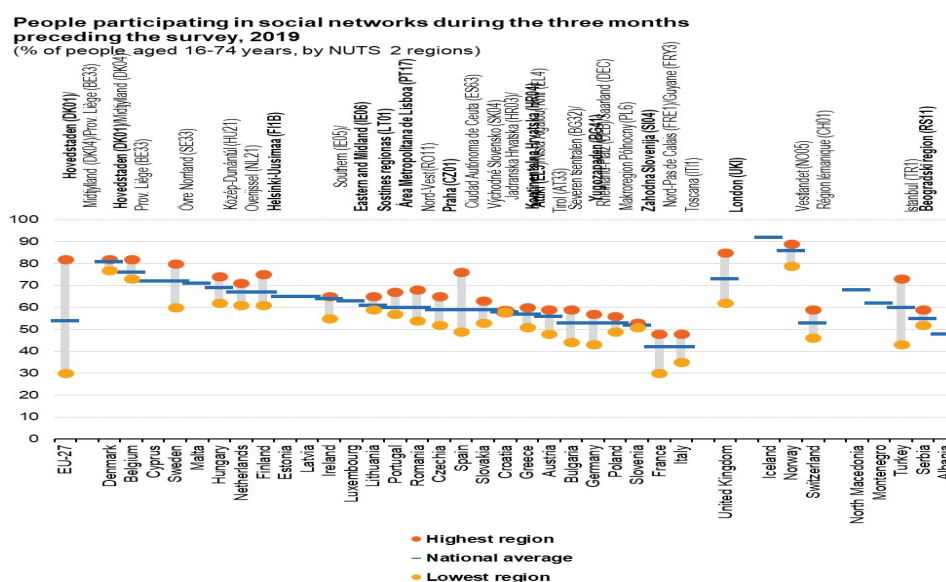


Figure 2. People participating in the social networking during three months preceding the survey, 2009 and 2019, by country, for lowest, highest and average regions.

Note: ranked on national average. Regions listed above the figure are those with the highest ratio. *Note:* Capital regions are indicated by a bold typeface. Germany, Greece, Poland, the United Kingdom and Turkey: NUTS 1 regions. Albania: national data. Ciudad Autónoma de Ceuta (ES63), Corse (FRM0) and Mellersta Norrland (SE32): low reliability. Albania: 2018.

Source: Eurostat

In Figure 2 are displayed people participating in the social networking (% of individuals aged 16 to 74) during three months preceding the survey, for 2009 and for 2019, by country, for lowest, highest and average regions.

This situation indicates the digital divide that is evidently large between the EU member states and the countries of the region as a result of the insufficient focus of government policies on investing in technological innovation and educating the population on the use of digital tools.

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1.4 Online Banking

The use of online banking, to some extent, reflects the availability of the Internet. An individual's choice of whether or not to use the Internet for banking often comes down to trust. ICT helps organizations adapt and improve their quality of service (Sembiring, 2015). There is a noticeable variation of the population (aged 16-74) in the EU-27 in terms of internet use 81 % and internet banking 55 % in 2019. Of these, 72 % used online banking by people aged 25 to 34, while less than a third of the population aged 65-74 used internet banking.

Table 4. People making use of the internet for banking during the three months preceding the survey, 2019 (% of people aged 16-74 years, by NUTS 2 regions)

	Lowest region	National average	Highest region	min	Mid	max
EU-27	4	55	95	0,0	4,0	91,0
Netherlands	85	91	95	0,0	85,0	10,0
Finland	88	91	94	0,0	88,0	6,0
Sweden	78	84	95	0,0	78,0	17,0
Turkey	17	35	49	0,0	17,0	32,0
Serbia	12	18	30	0,0	12,0	18,0
North Macedonia		15		0,0	15,0	0,0
Montenegro		3		0,0	3,0	0,0
Albania		2		0,0	2,0	0,0

Note: ranked on national average.

Source: Eurostat (online data codes: isoc_r_juse_i and isoc_ci_ac_i)

In all NUTS Level 2 regions, more than four-fifths of adults used Internet banking in 2019. The highest level of use is observed in the Netherlands and Sweden 95 %. In other regions of the EU, less than four-fifths of the adult population used online banking. Approximately one third of all regions in the EU, i.e. less than 50 % of the adult population used the Internet for online banking in 2019. Generally lower in rural and remote regions and higher in urban regions. This share did not rise above 15 % in any of the other regions in these two EU member states. Unlike EU countries, the value of using e-banking in the region countries is much lower. The highest level of application of 35 % is in Turkey, and the lowest in Albania 2 %. In R. N. Macedonia 15 % of the population in 2019 used e-banking, which is a low percentage compared to EU member states.

1.5 Interaction with public authorities

The area of analysis and interpretation in this study is the digital interaction of citizens with the public authority to improve service delivery. In many EU Member States, individuals engage in a wide range of online interactions with public authorities.

The analysis notes approximately the same value in the use of the Internet for communication with public authorities 53 %, and the use of e-banking 50 % of the adult population in the EU-27. Although 81 % of the population uses the Internet, the value of using the Internet with public authorities and e-banking is low. There are significant differences between EU member states in terms of the participation of people communicating with public authorities online. In one-fifth of NUTS level 2

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regions in the EU, 75 % of the adult population used the Internet to communicate with public authorities in 2019. The highest percentage of Internet use for communication with public authorities is observed in the Nordic member states 94 %, the lowest in Romania 10%. The situation in the countries of the region is unsatisfactory compared to EU countries. Turkey has the highest level of 51 % of citizens' communication with public authorities, while Albania has the lowest level of 13 %. R. N. Macedonia participates in that segment with 25 % of the citizens, which is unsatisfactory compared to the EU countries.

Table 5. People interacting with public authorities over the internet during the 12 months preceding the survey, 2019 (% of people aged 16-74 years, by NUTS 2 regions)

	Lowest region	National average	Highest region	Min	mid	max
EU-27	8	53	94	0,0	8,0	86,0
Denmark	89	92	94	0,0	89,0	5,0
Finland	84	87	93	0,0	84,0	9,0
Sweden	81	86	94	0,0	81,0	13,0
Turkey	31	51	67	0,0	31,0	36,0
Serbia	19	29	46	0,0	19,0	27,0
North Macedonia		25		0,0	25,0	0,0
Montenegro		23		0,0	23,0	0,0
Albania		13		0,0	13,0	0,0

Source: Eurostat (online data codes: isoc_r_gov_i and isoc_ciegi_ac)

Note: ranked on national average.

1.6. Ordering goods and services online

E-commerce is significantly present as a potential that configures the geography of consumption by expanding consumer choice and reducing remote pricing in EU regions. This is especially true in social networking, where people in the community show a similar interest in the trend in the community, for example, buying the same products in network marketing (Narantsatsralt end Cang, 2017). As with internet banking, an individual's choice of whether or not to use e-commerce may be partly related to trust.

Table 6. People buying/ordering goods or services over the internet for private use during the 12 months preceding the survey, 2019 (% of people aged 16-74 years, by NUTS 2 regions)

NUTS	Region name	Value	Flag	Class
NL31	Utrecht	89		5
NL32	Noord-Holland	84		5
NL33	Zuid-Holland	82		5
ME00	Montenegro	16		1
MK00	North Macedonia	29		1
AL	Albania	5	National	1
RS11	Beogradski region	44		2
RS12	Region Vojvodine	37		2
RS21	Region Šumadije i Zapadne Srbije	29		1
RS22	Region Južne i Istočne Srbije	31		2
TR1	Istanbul	41	NUTS 1	2

Source: Eurostat (online data codes: isoc_r_blt12_i and isoc_ec_ibuy)

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E-commerce values in 2019 in the EU-27 are relatively high. 60 % of the population aged 16-74 bought or ordered goods or services online. The use of e-commerce is closely related to age. The population aged 25-34 were almost three times more likely to use the internet to buy or order goods or services – 79 %, compared to people aged 65-74, 28 %. The values indicate that there is a relatively balanced distribution around the EU-27 average when analyzing the propensity to use e-commerce at the regional level: 99 NUTS level 2 regions are above the EU-27 average, while 97 regions are below the average. Regarding the countries of the region, the highest percentage of 44 % of the population using e-commerce in Serbia, the lowest percentage is observed in Albania of 5 %. In North Macedonia 29 % of residents use the Internet for e-commerce, which is a significantly low level of Internet use for that purpose. The indicators indicate low values of the region in the use of e-commerce compared to the EU-27 countries.

CONCLUSIONS

This study examines several aspects of the impact of ICT as a factor in the economic growth of the EU-28 and the countries of the region.

The impact of information and communication technologies (ICT) is significant for economic growth in high-income countries, while less significant effect is observed in middle-income countries. It is also noticeable that the impact of ICT on economic development is positive for low to middle income and low income countries. The main indicator of the level of economic development is the GDP per capita in PPS, which is an index of the volume of GDP per capita in the Purchasing Power Standards (PPS), expressed in relation to the European Union average set at 100 (EU27_2020 = 100).

Internet use across regions in terms of social networking, Internet banking, e-government and e-commerce are considered separately. The values for the EU-28 are compared with those for the countries from the region. The digital division between older people in urban and rural areas has also been studied.

Regarding the use of the Internet, it is noted that in the older population there are significant side effects. Substantial concerns about engaging children in social activities on the Internet have been raised.

Finally, European policies for shaping the digital single market are discussed according to the indicators of the analysis.

For all the considered indicators, significant discrepancies are noticed between the euro area and the countries in the region. For GDP per capita in PPP, the North Macedonia has the weakest results (index 38 and 40, almost a third of the value for the euro area).

In the case of Internet use, the differences are much smaller than in the case of GDP per capita in PPP. The North Macedonia has a high value (73 %), comparable to this for the Euro area (77 %). Other countries in the region are also show high values. However, the high values of the Internet usage indicator (percentage of people who frequently use the Internet) do not correspond to other ICT indicators.

Thus, only the percentages for participation in social networking are comparable to the value for the Euro area (82 %), North Macedonia (68 %). Internet banking and e-

government values are low even for the euro area (55 % and 53 %, respectively). Low values are also observed in the case of internet banking.

The differences are very large in the case of e-commerce. The percentage of individuals who use the Internet to order goods or services in the euro area is very high (89 %), while for countries in the region it is significantly lower.

The case of the North Macedonia is especially interesting; While the indicator of the level of economic development is one of the lowest in the region, the ICT indicators are in the middle of these for the countries in the region and social networking is the highest (68 %). The above finding indicates that the potential for economic growth dependent on the use of ICT in the North Macedonia is quite high and should be considered as a benefit for accelerated power in the next period.

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FUND FOR INNOVATIONS AND TECHNOLOGY DEVELOPMENT – THE OPPORTUNITIES FOR FINANCING START UP BUSINESS IN MACEDONIA

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Abstract:

Today, the banking sector in The Republic of North Macedonia is the primary source of capital for the financial growth and development of companies. Macedonian companies, whose overall business output is stable, generally finance their development projects through banks. In addition, they have at their disposal other alternatives: use internal financial resources and issue securities on the stock exchange. Due to the uncertainty of startup businesses, the possibilities for financing them through banks are limited and, in many cases, family and friends provide the initial source of funding, prior to accessing financial assistance elsewhere. However, access to funding is a challenge for a company in its early stage of development. This is primarily due to the fact, that in that period companies lack adequate financial results and material resources as guarantee to their financial providers.

In order to overcome financial obstacles, a country develops its own institutions and instruments of financing, to support companies in the initial stages of development. Therefore, through its institutions and funding bodies, The Republic of North Macedonia, provides support to companies in the initial stage of development. The most commonly used financing practices are: direct financing of companies, risk-sharing schemes, fiscal relief and relief measures, training as well as educational support.

One recently established institution is the Fund for Innovation and Technological Development (FITD). It aims to promote and encourage innovation in The Republic of North Macedonia and provide improved access to financial support for innovation and technological development. Supporting the company's growth, it needs to improve the country's competitive climate, create new jobs, economic growth and development.

The subject of this research paper analyses opportunities for financing startup companies, and the main goal is to analyze current trends and products that an institution, such as FITD, can offer as a solution for capital financing in the initial stage of a company's development, including ways to access this financial aid.

Key words: funding, startup, institution, instrument

JEL classification: G21, L26, O43

INTRODUCTION

Finance is one of the key factors in the development of companies. It allows them to undertake research activities, improve and adopt new technology, develop products and commercialise them.

The financial market in the Republic of North Macedonia, similar to those of neighbouring countries, has not yet experienced substantial growth. Macedonian companies that have operational continuity and are established in the market, finance their activities through banks, stock exchanges or other alternative sources. But small companies have limited sources of finance, especially in the early stages of their development.

Small and medium-sized companies, family businesses and entrepreneurs are the most important factors for the economic development of countries. Especially for those in transition, which face lower standards, lower levels of economic activity, insufficient

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competition and insufficient investment activities. They are characterised by great flexibility, innovation, risk-taking, which allows them to adapt more quickly to market changes and consumer needs.

In the last ten years, Macedonia has been following the trend of developed countries, creating a favourable climate for the establishment and development of small businesses, by establishing institutions and instruments to support them. According to the Innovation Strategy (2012-2020), the goal is to increase the competitiveness of the Macedonian economy in the long run, but not on the basis of low wage costs, but on the basis of knowledge and innovation. This is most important in the process of bringing the Macedonian economy closer to the market-developed economies in the world and on the road to EU integration.

A real problem that limits the establishment and development of these businesses is the limited access to sources of financing in both the money market and the capital market. Therefore, it is very important for future entrepreneurs to be informed about all available alternative financing opportunities, as well as their advantages and disadvantages.

1. STARTUP BUSINESSES - NATURE, IMPORTANCE AND SOURCES OF EARLY-STAGE FINANCING

There is no general consensus, theory or definition as to what a startup business is. Various opinions are found in practice: from the fact that it is every company basically starting from scratch, to a more complex definition in which a startup company is a business that is usually technologically oriented, innovative and has high-growth potential. It can also include business scaling in which the product or service is offered on both the local and global market.

On the other hand, starting a business is closely related to entrepreneurship, which according to Skripak (2016) is characterized by three main activities:

- Innovation. Entrepreneurship generally means offering a new product, applying a new technique or technology, opening a new market, or developing a new form of organization for the purpose of producing or enhancing a product.
- Running a business. A business, combines resources to produce goods or services. Entrepreneurship means setting up a business to make a profit.
- Risk taking. The term risk means that the outcome of the entrepreneurial venture can't be known. Entrepreneurs, therefore, are always working under a certain degree of uncertainty, and they can't know the outcomes of many of the decisions that they have to make. Consequently, many of the steps they take are motivated mainly by their confidence in the innovation and in their understanding of the business environment in which they're operating. (p. 135)

Taking into account the aforementioned factors, it can be concluded that a startup does not always mean a micro or a small business, something that starts from scratch, as the etymology of the term itself suggests. For example, opening a supermarket or a boutique is not a startup in itself. Hence, there are no defined criteria in terms of the

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number of employees, revenue, time frame and so forth and often these factors can vary depending on the industry and country in which the business is operating. In the last ten years, the term "startup" in the context of Western business culture has been used to describe young entrepreneurs in California's Silicon Valley who create apps like Snapchat or WhatsApp and then sell them for large sums to Facebook, Google and other tech giants who at some point were startups themselves. Consequently, professional literature refers to the characteristics of these companies, which separates them from other entities.

In recent years there has been a growing trend of starting a business, primarily as a result of the growing number of successful small businesses and the increasing appeal of the creativity and independence that small businesses allow.

The benefits of developing small and medium enterprises including the incentive to start new ones are of vital importance to a nation's economy. These include:

- Creating new jobs;
- Encouraging innovation, research projects and human resources development;
- Strengthening competitiveness at a regional and international level based on knowledge and innovative companies.

In the past ten years, the government of The Republic of North Macedonia has implemented the following steps in its mission to achieve its goals:

- The Innovation Strategy 2012-2020 (2012, October), was adopted in collaboration with experts from the OECD which served to complement the previously adopted development strategies and programs;
- The Law on Innovation Activity (2013, May), was adopted with the aim to regulate innovation and scientific research activity, as well as all issues related to the work of the Fund;
- The Fund for Innovation and Technological Development (2013, December), was established with the aim to encourage innovation by providing additional sources of funding and build a competitive, knowledge-based economy;
- Institutions were established to offer support in the form of accelerators, venture capital funds and so forth;
- There is continuous training and education for future entrepreneurs, life-long learning is promoted, younger people are encouraged to develop innovative projects, entrepreneurs also receive assistance with documentation and paperwork necessary in the initial stages of starting a business;
- Marketing of the above-mentioned incentives and stimulus packages was executed throughout all mainstream media.

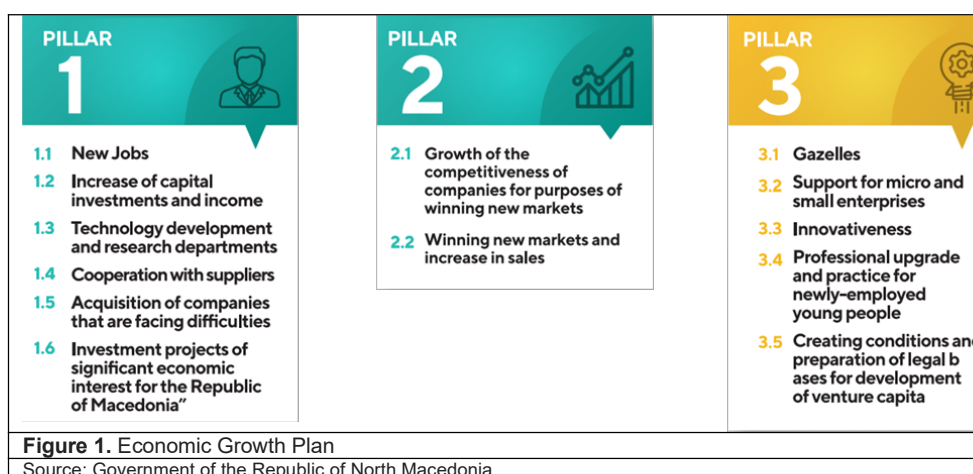
The major challenge for most entrepreneurs, who have an idea and are ready to start a business, is the lack of formal financial resources. Therefore, it is important that innovative entrepreneurs have the opportunity to receive grants, subsidies and loans from governments and international organizations as finances, are crucial in the early stage of startup businesses. Consequently, the allocation of these types of funds, which are approved from experts, help innovative ideas gain new ground and marketing exposure.

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2. NATIONAL INSTITUTIONS AND INSTRUMENTS OF FINANCING

In recent years, The Republic of North Macedonia has placed special emphasis on developing institutions and support measures for people with ideas and an entrepreneurial spirit ready to start their own business. These initiatives have been based on the observations of how developed and neighboring countries have promoted entrepreneurship. These initiatives produced a favorable outcome in the year 2019 when through the Fund for Innovation and Technological Development (FITD) projects were implemented to the value of about 63 million euros, of which 36 million as a direct support to the Fund, while 27 million euros were allocated as financial assistance to the companies themselves. Hitherto, 340 companies have received funding from the fund to finance the development of their business idea (Bankarstvo, 2020).

The government implemented a strategic approach in support of the economy, with a set of measures entitled Economic Growth Plan (2017, September), divided into three pillars, whose main goal is to encourage investment, technological development and increase the competitiveness of Macedonian companies. In the context of this research paper, special attention is paid to the measures of the third pillar, which are implemented in accordance with the Medium-Term Program for Support of Small and Medium Enterprises of the Fund for Innovation and Technological Development, figure1 (Government of the Republic of North Macedonia, 2017).



3. INSTRUMENTS OF THE FUND FOR INNOVATION AND TECHNOLOGICAL DEVELOPMENT

The Fund for Innovation and Technological Development (FITD) aims to promote and encourage innovation in The Republic of North Macedonia and provide improved access to financial support for innovation and technological development. In the longterm, it needs to improve the country's competitive climate, create new jobs, economic growth and development.

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To meet the legal requirements related to the performance activity of the Fund for Innovation and Technological Development (FITD), according to Law on financial support of investment (2013, May), a start-up business is defined as:

- Newly-established micro, small and medium trading company established by one or more natural persons, and/or legal entities whereby no more than six years pass between the trading company's initial registration and the application for financing from the Budget of the Republic of North Macedonia;
- A newly established spin-off trading company established by one or more natural persons employed/engaged, students conducting scientific research in a higher education institution, legal entities established by institutions conducting scientific research with the purpose for commercial exploitation of innovation, transferred to the newly established trade company.

Innovation and entrepreneurship is promoted and encouraged by the Fond using the following instruments (Rulebook of management for support of FITD, (2018, May):

- co-financed grants for startups, spinoff companies and innovations;
- co-financed grants and conditional loans for commercialization of innovations;
- co-financed grants for technological extension;
- co-financed grants for establishment, operation and investment of business technology accelerators, equity and mezzanine investments and technical assistance.

Most of the Fund's revenues, which are endorsed through the above-mentioned grants, come in the form of a loan from the World Bank through the Skills and Innovation Development Project and from The Republic of North Macedonia's budget funds in line with the Economic Growth Plan.

Measures to financially support micro, small and medium entities are being implemented through measures envisaged by the Government's Economic Growth Plan. According to FITD, consolidated text, Medium term work program for financial support of MSMEs for 2018-2020 (2019, October), some of the support measures related to startup companies are presented in table 1.

Table 1. FITR Instruments

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FITR INSTRUMENTS

1. Co-financed grants for startups and spinoffs (World Bank)	
Objectives	To encourage the level of innovation by providing the necessary financial support for research and development activities of "startup" and "spin-off" companies
Amount of co-financing	Up to a maximum of 85% of the total project budget, up to maximum amount of 30,000 Euros
Period of use	12 months, with the possibility of extension for a maximum of 6 months
2. Financial support to SMEs with a rapid growth trend "Gazelle" (Economic Growth Plan, Measure 1)	
Objectives	For technological development of companies (product safety, quality certificates, energy efficiency, environmental protection and others)
Amount of co-financing	30% of the eligible direct costs of the applicant in investment projects, but not more than 10,000,000 denars.
Period of use	18 months from the date of project approval
3. Co-financed grants for commercialization of innovation (World Bank)	
Objectives	Intended for micro, small and medium enterprises (from all sectors) and private healthcare institutions wishing to develop an innovative product, service or process, on their own or in cooperation with another company, an institution that performs higher education, ie scientific research activity or PHI
Amount of co-financing	Up to a maximum of 70% (for micro and small enterprises) or up to a maximum of 60% (for medium enterprises) of the total project budget, up to a maximum amount of 325,000.00 euros
Period of use	24 months, with the possibility of extension for 12 months

Source: Fund for innovation and technology development

The Fund contains a prescribed procedure for application and a system for evaluating the proposed projects set by the World Bank, which is constantly being improved in order to simplify the procedure and facilitate the method of application. The method of selection of the proposed projects is performed impartially and transparently, through a two-stage evaluation, and the final decision is made by a committee composed of five foreign experts. There is special control over the payment of funds, as well as control of the results achieved of the financed companies. The Fund also offers potential customers free technical assistance for document preparation.

The Fund implemented some of the support measures in cooperation with other financial and non-financial institutions in the country, so that more startups were included in its program. Of vital importance has been the cooperation with the Employment Agency and UNDP, including the recent collaboration with Sparkasse Bank.

The first set of measures refers to two projects entitled Self-employment: The Self-employment Lending Project and the Self-employment Lending Project for young people up to 29 years of age (<http://www.mtsp.gov.mk>). The aim of these projects is to provide favorable loans to unemployed people and active job seekers who want to start

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their own business and become self-employed in sectors of agriculture, trade, manufacturing, construction and the service sector thus creating many new jobs in the process. Funds ranging from 5,000 to 30,000 EUR can be obtained (maximum amount for up to five vacancies). The funds are approved with a 1% annual interest rate and a maximum repayment period of up to 7 years, including a grace period of maximum of 18 months.

The second set of support measures are banking products for startup companies. Although the liquidity of the banking sector in The Republic of North Macedonia is high, banks do not finance high-risk projects, such as startups and, as a result, banking funds are in a relatively limited supply. However, in recent years efforts have been made to encourage the banking sector to expand its products within this segment by taking advantage of guarantee schemes, supported by European and world reputable institutions. As a result of these efforts, at the end of 2018, the credit program "Step by step" of Sparkasse Bank was presented (<https://sparkasse.mk/>).

The "Step by Step" program is an opportunity for all young entrepreneurs to acquire skills, knowledge and financial resources to start, develop or upgrade startup companies. This is the first accelerator program of its kind, which aims to provide financial and social support to companies that are in the initial stages of starting their own business, with the possibility of lending up to 25,000 euros and offer packages for educational, financial and mentoring support. Funds from this package can be used by companies that are not older than three years and have less than 10 employees. The terms of the credit product of Sparkasse Bank are presented in Table 2 - Credit support for start-up businesses of Sparkasse Bank. Following the example of this program, the Fund has made efforts to implement cooperation of this kind with other banks and in the future, it is expected that this type of financing will become enriched with new offers.

Table 2. Credit support for start-up businesses of Sparkasse Bank.

STEP BY STEP - SPARKASE BANK START UP COMPANY CREDIT PROGRAM

1. Companies up to 12 months	
Amount and purpose	Up to EUR 10,000, for support for development of new business and business in development phase, educational and mentoring support, investment loan and loan for fixed working capital, possibility for approval in denars and euros
Repayment period	5 years for financing investments, 3 years for financing fixed working capital
Grace Period	Up to 12 months
Security	Bill of exchange as a minimum security
2. Companies from 12 to 36 months	
Amount and purpose	Up to EUR 25,000, for support for development of new business and for business in development phase, educational and mentoring support, investment loan and loan for permanent working capital, possibility for approval in denars and euros
Repayment period	5 years for financing investments, 3 years for financing fixed working capital
Grace Period	Up to 12 months
Security	Bill of exchange as a minimum security

Source: Sparkasse Bank

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A significant step forward for the Macedonian startup community was the recent establishment of three accelerators - Seavus Accelerator, Ukim Accelerator and X Factor Accelerator. The goal is to invest and support further development of Macedonian startup companies that are in a more advanced stage of development. In addition to capital investment, they offer companies full support, mentoring and all the necessary conditions for the development of their plans.

The three accelerators were established with funds from the World Bank in the amount of 1.45 million euros and own funds in the amount of 550 thousand euros. With these funds, after the expiration of three years from the beginning of the work, the business accelerators should support 100 startup companies (Biznisregulativa, 2017, September).

With the establishment of these accelerators, the possibility for financial and development support of startups in Macedonia, has significantly increased with a substantial number of successful startups, serving as an example to new and potential entrepreneurs. To this end, it is necessary to constantly create new institutions and improve the functioning of existing ones. Experts believe that legislation needs to be improved, and there is even an initiative to create special regulations for startup companies. Therefore, it is considered that all measures, programs, institutions and measures should be constantly adjusted and improved in accordance with the new needs of the innovative fast-growing startup community.

During 2020, the Fund plans to adopt measures and programs in the field of education, science and innovation, in order to strengthen human resources and overcome the problem of "brain drain" in the world. Also, cooperation will be encouraged between the academic community and the industry and within the project "Creating Success Stories", successful startups will be promoted with special emphasis on improving the institutional framework for venture capital development.

CONCLUSIONS

Startups can be defined as technologically oriented, innovative, and high-growth businesses. The biggest challenge for these companies is securing finance in the early stages of their development. Therefore, The Republic of North Macedonia, through its institutions and financing instruments, provides support to these companies, to encourage development, entrepreneurial innovative ideas and to ensure the growth of the economy as a whole.

The Fund for Innovation and Technological Development was established in order to promote and encourage innovation activity in The Republic of North Macedonia, to provide improved access to financial support for innovation and technological development, and in the long term, provide improvement of the competitive climate in the country, create new jobs and economic growth and development. In the last two years, the Fund has achieved significant progress in achieving these goals with the adoption of the Economic Growth Plan and the implementation of the third pillar of this plan.

The Fund provided the most significant support to startup companies in The Republic of North Macedonia by approving co-financed grants for startups and spinoff

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companies in the initial phase of their development and the establishment of the three accelerators.

In the future, emphasis should be placed on improving the existing legislation, ensuring cooperation with all financial institutions, following the example of Sparkasse Bank and informing young entrepreneurs of the opportunities available to them. Needless to say, the development of the financial market as a whole would be a prerequisite for the development of the other alternative sources of finance for startup companies.

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TYPES AND COMPARATIVE ANALYSIS OF MODERN BUSINESS PERFORMANCE

Stefana Risteski¹

Abstract

Nowadays, when businesses face a competitive environment, they must be able to measure their organizational performance on their own. If organizations cannot evaluate their performance, they cannot manage their business. The evaluation of the company's performance is an integral part of the management of each company, which allows determining the impact of decisions on the results of operations, as well as the direction of results and decisions they need, in order to improve them. Namely, measuring performance is a progressive and stable movement towards achieving the set goals. The aim of this paper is to research and compare modern methods for assessing company performance based on the identification, synthesis and analysis of appropriate indicators. Knowing the organizational performance indicators is especially important in the context of current economic crises because it enables the identification of those factors that need to be treated with increased interest in order to improve performance. Indicators and performance measurement are key elements in implementing an organization's mission or strategy, in reality. Indicators and strategy are firmly and inevitably linked to each other. Strategy without indicators is useless, and indicators without strategy are meaningless. The research was conducted using systematic analysis of scientific literature, comparison and methods of aggregation. Organizational performance and its measurement will be elaborated first, and then the characteristics of popular and widely used modern performance appraisal methods will be presented. Based on that, a comparative analysis of the latest methods will be made, in terms of focus, i.e. the perspective of measuring organizational performance. It will be the basis for selecting indicators for measuring organizational performance and perceiving which indicators are included in the research methods, based on which it can be concluded whether to use a single method for measuring organizational performance of all companies or multi criteria method of performance appraisal should be established.

Keywords: indicators, modern performance evaluation methods, organizational performance

JEL Classification: L2

INTRODUCTION

If organizations cannot evaluate their performance, they cannot manage their business. Therefore, performance is an important segment of the companies' operations. There are more methods of measuring performance today because older and traditional methods seem to fail to measure performance for the current market structure. In order to be efficient, competitive and productive, the performance of the organization needs to be both efficient and effective at the same time. As the essence of these measurements changes, there is a need to modify the same instruments that are based on finance and their framework to be economically oriented. Performance measurement is the quantification of the results of activities undertaken within an organization over a period of time. New economics-based indicators, such as economic

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value added (EVA), are replacing more traditional instruments such as earnings per share. In addition to this modern instrument, this research paper will cover and elaborate other modern instruments for measuring organizational performance, such as: Balance Scorecard, Deming model, Performance pyramid and Performance prism.

1. LITERATURE REVIEW

Nowadays, when businesses face a competitive environment, businesses themselves must be able to assess their goals, such as unit price, profit, subjective performance (e.g. quality, satisfaction) and to establish appropriate strategies to achieve their goals. The business process is a set of activities performed in order to achieve common goals based on a well-defined strategy of the company claim Hammer, Champy, Keung and Kawalek (Hammer & Champy, 1994; Keung & Kawalek, 1997). These processes contribute to the achievement of the required goals. Indicators and performance measurement are the key elements in implementing an organization's mission or strategy, in reality. Indicators and strategy are firmly and inevitably linked to each other. Strategy without indicators is useless, and indicators without strategy are meaningless. Pierre et al. (Pierre et al. 2009) stated that organizational performance methods are the basis for measuring the success of business activities as well as companies' projects. Connecting performance, strategy and organizational goal is a challenging task. The selection of important indicators influences the operation and direction of the organization in the process of identifying clear goals and adjusting them with the strategy. Measuring and improving performance also depends on the right choice of effective models and performance indicators claim Meng and Minoque (Meng & Minoque, 2011).

Organizational performance has always had a significant impact on the conduct and operation of businesses. One of the consequences of this impact is the increase in the number and variety of tools and methods for accurate measuring performance and the gradual establishment of an important field for business research. If a business can measure its own performance, then it means that the business can be managed, so that measurement and performance management are two parallel activities of the same action. According to Aby-jarad (Aby-jarad, 2010), one of the most important questions in business is why some organizations have succeeded in their operations while others have failed. There are various methods for measuring business performance. The first is through objective (quantified) and subjective (decisive) methods, the second through criteria such as financial and operational and the third through primary and secondary claim Venkatraman, Ramanujam, and Sang (Venkatraman and Ramanujam, 1986; Sang, 2004). In objective measurement, quantitative data (i.e. absolute performance data) can be measured, while in the subjective method, measurement is a perceptual opinion of competitors' performance or company expectations, claim Dess and Robinson (Dess and Robinson, 1984). In an attempt to measure qualitative and quantitative performance, a subjective measurement method is used to the extent that business managers consider their companies successful - compared to other businesses in the sector - in the context of various performance criteria, claim Alpkhan and others. (Alpkhan et al., 2005). According to Ramayah et al. (Ramayah et al., 2011) organizational performance is influenced by various factors that are combined in a

unique way to increase the productivity of the performance itself. This sums up the need to measure performance as a direct consequence in order to be able to evaluate performance, claim Mushref and Ahmad (Mushref & Ahmad, 2011). Organizational performance is defined in terms of an organization's ability to meet the expectations of the three main stakeholders consisting of owners, employees and customers, claims Aluko (Aluko, 2003). According to Akroush and Al-Mohammad (Akroush & Al-Mohammad, 2010), the construction of organizational performance is composed of three measures: market, customer and financial measures. Organizational performance and organizational effectiveness are used interchangeably. There are different conceptualizations regarding the evaluation of the organization. It has been suggested that there are two measures for evaluating performance, i.e. efficiency and effectiveness. Efficiency measures focus on costs and benefits, such as return on assets, return on equity, and other financial ratios. While effectiveness measures focus on generating revenue and are measured in variables such as market share, sales etc. Performance is a kind of effectiveness indicator followed by advantages and disadvantages, which is why a distinction should be made between organizational performance and the more general framework of organizational effectiveness argue Venkatraman and Ramanujam (Venkatraman & Ramanujam, 1986). Unlike organizational efficiency, organizational effectiveness is broader and encompasses organizational performance along with the abundance of results from the organization's internal work, which is related to more efficient or effective operations and other external measures that address attitudes that are broader than those which are simply related to economic evaluation (whether by shareholders, managers, or consumers) such as corporate social responsibility.

2. METHODOLOGY AND DATA

For an organization to be efficient, competitive and productive, the performance of that organization needs to be both efficient and productive. Performance measurement is the quantification of the results of activities undertaken within an organization over a period of time. New economics-based indicators, such as economic value added (EVA), are replacing more traditional instruments such as earnings per share. In addition to this modern instrument, this research paper will cover and discuss five other modern instruments for measuring organizational performance: Balance Scorecard, Deming model, Baldrige model, Performance pyramid and performance prism.

2.1. DEMING MODEL

According to Deming (Deming, 1950), business processes need to be put in a circle so that there is continuous feedback so the managers can identify and change the parts of the process that need improvement. As a teacher, Deming created a rather complex diagram to illustrate this continuous process, known as the PDCA cycle of plan, do, check, act:

- Plan: Design or revise business process components to improve results.
- Do: Implementing the plan and measuring its performance.
- Check: Assessing measurements and publish the results of decision makers.

-Act: Making decisions about the changes needed to improve the process.

2.1.1 PERFORMANCE PYRAMID

The Performance Pyramid was founded by Lynch and Cross in 1991, and covers a hierarchy of financial and non-financial measures. The purpose of the performance pyramid is to link the strategy of organizations with their activities. This pyramid includes four levels of goals that cover the external efficiency of the organization (left side of the pyramid) and its internal efficiency (right side of the pyramid). The development of an organization performance pyramid begins with defining the corporate vision at the first level, and refers to quality, delivery, cost, and cycle time. However, this pyramid does not provide any mechanisms for identifying key performance indicators, nor does it explicitly integrate the concept of continuous improvement. It should also be noted that the system has not been empirically tested.

2.1.2. PERFORMANCE PRISM

With the advent of performance prism, many organizations are applying this framework. According to Neely et al. (Neely et al., 2001), the performance prism is the second generation of a performance measurement framework designed to assist in the selection of performance measurement - a vital process of selecting appropriate measures. A prism can reveal the hidden elements behind something as obvious as white light. The performance prism suggests that the performance management system should coordinate around five different business performance perspectives:

- Shareholders' satisfaction: - Who are the shareholders and what are their needs? Organizations exist to give value to their shareholders. Therefore, shareholders include investors, suppliers, employees and customers.

- Strategies: - According to Neely et al (Neely et al.2011), strategies are needed to meet the needs and desires of stakeholders. Once the stakeholders decide what they want and what their needs are, then the managers are the ones who have to decide if and to what extent the needs of the stakeholders will be met.

- Processes: - What are the necessary processes to realize the strategy. Many organizations understand their business processes consisting of four different categories: product and service development, production on demand, demand fulfillment, and overall organization planning and management as a category confirmed by various sub-processes, claim Neely et al. al., 2002).

- Ability: - The combination of people, practices, technology and infrastructure together ensure the execution of the business processes of the organizations claim Kurien and Qureshi (Kurien & Qureshi, 2011). However, opportunities are combinations of infrastructure, people, and technology that represent the ability of organizations to create value for stakeholders, claim Neely et al. (Neely et al., 2002).

- Shareholders' Contributions: - The most common question according to Kurien and Qureshi (Kurien & Qureshi, 2011) is: what exactly do we need from stakeholders to maintain those capabilities. What kind of organization do stakeholders need and what do stakeholders need from the organization.

2.1.3. ECONOMIC VALUE ADDED

Alfred Marshall (1890) launched the idea of economic profit, expressed in terms of real profit in addition to the various operating costs and the cost of capital invested. EVA is a measure of financial performance that is closer than any other to realizing the true economic profit of a company and is directly related to the creation of shareholder capital. This type of method is calculated by: economic value added is the difference between net operating profit after tax (NOPAT) and the cost of capital. It can be calculated using the following formula:

$$\text{EVA} = \text{NOPAT} - \text{WACC\%} * \text{IC}$$

Eq. (1)

Where, EVA - Economic Value Added; NOPAT - Net operating profit after tax, WACC% weighted average cost of capital; IC - Total invested business capital. EVA clarifies the concept of maximizing absolute returns on the cost of capital when creating shareholder equity. Hence, better investment decisions can be made than increase the rate of return. This method promotes long-term thinking at all levels of the business organization by changing the mindset of managers and employees towards the perspective of shareholders.

2.1.4. BALANCED SCORECARD METHOD

Robert Kaplan and David Norton (Kaplan and Norton, 2007) from Harvard University first introduced the Balanced Scorecard method in 1992. The idea for this model was to combine a number of measures into a compact description of an operation. According to Brewer and Speh (Brewer and Speh, 2000) this method emphasizes that financial and non-financial measures are part of the system that provides information for each part of the organization. Measures are actually a balance between external measures for customers and shareholders and internal measures of business processes, innovation and learning and growth. A balance must also be struck between measures of past performance and measures that lead to future performance. Balanced Scorecard is a method that describes the activities of an organization through a number of measures for each of the four perspectives. The function of the business activity is described from four different perspectives, using a small number of measures for each of them. This method is composed of the following four perspectives:



Figure 1. Balanced Scorecard method

Source: Kaplan S., R., and Norton P., D., (2007). Using the Balanced Scorecard as a strategic management system, *Harvard Business Review - managing for the long term*, www.hbr.org

1. Financial perspective: In order to succeed financially, how should we treat the shareholders? Measures: return on equity; improved shareholder's value; and profitable use.

2. Customer perspective: in order to realize our vision, how should we present ourselves to our customers? Measures: attributes of products / services; customer relations; image and reputation.

3. Internal business processes: to satisfy our shareholders and customers, which business processes must we overcome? Measures: development of products and services; delivery of products and services; and post sales services.

4. Learning and Growth Perspective: To achieve our vision, how will we maintain our ability to change and improve? Measures: ability of employees; opportunity for a better information system; motivation; and strengthening and coordination.

2.1.5. MULTICRITERIA METHOD FOR MEASURING ORGANIZATIONAL PERFORMANCE IN COMPANIES

The purpose of the model for measuring the performance of the company with multiple criteria is quite complex because the results of the company's operations need to be evaluated, taking into account the most important performance indicators. In the research literature, it is noted that when conducting an evaluation of the results of companies, following the analysis of several important indicators, the conclusion and decision-making can become chaotic to some extent: the value of one indicator may be better, the value of other indicators may be worse, however, in the end it is complicated to define whether the performance result is improved or deteriorated. For this reason, in the opinion of Peleckis et al. (Peleckis et al. 2013), methods for evaluating the performance of multiple criteria can be applied, as they combine indicators of single performance into a single summary indicator, which may be an adjunct or a multi applicative combination of partial indicators. Tamašiūnienė et al. (Tamašiūnienė et al. 2006) suggest that these methods can be classified into two groups: simple methods and complex methods. It is worth noting that performance results often do not match when different methods are applied; therefore, it is proposed to construct a model for assessing multiple criteria from several methods Stonkutė and others (Stonkutė et al., 2016). The universality of this model is considered to be its essential advantage. The

model allows quantitative estimation of all complex aspects that are expressed by many indicators. It is important to evaluate as many indicators as possible to remove the threat of a lack of important aspects of evaluating a company's performance. Peleckis and the others. (Peleckis et al. 2013) suggest adding the analyzed factors into specific groups, for example, by distinguishing between profitability indicators, cost levels, employment efficiency, and labor use. The universality of the model is also expressed in the fact that each company can adjust its needs according to the objectives of the assessment. The model includes a wide range of evaluation indicators and requires a lot of effort in gathering information and selecting appropriate methods on multiple criteria during construction.

3. ANALYSIS AND RESULTS

3.1. COMPARATIVE ANALYSIS OF MODERN METHODS FOR EVALUATING ORGANIZATIONAL PERFORMANCE

Starting from the previously presented characteristics of modern methods for evaluating business performance, it can be concluded that each of the methods has a different focus and application. The focus of the Deming's method is on business processes and the main purpose of this method is to identify and apply business processes, if necessary to improve them. This method can easily control the daily management of the organization itself, but can also be used when starting new projects. The performance pyramid covers performance at various levels of the organization with the help of financial and non-financial measures to measure the external and internal efficiency of the organization. This method is aimed at defining the corporate vision and its realization. However, this method does not include efficiency indicators. The third modern method of measuring organizational performance covered in this paper is the performance prism, which reveals the hidden elements in the business performance management system, which means that this method focuses on five different perspectives of business performance which were previously elaborated. With this method, the focus and perspectives on organizational performance is quite extended because the needs of shareholders define the strategy, process, capabilities and revenue as a whole. The fourth method is the EVA method where the focus for this method is on finance and profit. Unlike other methods that include financial and non-financial measures, this method is exclusively focused on measuring only the financial performance and accurate expression of the company's profit or profit. This method is aimed at long-term action at all levels of the business organization. This method identifies the real profitability of businesses. The last method presented is the Balanced Scorecard method. This method, as in the performance pyramid, uses financial and non-financial measures in order to obtain information about each part of the organization. This method is also used in the long run and is used to plan and organize the future of organizations. The essence of this method is to determine whether an organization is on the right track to meet the goals and improve the decision-making process. Starting from the previously developed theoretical part for different types of modern methods for measuring organizational performance, it can be concluded that each method has a different focus and perspective for its application. The focus of the

methods is usually focused on the work process, internal organization, strategy definition, production quality, delivery and employee motivation. From the presented characteristics of each of the methods supported by different indicators, a comparative analysis can be made as to which of these methods would be universal, i.e. could be used in each organization. From the sources of different authors, the indicators are defined according to which the modern methods of organizational performance can be evaluated. Since there are several criteria in this paper, ten criteria defined by different authors will be taken and a synthesis will be made for analysis of the following criteria: criterion for quantitative and qualitative assessment, criterion for measuring with non-financial indicators, criterion for measuring with specific indicators, future operations, criteria for linking the method used with the organization's strategy, criteria for low cost, criteria for meeting customer needs, employee motivation and perspective for process analysis. With the help of these criteria, an assessment will be made to see which of the previously elaborated methods meet the selected criteria and how many of them meet them. For that purpose, a tabular presentation has been prepared which presents some of the modern methods that have been previously elaborated and the criteria that have been previously defined by different authors, in order to explain the inclusion of the selected criteria in the methods.

Table 1. Comparison of modern methods for evaluating the performance of companies
 Comparison of modern methods for evaluating the performance of companies

Criteria	Deming model	Performance Pyramid	Performance Prism	EVA	BSC	Multicriteria method
Quantitative assessment	√	√	√	√	√	√
Qualitative assessment	X	√	√	x	√	√/x
Measuring with non-financial indicators	√	√	√	x	√	√/x
Measuring with specific indicators	X	x	x	√	x	√/x
Planning for future operating	√	√	√	√	√	√/x
Linking the method to the company strategy	√	√	√	x	x	√/x
Low cost	√	x	x	√	x	x
Satisfying the needs of consumers	√	√	√	x	√	√/x
Employee motivation	√	√	√	x	√	√/x
Perspectives on process analysis	√	√	√	x	√	√/x
Total	8 (10)	8 (10)	8 (10)	6 (10)	7 (10)	9(10)

Source: Authors own research

ECONOMY & FINANCE

This tabular presentation will summarize the methods for evaluating the performance of a company, while the comparison of methods is carried out according to the criteria of the systems for evaluating the performance of companies. It can be concluded that there is no single method of performance estimation that would be most appropriate for all companies; however, the choice depends on the organizational needs and objectives of the evaluation. It has been noted that all performance estimation methods are based on quantitative appraisal, however, the specific indicators that must be measured to evaluate performance results are given exclusively in the EVA method, which does not include non-financial information. For this reason, when choosing methods that include non-financial indicators in the evaluation, there is a great challenge to forming a set of indicators. This is a complex process that takes a lot of time and money leading to the introduction of the method in the organizational management system. On the other hand, unlike traditional methods of assessing financial performance, most modern methods distinguish between customer satisfaction, employee motivation, and process analysis perspectives; this allows for complex performance estimation. However, the Balanced Scorecard, EVA, the performance prism and performance pyramid as well as the Deming method of evaluating performance meet most of the criteria required for a complex performance evaluation. This assessment links performance evaluation and required indicators to the organizational strategy, so this allows assessment of actual results and a focus on the future, making certain management decisions that will help to achieve the company's long-term goals, from the synthesized ten criteria Deming's model meets eight criteria not including the criteria for qualitative assessment and measurement with specific indicators. The method of the performance pyramid is the same as the Deming method, with the difference that in this method the cost for its use is quite high, and includes measurement with specific indicators, which is not the case with the Deming method. The performance prism meets the same criteria as the performance pyramid. Unlike the previous methods, the EVA method meets six of the ten defined criteria and thus this method according to this evaluation of selected criteria concludes that it would be the most useless method for evaluating the performance of all previous methods. This method does not include the criteria for qualitative assessment, measurement with non-financial indicators, linking the method with the company's strategy, and the cost of implementing this method is high. The next method presented is the BSC method which meets seven of the ten criteria shown. This method, like most methods with the exception of the EVA method, does not perform measurements with specific indicators. This method as well as the EVA method does not correspond to the company's strategy and its realization requires more financial resources. However, it is worth paying attention to the multi criteria method of performance estimation, which, compared to other methods, is the most universal, meeting nine of the ten criteria required for complex performance estimation, and which is particularly flexible in considering organizational needs and assessment objectives.

CONCLUSION

In the research literature, company performance evaluation is defined as a broad and multifunctional process that combines all important performance indicators in a way

that enables performance appraisal, provides an ongoing process of managing the company, creating value, customizing and responding quickly. to the improvement and growth of the company. The research literature enables distinguishing the key advantages of non-financial indicators from financial indicators. The methods for assessing the success of the company can be grouped into two categories: traditional methods that are justified only by the analysis of financial indicators and modern ones that combine information about the financial and non-financial performance of the company and allow assessment of its activity and quantitative and qualitative research. The most popular modern models for evaluating the company's performance are considered to be the following: Balanced Scorecard, EVA, Performance prism, Performance Pyramid as well as Deming method and multi criteria method. There is no single performance appraisal method that would be appropriate for all companies; the method should be chosen individually given the purpose of the evaluation and the needs of the company. A multi-criteria performance appraisal model can be established that would meet the needs of a particular business activity and appraisal objectives. Thus, further research can be directed towards establishing such a model for manufacturing companies by identifying a set of specific key performance indicators and their impact on performance results.

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ANALYSIS OF BUSINESS ENVIRONMENT IN THE REPUBLIC OF NORTH MACEDONIA

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Abstract

Nowadays, companies operate in a dynamic environment which has a great impact on their functioning. A good business climate provides opportunities and incentives for companies, in order to invest productively, create jobs and to expand. In this context, businesses have a central role in economic growth and poverty reduction, and that is why every national economy strives to create a business environment convenient to business growth and development. Business environment helps in identifying business opportunities, tapping useful resources, assists in planning, and improves the overall performance, growth, and profitability of the business.

The business climate covers all factors (internal and external) that affect the operation of the company which includes the strengths, weaknesses, internal energy relations, orientations of the organization, the nature of the economy and economic conditions, social and cultural factors, demographic trends, natural factors, global trends and cross-border development, customers and suppliers, technology developments, laws and government activities.

Regarding these facts, the purpose of the paper is to analyze the business climate in the Republic of North Macedonia through the indicators in the Doing business reports. Knowing the indicators is especially important in the context of the current economic crises because it allows the identification of those factors that need to be treated with increased interest in order to improve the business climate of a country. The research was conducted using systematic analysis of scientific literature, comparison and methods of aggregation. The general elements of the business climate will be elaborated first, and then the assessment of the international business climate according to the Doing report in the Republic of North Macedonia will be presented so that at the end of the paper based on the analysis, the conclusions can be presented, and also measures will be proposed in order to improve the business climate in the Republic of North Macedonia.

Keywords: business environment, doing business, indicators

JEL Classification: F18, F64, O44

INTRODUCTION

Every day, businesses face the need to make important decisions. Their decisions have significant implications, and on the other hand, decisions largely depend on how the government implements its policies and creates the business climate. The business climate is affected by a wide range of conditions in the areas of legislation, institutional infrastructure and market operations. The goal of all governments in the countries is to improve their business environment so that entrepreneurs and companies can improve because then the economy thrives. In fact, a profitable business climate provides opportunities and incentives for micro to multinational firms to invest productively, create jobs, and expand. Business climate thus plays a central role in economic growth and poverty reduction. Business climate is a key factor in a country's ability to attract foreign investment and achieve the development of small and medium enterprises. A

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good business climate is a cornerstone of a country's strategy to stimulate economic growth, which creates opportunities for poor people to have more productive jobs and higher incomes.

1. LITERATURE REVIEW

The business environment is defined as a combination of internal and external factors that affect the state of the company, including employees, customers, management, supply and demand, and business regulations, state Hans (Hans, 2018). The business climate may include factors such as: customers and suppliers; its competition and owners; technology improvements; laws and government activities; and market, social and economic trends. Also, the business climate is like "the forces, factors and institutions that the businessman has to deal with to achieve his goals." According to Richard Andrews (Richard Andrews, 1999), the business environment covers a climate or set of conditions, economic, social, political and institutional in which business operations are conducted. According to Estay (Estay, 2004) the path that takes place in starting a business depends especially on the personal characteristics of the businessman and the environment in which he works. In this context, Appiah-Adu (Appiah-Adu, 1999) highlighted the impact of changes in the business environment on business operations and stimulating economic growth. Basically, the effects of changes in the business environment are included in business studies in an attempt to determine a business's adaptability to transition in its micro or macro environment.

2. METHODOLOGY AND DATA

2.1 GENERAL ELEMENTS OF A BUSINESS ENVIRONMENT

The business climate covers all factors (internal and external) that affect the operation of the company and includes the strengths, weaknesses, internal energy relations, orientations of the organization, the nature of the economy and economic conditions, social and cultural factors, demographic trends, natural factors, global trends and cross-border development, customers and suppliers, technological developments, laws and government activities.

The business climate is actually divided into internal and external environment, while the outdoor environment is divided into micro and macro environment. The internal environment refers to the internal factors of the company, i.e. factors that exist within the business firm. These factors are generally easy to control because the company has control over them and the potential of the company to meet environmental challenges can be determined. The most important internal factors or elements of the business climate are:

- Culture - It is widely accepted that every business organization usually takes a set of measures to increase profits. However, people holding senior positions in certain modern corporate enterprises have some values that influence their policies, norms, working language, systems, practices as well as the overall internal environment.

- Vision, mission and goal - The vision, mission and goal of the company is guided by priorities, philosophy, policy, etc. The vision emphasizes what the organization

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wants to represent, or what it wants the world in which it operates to be. It is a long-term view that concentrates on the future. Vision can have emotional content and is a source of inspiration. The mission determines the basic goal of an organization or an enterprise, accurately describing the reason for its existence and the activities it undertakes to realize its vision. The goal is actually the realization of the vision and mission of what the company has planned to fulfill.

- Management structure at the top of the organization - The composition of the board of directors is a very critical factor for the development and maintenance of the company, because they are the highest decision-making body, which aims to manage and control through their professionalism. The board of directors has a large stake in companies and can have important managerial implications.

- Structural power - The relationship of internal strength between the board of directors and senior executives highly influences the decision-making process in the organization.

- Human and other resources - The quality of the company's human resources depends to a large extent on the competence, commitment, attitude and motivation that play an important role in the success of the organization. Other resources include: physical resources and technology, production capacity, distribution, logistics, etc., are factors that affect the operation and competitiveness of the company.

- The image of the company and the impartiality towards the brand - The image and brand capital of the company are very important especially in increasing the finances, forming corporate ventures and other alliances, choosing dealers and suppliers, etc.

The external environment refers to the external aspects of the business environment that affect the operation of the business. A micro-environment or environmental task consists of those forces adjacent to an organization that affect that functioning. Micro forces do not have to affect all firms in a particular industry in the same way. Some of the micro factors may be specific to a particular firm. The most important elements of the micro-environment are:

- Suppliers - Companies are looking for a large number of suppliers, who supply raw materials and components for the company. They are an important force in the micro environment of the company.

- Consumers - Being highly influential may be the focal point of any business.

- Market intermediaries - Every business enterprise is assisted by market intermediaries that include agents, brokers, who help companies find clients. Intermediaries are the link between the company and the end consumer.

- Competitors - Every business should adjust its activities according to the actions and reactions of competitors. This factor can only make a profit for the company if it is controlled by the company.

- The public - Any group that has a real or potential interest in a business that also has an impact on the business. For example, the growth of consumer groups can affect the operation of a newly developed business

The macro environment has large external and uncontrolled factors that influence the organization's decision making and influence efficiency and strategies. When the macro environment is out of control, a company's success depends on its adaptability to the environment. These factors include:

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- Economic environment - Enterprises carry out their activity in the market system in order to maximize profits, because business enterprises are essentially economic institutions. Therefore, the economic environment consisting of economic factors affects the business in the country. These factors include gross national product, corporate profits, inflation rate, employment, balance of payments, interest rates, consumer income, etc.

- Political environment - The economic and political systems of a country are interdependent, which is a reflection of each other's ideologies. It consists of political stability and government policy. The ideological inclination of political parties, the personal interest of politicians, the influence of party forums and more create the political environment.

- Socio-cultural environment - The socio-cultural environment is made up of the values, attitudes, beliefs and customs of the people in a given group or society. The socio-cultural dimension of entrepreneurs who have the opportunity to manage their investments, literacy rate, customs, values, beliefs, lifestyle, demographic characteristics and mobility of the population are part of the social environment. It is important for managers to notice the direction in which society is moving and to formulate progressive policies in line with social change.

- The technological environment - The progress of a business depends on the level of technology available in the country which provides a great impetus for economic revival. It also indicates the pace of research and development and progress in the introduction of modern technology in production. Technology provides capital intensity, but also a reduction in labor efficiency, i.e. machines replaces the human hand. In a competitive business environment, technology is the key to development.

- Legal environment - Has a great influence on the functioning of the organization that sets the codes and procedures for different types and aspects of business and deals with deviations or violations of the law such as bribery, counterfeiting, gray economy, black market, consumer fraud and tax evasion. The coverage, efficiency and effectiveness of the legal system determine the adequacy, cost and speed of economic justice and these factors are of great importance for business growth.

- Environment - There is no business that can survive in adverse climatic conditions. The relationship between business and the environment is not common. First, the environment is a source of resources and raw materials and second, while the production process is one that harms the environment.

- Financial environment - Business finance deals with making investment decisions in business. These include bond markets, forex markets, stock exchanges, commodity markets, over-the-counter markets, real estate markets or on-site markets. All these markets play an important role in raising funds for companies and at the same time making a profit for investors.

- Global environment - Includes the rules and regulations of the World Trade Organization - WTO, International Monetary Fund - IMF, World Bank, G-20 and other international bodies that affect the work of a business organization in each country individually. Businesses must exist in the market world and therefore their effect must be understood and action taken in accordance with these rules and regulations.

2.2 EVALUATION BY INTERNATIONAL INSTITUTIONS OF THE BUSINESS ENVIRONMENT

The main goal of the international institutions is to provide assistance for starting and developing businesses. With the help of these institutions, a favorable business climate can be created for business development. This paper will analyze the assessment of the business climate according to Doing Business reports. In fact, this project is one of the institutions that offers help for starting businesses. The World Bank Doing Business Project transmits objective information on business start-up regulations across 190 economies, both nationally and locally. The data collected by Doing Business shows the costs, time and procedures for regulating documentation when starting and running a business. This report was created for several reasons, but the main and basic ones are the following:

- Many developing countries do not reform and adapt to regulations that are generally accepted in modern economies. Because of this, investors have huge problems registering a business or making a greenfield investment. This report identifies problems and offers solutions to them.

Doing Business notes that socialist legal regulations and the socialist business environment leave little room for private sector flexibility. In such cases, where regulations severely limit profits, the incentive to invest is much lower.

- Comparability and use of successful examples from the region is one of the reasons why these reports exist. Therefore, in addition to state-level reports, the World Bank prepares a report on the regions in which one can directly see how far the countries in the region have improved and take their successful examples to be implemented in the country.

- Business regulations are crucial in starting a business, as well as for the overall development of an economy. According to some information from the World Bank, about 90% of jobs in the world are provided by the private sector. Having good and efficient business and legal regulations is essential for a healthy and stable economy. Doing business mainly focuses on local businesses, more specifically on small and medium businesses at the local level. It mainly works with standardized case studies that include quantitative and qualitative indicators at different levels of business development. At any moment the report offers clear comparability with the 190 economies it covers. From the above it can be concluded that the purpose of Doing Business is to provide an objective basis for understanding and improving the regulatory environment of businesses. Doing Business seeks to encourage regulatory change precisely because of the greater representation of domestic investors, who often differ significantly from large international corporations in terms of the benefits they receive from an economy.

Each year, the report mainly focuses on legal reform, individually for each city. However, it must be known that these measures do not reflect the experience and success of companies. By facilitating business regulations and legal regulations, all people who have an idea can turn it into a business, and other companies can invest in those ideas and thus, as a final result, open new jobs.

Doing business reports cover quantitative measures related to business start-up regulations, building permit regulations, legal entity registration, credit acquisition,

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investor protection, import and export duties (cross-border trade), the process of signing and executing contracts, and liquidation of businesses (bankruptcy). All of these mainly apply to small and medium-sized enterprises.

The Doing Business report includes an indicator that has its own sub-indicator that fully explains the procedure, cost and time for a particular process. This indicator refers to starting a business. This indicator documents all the procedures that are officially required and used in practice in the process of formal business start-up, whether it is a production or service activity. This includes registering a name, the company account, obtaining an identification number etc. Elements that are included and measured by this indicator are:

- The procedure to start the work legally (measured in numbers)
- The time it takes to collect all the documentation a (measured in calendar days)
- The cost required to complete each procedure (percentage of revenue per capita)
- Mandatory start-up capital (percentage of income per capita)

Countries have taken an increasingly serious approach to this report over the past decade. This report serves as a tool that offers a lot of information that can be used. Many countries and institutions use this report to attract foreign investment, although the report and its methodology are not explicitly designed to do just that. The businesses themselves believe that the higher the ranking, the better the climate for the development of their business. It has been mentioned several times that the Doing Business report is mainly focused on small and medium-sized domestic companies, but this does not mean that laws and regulations are not a useful signal for foreign and domestic investors who want to start a large company. When assessing the business climate in an economy, a number of laws and regulations can affect foreign companies in the same way as they would domestic ones.

This is where the government should help simplify regulations and put them into practice. States should be aware that practice is not interested in paperwork and formal rules, but in substantive developments. Therefore, the impact that Doing Business has should be an incentive for the country, and thus to attract as many foreign businesses as possible, which, in addition to employment, would increase the competitiveness and technical-technological development of businesses. Direct stimulation by the state, helping and giving work lead to business-model and business-thinking.

To mitigate the impact of the global financial crisis, governments are taking a number of measures to make it easier for local and foreign companies to start and run businesses. Because of this, many companies have decided to relocate their capital to other countries. This is where the complicated procedures for starting and running a business come into play. The Doing Business report and its impact have significantly helped governments see the need to simplify the regulations and policies of economies. Accordingly, from June 2009 to May 2010, the governments of 117 economies implemented more than 216 business reforms to alleviate business start-ups, enhance business transparency, improve bankruptcy laws, and many other changes. All this would be extremely difficult if this report did not exist. The Doing Business report clearly and transparently shows the regulations of all economies for starting and doing business, so a country can take the example of a higher ranked country, in order to translate the positive example into changes that would facilitate some procedures.

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3. ANALYSIS AND RESULTS

3.1 ANALYSIS OF BUSSINES ENVIRONMENT IN THE REPUBLIC OF NORTH MACEDONIA

Doing business captures several important dimensions of the regulatory environment as it applies to local firms. It provides quantitative indicators on regulation for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. Doing business also measures features of employing workers. Although, Doing business does not present rankings of economies on the employing workers indicators or include the topic in the aggregate ease of doing business score or ranking on the ease of doing business, it does present the data for these indicators. In this part of the paper, an analysis of the business climate in Republic of North Macedonia will be done, according to the indicators in Doing Business.

Table 1. Summary of Doing Bussines in Republic of North Macedonia

Year	DB Rank	DB Score
2020	17	80.7
2019	10	81.55
2018	11	81.18
2017	10	81.74
2016	12	80.18

Source: own processing out of data from the World Bank Group (DB2016-2020 report)

Table 1 shows the summary of the reports from Doing Business for the period from 2016 to 2020 on how according to the rank and result the Republic of Northern Macedonia is ranked in the last five years. From the table it can be concluded that in a period of five years there is a decrease in the ranking by 5 places.

For the purposes of this paper, an analysis of the indicators from the Doing business report with its sub-indicators for the last five years for the Republic of North Macedonia will be prepared.

- The first of the indicators that is processed in the Doing report refers to starting a business which is composed and supported by four sub-indicators. In this indicator as sub-indicators are included: Procedures (number), time (days), cost (number) and paid-in min. capital (% of income per capita).

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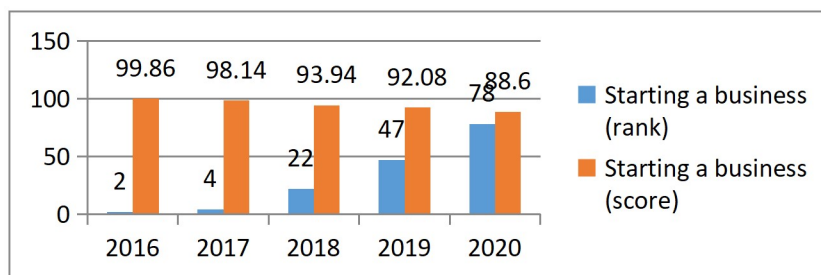


Figure 1. Starting a business in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

From the graph it can be concluded that according to the ranking for starting a business, the procedure itself has been improved in 2020 as opposed to 2016 where a longer period of time is required for registration and starting a business on the territory of the Republic of North Macedonia. For 76 units, i.e. with a number of reforms to facilitate the procedure for business registration, which results in the Republic of Macedonia in 2020 to climb to third place ahead of Montenegro, Bulgaria and the Czech Republic.

- Dealing with construction permits This indicator refers to the procedures, time and costs for construction of a warehouse, including the necessary licenses and permits, submission of all necessary notifications, requests and receipt of all necessary inspections and obtaining utility connections. In addition, the indicator for dealing with building permits for measurement and quality control, quality assessment of building regulations, the strength of quality control and safety mechanisms, liability and insurance regimes and certification requirements.

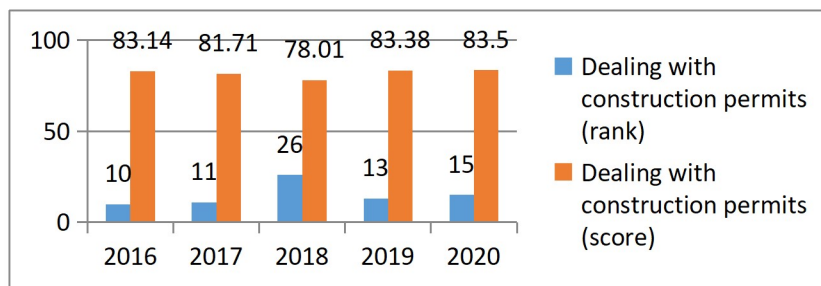


Figure 2. Dealing with construction permits in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

From the graph it can be concluded that in a period of five years there is a slight improvement in terms of the procedure for issuing a building permit, because the procedure itself can be performed online, so that in 2020 the Republic of North Macedonia is ranked on fifteenth place with 83.5 points and is first in relation to Montenegro, Bulgaria, the Czech Republic and the countries of Europe and Central Asia.

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- The ranking of the economy of the Republic of Northern Macedonia in the process of obtaining electricity in the period from 2016 to 2020 is presented in the following graph:

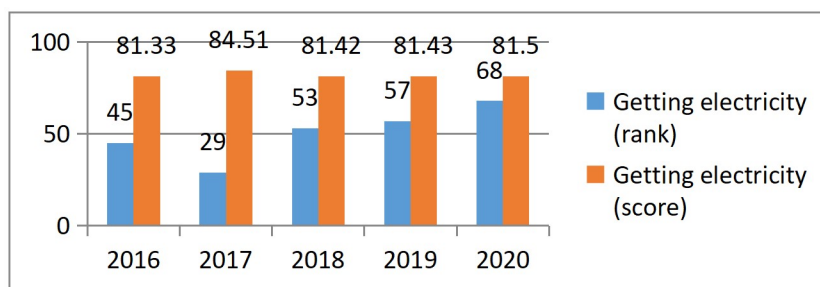


Figure 3. Getting electricity in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

From the graph it can be concluded that the Republic of North Macedonia in 2020 is ranked 68th, opposed to 2016 where it is ranked 45th, and the procedure for issuing a permit for electricity connection lasts 97 calendar days.

- Registering property: This topic examines the steps, time and costs involved in registering a property, assuming a standardized case of an entrepreneur who wants to buy land and a building that is already registered and free from a property dispute. From the graphic display it can be seen that for the period from 2016 to 2020 the Republic of North Macedonia is ranked fifth with points from 46 to 50. And in 2020 the ranking for Macedonia is 48 with 74.5 points behind the Czech Republic and European countries and central Asia.

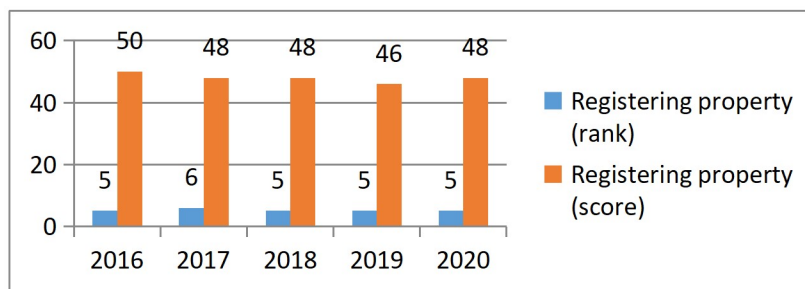


Figure 4. Registering property in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

- Getting Credit. This topic explores two groups of issues - the strength of credit reporting systems and the effectiveness of collateral and bankruptcy laws in facilitating lending. Regarding this topic in the Republic of North Macedonia there is an improvement in the procedure for getting a credit so that in 2020 the credit rating is 25 with 80 points.

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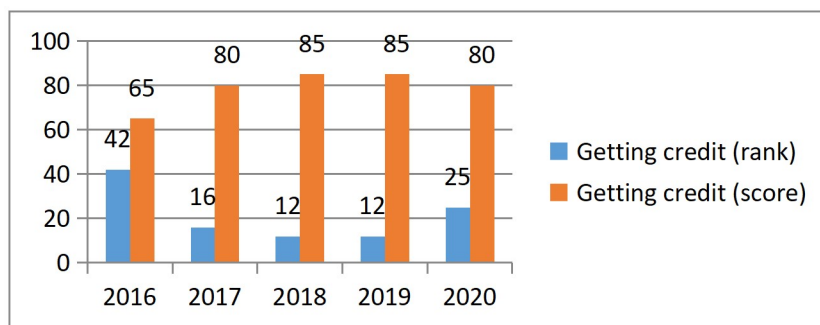


Figure 5. Getting credit in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

- Protecting minority investors. This topic presents the ranking of economies according to the strength of investor protection which is determined by sorting their results for investor protection. These results are a simple average of the ratings for the degree of conflict of interest regulation index and the degree of shareholder management index. The results of the ranking for investor protection in the Republic of North Macedonia for a period of five years are shown in the following graph:

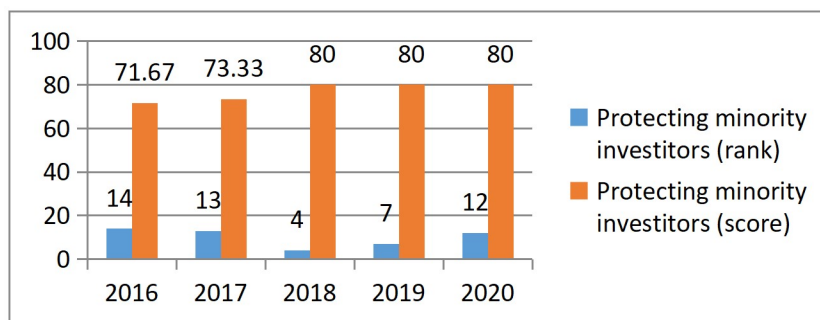


Figure 6. Protecting minority investors in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

From the graphic review according to the ranking, a slight decrease in the ranking can be noticed, but still in 2020, the Republic of North Macedonia is on the 12th place before Bulgaria, Greece and the Czech Republic.

- Paying taxes. This topic records the taxes and mandatory contributions that a medium-sized company must pay or retain in a given year, as well as the administrative burden of paying taxes and contributions and compliance with paperwork procedures (VAT refund and tax audit). From the graphic review it can be concluded that there is an improvement or facilitation in terms of the tax payment procedure so that compared to 2016, in 2020 the ranking is improved by 30 units, and the result is reduced by 10 units.

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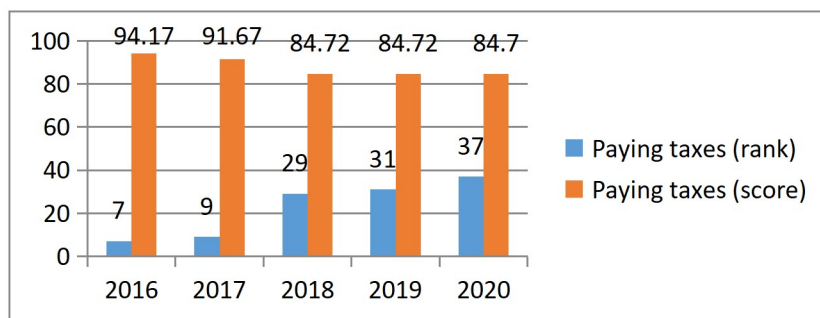


Figure 7. Paying taxes in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

- Trading across borders. Doing Business records the time and costs associated with the logistics process of export and import of goods. Measures the time and costs (excluding tariffs) associated with three sets of procedures - documentary compliance, border compliance and domestic transport - within the overall process of exporting or importing a consignment of goods. The graph below shows an improvement over the years in terms of import and export of goods for the Republic of Northern Macedonia as well as an increase in the ranking from 26th to 32nd place.

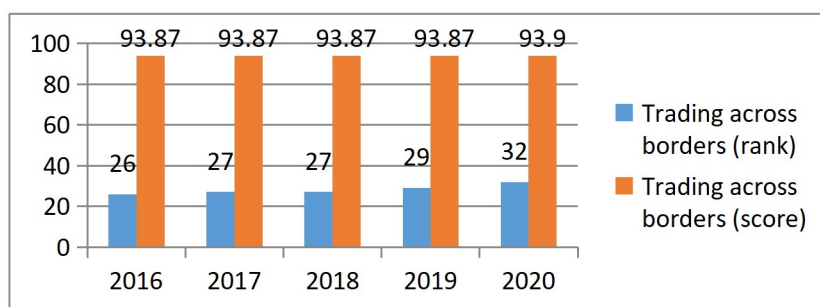


Figure 8. Trading across borders in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016-2020 report)

- Enforcing contracts. This indicator refers to contract realization and measures the time and cost of resolving a trade dispute through a local court of first instance and the quality of court processes, assessing whether any economy can adopt a range of good practices that promote quality and efficiency in the judicial system. This indicator measures the time required to execute contracts in court on calendar days, the costs required to execute a contract through the courts (% of the value of the claim) and the quality index of court proceedings (0-18). The graphic overview below shows the indicator for execution of contracts by rank in the Republic of Northern Macedonia in the period from 2016 to 2020.

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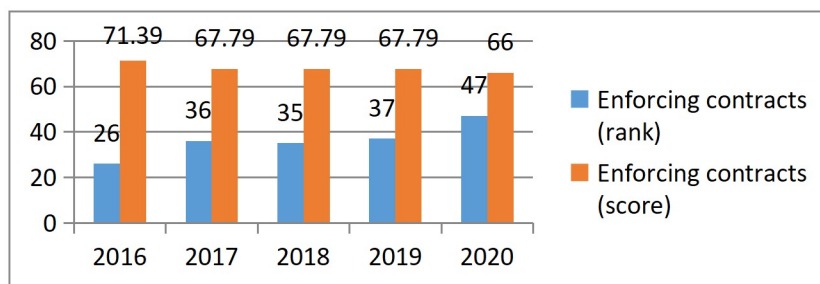


Figure 9. Enforcing contracts in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016)

From the graph it can be concluded that there is growth in 2020 compared to 2016, with small oscillations and a slight decrease in 2018. However, over the years for this indicator there is an improvement in terms of ranking that puts Macedonia on the 47th place behind Bulgaria and Montenegro.

- Resolving insolvency. The Doing Report examines the timing, costs, and outcome of insolvency proceedings involving domestic legal entities. To determine the present value of the amount repaid by creditors, they use International Monetary Fund loan rates, supplemented by data from central banks. For solving the illiquidity according to the ranking from the Doing report in 2020, Macedonia is ranked 30th with a result of 72.7 points, ahead of only the Czech Republic. Compared to 2016, there is a slight decline in the resolution of illiquidity, and that decline is accompanied by all years and is constant in 2018, 2019 and 2020. This ranking for the Republic of North Macedonia is shown in the following graph.

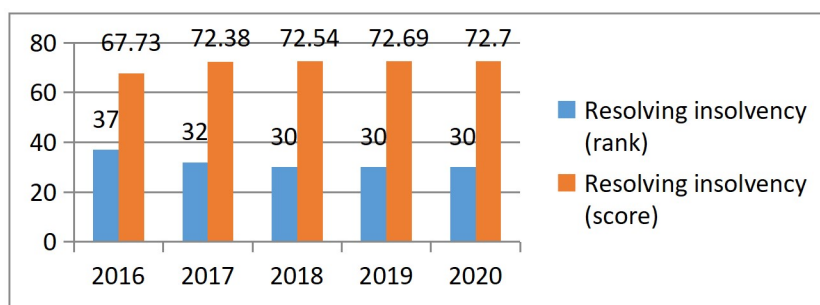


Figure 10. Resolving insolvency in Republic of North Macedonia
Source: own processing out of data from the World Bank Group (DB2016)

From the graphs according to the Doing report it can be concluded that in the Republic of North Macedonia to improve the indicators presented in this paper, there is a need to establish measures and reforms in order to improve the investment climate and better economic stability. The following are the measures that can be applied:

- Facilitate the implementation of contracts by simplifying the calculation of performance fees, as well as making the overall process less expensive.
- Making the process for issuing construction permits cheaper by reducing the fees for land development and reducing the time required for registration.

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- Strengthening the access to credit by amending legal regulations for conducting a functionally secure transaction.
- Improving the protection of investors by increasing the rights of shareholders and the role in major corporate decisions, as well as providing greater access to information about the company.
- Facilitate the implementation of agreements by accepting changes and amendments to the Law on Civil Procedure.
- Resolving illiquidity by changing voting procedures for reorganization plans and allowing creditors greater participation in insolvency proceedings.
- Facilitate the procedure for starting a business by introducing mandatory free online registration.
- Facilitate the process of obtaining electricity by reducing the time required to obtain a new connection and by setting fixed connection fees.
- Property registration to be faster and less expensive by digitizing the real estate cadastre and eliminating certain conditions.
- Facilitate the process of paying taxes for companies by encouraging the use of electronic systems for applying and paying income.

CONCLUSION

As a general conclusion in this study it can be concluded from the presented results according to the ranking and the result of the Doing Business report that in the Republic of Northern Macedonia there is no improvement of the business environment. That means in the business environment there are no favorable opportunities and incentives for micro businesses of multinational companies to invest productively, create jobs, and to expand, on the contrary in the last five years there has been a slight decline in the ranking in assessing the business climate in RN Macedonia. The reason why there is no improvement in the rank of the business environment, especially in 2020, is due to the occurrence of the global pandemic that is present worldwide. The COVID-19 pandemic outbreak has forced many businesses to close, leading to an unprecedented disruption of commerce in most industry sectors. Retailers and brands face many short-term challenges, such as those related to health and safety, the supply chain, the workforce, cash flow, consumer demand, sales, and marketing. However, successfully navigating these challenges will not guarantee a promising future, or any future at all. This is because once we get through this pandemic, we will emerge in a very different world compared to the one before the outbreak. Many markets, especially in the fields of tourism and hospitality, no longer exist. Therefore, certain measures need to be taken because the business climate plays a central role in economic growth and poverty reduction. To improve the business climate in an economy, it is necessary to take certain measures and reforms to improve certain segments of the economies, including: starting a business, cross-border exchange and lowering barriers to entry and exit of goods and services, land registration, electricity supply, cost reduction and construction time and the like. All this would contribute to improving the business climate in the Republic of Northern Macedonia and to the development of the economy.

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ISLAMIC BANKING AS ALTERNATIVE FINANCIAL SYSTEM

Avdirahman Ebibi¹

Abstract

The global financial crisis (2008) has not only cast doubt on the proper functioning of "western" conventional banks, but has also raised attention to an alternative form of financing, known in the literature as Islamic finance/banking. Islamic banking is the fastest growing segment of the international financial system. In Europe, Islamic finance is still in its infancy, but there are a number of factors that believe in the potential growth of this segment, such as the need to withdraw liquidity from new countries or the growing emphasis on alternative financial solutions in the wake of the financial crisis in Europe, etc. The industry is becoming increasingly competitive. Despite the growth of assets from year to year, the global Islamic financial services industry is relatively small. In 2012, the assets of Islamic banks were estimated at \$ 1.3 trillion, while for the conventional banking sector, only the 1000 largest banks in the world had assets of \$ 100 trillion.

The purpose of this paper is to analyze how Islamic finance works, what is the meaning of Sharia principles and how sharia law acts as a code of conduct for all aspects of a Muslim's life. How sharia law is a legal system of Islam, and why it is derived from the Qur'an, as the central text of Islam, and from the FETWA - judgments of Islamic scholars.

The analyze will conduct the seven main operating principles of the Islamic banking:

- 1 Profit and loss sharing
2. Common risk
3. Reba
4. Gharar
5. Gambling
6. No investments in prohibited industries:
7. Zakat

Through the above mentioned analyze this paper will try to conclude how the authentic Islamic financial system can be an alternative way of doing financial business in different jurisdictions with special emphasis on the Republic of Northern Macedonia.

Keywords: Islamic finance, Islamic banking, conventional banking.

JEL Classification: H00

INTRODUCTION

The global financial crisis (2008) has not only cast doubt on the proper functioning of "western" conventional banks, but has also raised attention to an alternative form of financing, known in the literature as Islamic finance/banking. Islamic banking is the fastest growing segment of the international financial system. In Europe, Islamic finance is still in its infancy, but there are a number of factors that believe in the potential growth of this segment, such as the need to withdraw liquidity from new countries or the growing emphasis on alternative financial solutions in the wake of the financial crisis in Europe, etc. The industry is becoming increasingly competitive. Despite the growth of assets from year to year, the global Islamic financial services industry is relatively small. In 2012, the assets of Islamic banks were estimated at \$ 1.3

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trillion, while for the conventional banking sector, only the 1000 largest banks in the world had assets of \$ 100 trillion.

There are not many empirical studies available which compare Islamic and conventional banking. At present, the existing literature on Islamic banking and finance mainly focuses on to distinguish conceptual differences between conventional and Islamic banks (Bashir 2003), and very few studies have been done on risk analysis and performance of banks (Cihak and Hesse 2008).

Islamic banking and financial system exists to provide a variety of religiously acceptable financial services to Muslim communities. In addition to this special function, the banking and financial institutions, like all other aspects of Islamic society, are expected to “contribute richly to the achievement of the major socio-economic goals of Islam” (Chapra 1985).

1. PRINCIPLES OF ISLAMIC BANKING

The word Islamic bank refers to banks which are involved in retail banking, wholesale banking, investment banking etc. There is no dilution between these types of banking services, while one bank can engage with all these businesses. Main sources of funds are from deposits of customers. Islamic banking and financial system exists to provide a variety of religiously acceptable financial services to Muslim communities. In addition to this special function, the banking and financial institutions, like all other aspects of Islamic society, are expected to “contribute richly to the achievement of the major socio-economic goals of Islam” (Chapra 1985).

1.1. PRINCIPLE OF PROFIT AND LOSS SHARING:

It is one of the best principles of Islamic finance where the partners will share their profit and loss according to the part they played in the business. There will be no guarantee on the rate of the returns that the Muslims will play the part of a partner and not a creditor. Since Islamic finance is based on several restrictions and principles that do not exist in conventional banking, special types of financing arrangements were developed to comply with the following principles:

1.1.1. Partnership (Mudarabah)

Mudarabah is a profit-and-loss sharing partnership agreement where one partner (financier or *rab-ul mal*) provides the capital to another partner (labor provider or *mudarib*) who is responsible for the management and investment of the capital. The profits are shared between the parties according to a pre-agreed ratio. The Murabaha is kind of contract where bank buys product from the provider of goods and resells it to debtor (purchaser). Though Murabaha contract is signed by two sides: bank and debtor (purchaser), there are three parties actually engaged in this contract: bank's debtor (purchaser) who can be person or company, the seller of goods who can be the manufacturer or trader and the bank who plays the role of intermediary trader between

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the purchaser and the seller. In Murabaha contract bank purchases the product from the seller and after adding pre-agreed profit, resells it to its debtor. One can argue that it involves interest while calling it pre-agreed profit, however in this case its ex-ante profit. The Murabaha contracts are widely used for financing real estate, industry machinery, consumer equipment's etc. (Hassan and Lewis 2007).

1.1.2. Joint venture (*Musharakah*)

Musharakah is a form of a joint venture where all partners contribute capital and share the profit and loss on a pro-rata basis. In Musharakah contract the debtor or borrower of capital instead of asking e-g hundredpercent financing by bank side, also contributes his/her own equity capital, even it can be onepercent. The provider of capital is exposed to amount of capital committed by him/her and not like hundred percent, however the profits can be shared in predetermined ratios like 50/50 or 40/60 despite the fact that main capital provider contributes more. The Musharakah contract is used in financing imports to issue letter of credits(Siddiqui 2008).

The major types of these joint ventures are:

- **Diminishing partnership:** This type of venture is commonly used to acquire properties. The bank and investor jointly purchase a property. Subsequently, the bank gradually transfers its portion of equity in the property to the investor in exchange for payments.
- **Permanent *musharakah*:** This type of joint venture does not have a specific end date and continues operating as long as the participating parties agree to continue operations. Generally, it is used to finance long-term projects.

1.1.3. Leasing (*Ijarah*)

In this type of financing arrangement, the lessor (who must own the property) leases the property to the lessee in exchange for a stream of rental and purchase payments, ending with the transfer of property ownership to the lessee.

1.1.4. Principle of shared Risk

In the economic transactions, the risk sharing is promoted by the Islamic banking. When two or more parties will share the risk following the principles of Islamic banking the burden of the risk will be divided and reduced in the parties. So it will improve the economic activity of the state.

1.2. PRINCIPLE OF RIBA

It can be regarded as the prohibition of interest:

The wealth will get the return without any risk or effort. Regardless of the outcome of economic activity the person who gets the loan has to return the money and Riba to the lender. In principles of Islamic banking, taking advantages of the issues that other are facing is unjust.

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1.3. PRINCIPLE OF GHARAR

According to the Islamic finance principles, Muslims are not allowed to participate in the ambiguous and uncertain transactions. Based on these rules, both parties should have a proper control over the business. As well as the complete information should be shared with both parties so that the profit and loss will be equally shared.

1.4. PRINCIPLE FOR GAMBLING

In Islam, the acquisition of wealth through evil means or participation in gambling is prohibited. On the other hand, Islamic banking works in Takaful that involves mutual responsibility and shared risks.

1.5. NO INVESTMENT IN PROHIBITED INDUSTRIES

Islamic finance strictly complies with Sharia law. Contemporary Islamic finance is based on a number of prohibitions that are not always illegal in the countries where Islamic financial institutions are operating. The industries that are harmful to society or have a threat to the social responsibilities are prohibited in Islam (Cihak and Hesse 2008). They include:

- Paying or charging an interest - Islam considers lending with interest payments as an exploitative practice that favors the lender at the expense of the borrower. According to Sharia law, interest is usury (riba), which is strictly prohibited
- Pornography.
- Prostitution.
- Alcohol.
- Pork.
- Drug.
- Speculation (maisir) - Sharia strictly prohibits any form of speculation or gambling, which is called maisir. Thus, Islamic financial institutions cannot be involved in contracts where the ownership of goods depends on an uncertain event in the future.
- **Uncertainty and risk (*gharar*) - The rules of Islamic finance ban participation in contracts with excessive risk and/or uncertainty. The term *gharar* measures the legitimacy of risk or uncertainty in investments. *Gharar* is observed with derivative contracts and short-selling, which are forbidden in Islamic finance.**

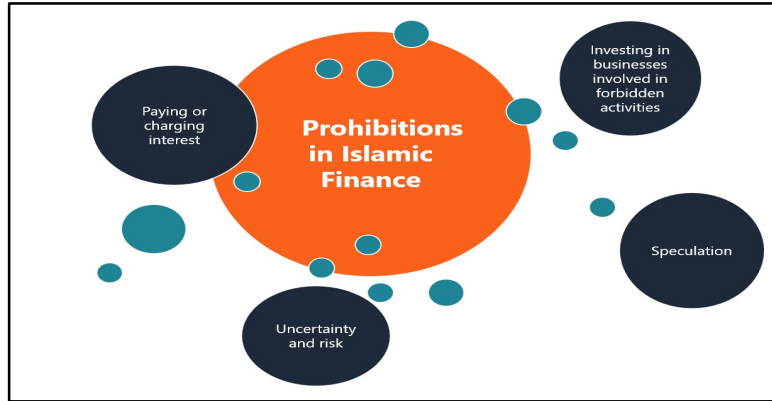


Figure 1. Prohibitions in Islamic Finance

According to the Islamic finance principles, you are not allowed to invest in such industries. You cannot even participate in the mutual funds that will help the industry to flourish.

1.6. SUKUK (ISLAMIC BONDS)

Generally, Sukuk are asset-backed and tradeable Sharia compliant certificates. According to AAOIFI7 Standard 17 (Accounting and Auditing Organization of Islamic Financial Institutions), “Investment Sukuk are certificates of equal value representing undivided shares in ownership of tangible assets, usufruct and services or in the ownership of assets of particular projects or special investment activity” (Hassan and Lewis 2007). Table 1 describes the differences between Sukuk and a Conventional bond.

Table 1. Comparison of Islamic and Conventional Bond (Mardam-Bey 2007).

Sukuk/Islamic Bond	Conventional Bond
Sukuk represents ownership stakes in existing and or/well defined assets	Bonds represent pure debt obligation due from this issuer.
The underlying contract for Sukuk issuance is permissible contract such as a lease or any of other.	In a bond, the core relationship is a loan of money, which implies a contract whose subject is pure earning money on money (Interest)
The underlying assets monetized in a Sukuk issuance must be Islamically permissible in both their nature and use e.g. a truck would always be an eligible asset but not its lease to a distillery	Bonds, can be issued to finance almost any purpose which is legal in its jurisdiction
The sale of a Sukuk represents a sale of a share of an asset	The sale of a bond is basically the sale of a debt
Asset-related expenses may attach to Sukuk Holders	Bond holders are not concerned with asset-related expenses

1.7. TAKAFUL (ISLAMIC INSURANCE)

The word Takaful literally means mutual or joint guarantee, which is practically used for understanding typical Islamic insurance, usually in forms of Modarabah where participants are agree to share their losses by contributing periodic premiums in the form of investments (Greuning and Iqbal 2008). Contrast to conventional type of life insurance Islamic laws prohibits making life insurance, while other insurance types have alternatives (Hassan and Lewis 2007). The financial statements of Islamic banks are organized on the basis of functionality. For example, Table 3 represents the balance sheet of a typical Islamic bank. On the assets side, most of the resources serve the bank only for liquidity purposes and they can't be invested in equity contracts, however bank can charge for that type of accounts while liabilities are in forms of investments in equity contracts. Furthermore, the structure of individual balances may differ depending on business orientation, mission, county specificity etc.

Table 2. Theoretical balance sheet of an Islamic bank based on functionality(Greuning and Iqbal 2008).

Assets	Liabilities	Assets	Liabilities
Cash balances	Demand deposits (amanah)	Cash balances	Demand deposits (amanah)
Financing assets (murabahah, salaam,		Financing assets (murabahah, salaam,	
Investment accounts (mudarabah) ijarah,		Investment accounts (mudarabah) ijarah,	
istisnah)		istisnah)	
Investment accounts (mudarabah)		Investment accounts (mudarabah)	

1.8. ZAKAT

Zakat is an [Islamic finance](#) term referring to the obligation that an individual has to donate a certain proportion of wealth each year to charitable causes. Zakat is a mandatory process for Muslims and is regarded as a form of worship. Giving away money to the poor is said to purify yearly earnings that are over and above what is required to provide the essential needs of a person or family.

Some key considerations of the Zakat:

- Zakat is a religious obligation, ordering all Muslims who meet the necessary criteria to donate a certain portion of wealth each year to charitable causes.
- Giving away money to the poor is said to purify yearly earnings that are over and above what is required to provide the essential needs of a person or family.
- Zakat is based on income and the value of possessions. The common minimum amount for those who qualify is 2.5%, or 1/40 of a Muslim's total savings and wealth.
- If personal wealth is below the nisab during one lunar year, no zakat is owed for that period.

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Nisab is the minimum amount that a Muslim must have before being obliged to [zakat](#). The Nisab was set by Prophet Muhammad at a rate equivalent to: 87.48 grams of gold and 612.36 grams of silver.

Nisab Value (as of Dec/2020): [\(Islamic-relief.uk 2020\)](#)

Using value of silver (612.36 grams) – approximately £240.05

Using value of gold (87.48 grams) – approximately £3,868.37

2. COMPARISON BETWEEN ISLAMIC AND CONVENTIONAL BANKING

The difference between the conventional and Islamic banking system is that, in the conventional system interest is given (pre-promised) with a guarantee of repayment and a fixed percentage return. Conversely, in the Islamic system investors share a fixed percentage of profit or loss when it occurs i.e. the share of the two parties can vary according to the profit or loss achieved. Banks get back only a share of profit from the business to which it is a party and in case of loss, the business party loses none in terms of money but forgoes the reward for its activities during that period (AIBIM-Association of Islamic Banking Institutions Malaysia). An Islamic bank is essentially a partner with its depositors on one side and with entrepreneurs on the other side, when employing depositors' funds in productive direct investment as compared to a conventional bank which is basically a borrower and lender of funds (Suleiman 2001).

Demand for sound corporate governance is higher in Islamic banking than conventional one. Usually depositors of Islamic banks are seen as investors in the company despite the fact that they do not participate in risk management, monitor and control management team like shareholders. Since depositors in Islamic banks are more exposed to risk than depositors in conventional banks, protection their rights require efficient governance bodies for Islamic banks. Because of the peculiar contractual form of banking, corporate governance mechanisms for banks should encapsulate depositors as well as shareholders (Arun and Turner 2003).

The corporate governance differences can be found in the form of Sharia boards in Islamic banks. The primary role of Sharia board is to ensure that business activities of a bank are complying with Islamic Law. Except Sharia board, other structures of corporate governance are almost the same like conventional banks. A typical governance structure of conventional and Islamic banks is depicted in Figure 2.

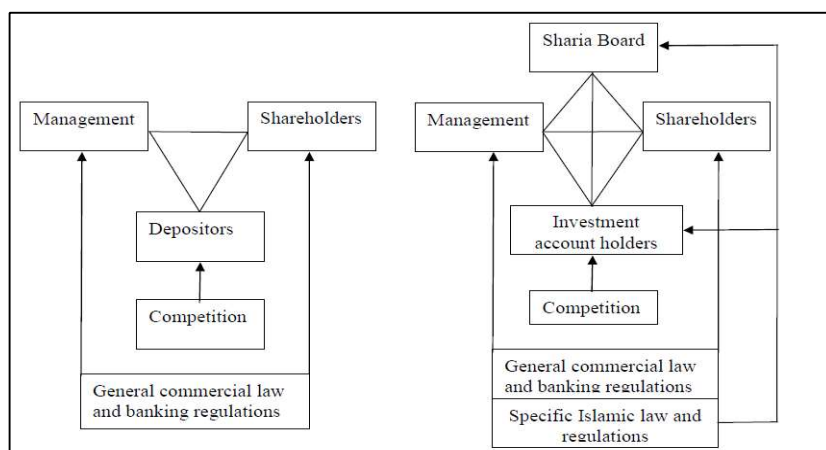


Figure 2: Stylized governance structures of conventional and Islamic banks (Hassan and Lewis 2007)

The responsibility of Sharia board for monitoring and screening doubtful businesses requires clarity of the role of Sharia board. Therefore, AAOIFI (Accounting and Auditing Organization of Islamic Financial Institutions) issued the governance standards of Sharia board which include its appointment, composition and reports.

Authors (Ahmad and Hassan 2007), discuss that Islamic banking system is required to be more social-environmental friendly than Conventional banking since Islamic banks have philosophical goals like integrating the moral values with economic activities, ability to provide credit to those who have talent, achieve harmony in society etc. As a part of their social responsibility policies Islamic banks often show Zakat¹⁰ in their financial statements, which are payments for charitable purposes. Pressure from society and strictness of sharia board require Islamic banks to be engaged in social activities. Table 3 explains the philosophical differences between conventional and Islamic banking. For instance, from the viewpoint of business policy Conventional banks are set to maximize the shareholder's value as their main task and in contrast Islamic banks have dual targets: implementation of Islamic Law objectives and profit making. This implementation of Islamic laws (Shariah Compliance Risk) is difficult in different regulatory and competitive environments and could actually make Islamic banks riskier since keeping the confidence of depositors and investors is difficult due to Shariah Compliance Risk.

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Table 3: Fundamental differences between Islamic and conventional banking (Ahmad and Hassan 2007)

No	Islamic banking	Conventional banking
1	An advance step toward achievement of Islamic economics financial system	Part of the capitalistic interestbased
2	Islamic banking is committed to implement welfare-oriented Financing	No such commitment; extend oppression principles of and exploitation
3	The basis of business policy is socioeconomic uplifting of the disadvantaged groups of the society while having dual target: implementation of the objectives of <i>Sharia</i> and profit	Profit is the main target of business, or the duty is to maximize the shareholders' value
4	Prepare and implement investment plans to reduce the income inequality and wealth disparity between the rich and poor	It increases the gap since All plans are taken out for the rich
5	Interest and usury is avoided at all levels of financial transactions	The basis of all financial transactions are interest and high-level usury
6	Depositors bear the risk, no need for deposit insurance	Depositors do not bear any risk, moreover, the bank is inclined to pay back principal with a guaranteed interest amount
7	The relationship between depositors and entrepreneurs is friendly and cooperative	Creditor–debtor relationship
8	Socially needed investment projects are considered	Projects below the fixed interest level are not considered
9	Islamic banks become partner in the business of the client after sanctioning the credit and bear loss	Do not bear any loss of client
10	Islamic bank can absorb any endogenous or exogenous shock	Cannot absorb any shock because of the ex-ante commitment
11	Inter-bank transactions are on a profit and loss sharing basis	On interest basis and create unusual bubble in the market, i.e. exorbitant increase in the call money rate
12	Islamic banks work under the surveillance of the <i>Sharia</i> Supervisory Boards	No such surveillance

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13	Lower rate of moral hazard problem because of the good relations between the bank and customers	High moral hazard problem because the relationship is based only on monetary Transactions
14	Avoids speculation-related financial activities	Main functions are speculation related
15	Bank pays <i>zakat</i> on income and inspires clients to pay <i>zakat</i> , which ensures redistribution of income in favor of the poor	No <i>zakat</i> system for the benefit of the poor
16	Islamic banks sell and purchase foreign currency on a spot basis	Spot and forward are both used

CONCLUSION

Considering the findings of this research paper we can conclude that the principles of Islamic finance guide people and businesses to invest in an industry that will help us to achieve the financial and social objectives that have been determined by Islam. The Islamic finance principles have been designed to make an economy successful. So it is a way of saving our money from being invested in a wrong path.

Islamic finance offers various contract with specific investments which are interest free. These are Mudarabah, Musharakah, Istisna, Ijarah. Even though it may look like interest in these business transactions in reality it works more on partnership basis. One of the most important features of Islamic banking is that it operates on the basis of profit and loss sharing. This features make Islamic banks and capital in particular less risky thus increasing its financial sustainability. There are more empirical evidence suggesting that Islamic banks are more sustainable to market fluctuations, especially after recent financial crisis. Because of its operating principles, some major economies of the world started to implement and develop new banking segment.

Although the term Islamic banking is relatively new in Central and European countries while Western European economies are already using Islamic products. To the question how CEE countries, considering Republic of Northern Macedonia also, can benefit from Islamic products, Muslims population is relatively considerable in CEE countries but setting up Islamic window will surely attract new clients. In leasing and construction transaction CEE countries may rely on Ijarah and Istinah contracts. Most of the financial contracts in Islamic banks are trade orientated which enables banks and companies not to rely excessively debt or finance debt with debt, which is believed by majority of economist as the main aspects of crisis, moreover it moves with along with economic growth. Conventional banks can segregate funds and on the behalf of Islamic banks can be engaged in investments that are ethically permissible.

To be more specific, setting up Islamic window will benefit not only Muslim population of Europe but also non-Muslims can trade and use it equally as throughout the research I outlined that it is based on social welfare and equality in the society.

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FINANCING THE BUSINESS SECTOR IN REPUBLIC OF NORTH MACEDONIA THROUGH ISSUANCE OF SECURITIES

Nikolina D. Ivanovski¹

Abstract

Financing represents process of managing financial assets, i.e. providing, using, reproducing, analyzing and controlling the use of funds, necessary for maintaining the continuity of the reproductive process. Financing in every business entity is overly complex process that plans, provides and uses necessary funds for current and development operations. Precisely or those reasons, the basic task of the management in each business entity is to provide adequate sources of financing that will also ensure the financial stability of the business. Self-financing, as an internal form of financing enables financing of the reproduction process in the most economical way, because it does not burden the business entity with interest, nor with the obligation to return the principal, which is not the case with other sources of financing. However, business entities cannot finance their growth and development solely from their own sources. Namely, they often rely on borrowed sources, i.e. loans from banks and other financial institutions, issuance of securities, specific forms of financing such as: factoring financing, forfeiting financing, leasing and franchise financing. Financing businesses by issuance of securities as one of the alternative ways of financing businesses offers several advantages. Namely, the issuance of long-term securities on the capital market enables mobilization of free funds so that business entities have access to high quality funds to finance their operations. Thereby, the secured capital through issuance of shares has an ownership character, and the secured capital through issuance of bonds has a loan character. Financing of the corporate sector through the issuance of securities is most common in developed countries. In transition countries as well as in R. North Macedonia has a marginal significance, so the benefits and methods of this type of financing are insufficiently known. In fact, the business sector in our country is mostly financed through borrowed funds from banking institutions.

Keywords: financing, capital market, securities, Macedonian stock exchange

JEL classification: G1, G2

INTRODUCTION

Financing is a complex process of managing financial assets, i.e. providing, and using the necessary funds required for current operation of the business entities. The management of the business entities shall provide adequate sources of financing that will also ensure the financial stability of the business. There are several sources of financing: self-financing (i.e. own sources of financing), lending, issuance of securities, specific forms of financing such as: factoring financing, forfeiting financing, leasing and franchise financing. This research focuses on financing through issuance of securities in the capital market. The first part of the research examines the effects and limitations of financing the corporate sector through the issuance of securities and special focus is placed on the opportunities of the capital market, through issuance of long-term securities, to provide additional funding for operation of the business entities.

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The second part of the research presents the retrospective development of the capital market in the Republic of North Macedonia. The focus is on the Constitution of the Macedonian Stock Exchange as the first organized stock exchange in the history of the Republic of Macedonia. The third segment of the research refers to the role of the capital market in financing the businesses in the Republic of North Macedonia, where was made an analysis of the value of new securities issuance, issued by non-financial institutions for a period of 10 years. In this section also, as a last segment, the focus is placed on the measures and recommendations for the development of the capital market in our country.

1. EFFECTS AND LIMITATIONS OF THE FINANCING OF THE CORPORATE SECTOR THROUGH ISSUANCE OF SECURITIES

Financing the businesses through issuance of securities as one of the alternative ways of financing businesses offers a number of advantages. Namely, the issuance of long-term securities on the capital market enables mobilization of free funds so that business entities have access to high quality funds to finance their operations. Thereby, the secured capital through issuance of securities has an ownership character and the secured capital through issuance of bonds has a loan character.

The use of stocks and bonds as an alternative form of financing investment projects for businesses had its advantages and disadvantages. Namely, the main goal of the issuance of regular shares is to raise permanent capital needed to finance the current and development operations of the company. The capital provided in this way is a permanent and highest quality source of financing the operation, given that this capital is permanently available and never returns. In contrary to that, the borrowed capital has a maturity period in which it must be repaid. That is why the basic capital is an important component of the capital structure of the joint stock company. This capital is especially important for financing long-term investments and maintaining the financial stability of the company.

1.1. FINANCING THROUGH ISSUANCE OF SHARES

Financing the companies through issuance of ordinary shares provides them with several benefits:¹

- This source of financing puts the least pressure on the company because the collected funds are for permanent use, and the payment of the dividend to the shareholders is made by an internal decision of the company bodies
- Because dividend does not have to be paid, and not paying the dividend does not jeopardize the income of others; financing by ordinary shares is an attractive form of financing
- Financing by issuance of ordinary shares increases the company's ability to hire funds from other sources (by creating liabilities).

¹ ArsovS., and Spasov Sinisha. 2004. *Financial management*. Faculty of economics. Skopje

1.2. FINANCING THROUGH ISSUANCE OF BONDS

As opposed to share financing, bonds are the most common type of securities used to finance companies, most commonly in developed capital markets, where there is a wide range of bonds that can be used to finance current and development operations. Bonds are a written document that contains an incorporated right for the monetary loan approved by the bondholder of its issuer. That right contains two parts:¹ the right to repay the approved amount of the loan and the right to interest. Bonds are securities that belong to the group of long-term instruments for financing business projects. Unlike stocks, they have a certain maturity period. Corporate bonds are long-term securities issued by business entities over a period of more than one year to obtain the necessary capital necessary to finance their current and development operations. Corporate bonds are debt securities that are not guaranteed by the state and therefore they carry a higher risk, but also higher potential yield than government bonds, and can be issued on the domestic and international market, in domestic and foreign currency. The type of bond that will be issued by a separate business entity mostly depends on its capital structure, the conditions prevailing in the capital market and the decision of the company's management. A key factor in choosing this form of corporate finance is the level of management awareness of the benefits of bonds as long-term debt securities. Namely, one of the most common problems for the poor utilization of the potentials of this alternative form of financing for businesses, despite the underdevelopment of the capital market, is the fact that business entities are not sufficiently aware of the opportunities offered by bondholders.

The advantages that companies provide through bond issuance are the following:²

- Bond issuance enables the required capital to be procured from multiple sources. Hence, when issuing bonds, the total amount of debt is divided into several smaller amounts that are sold to a larger number of entities:
 - debt-based expenses are limited to the amount of principal and interest paid to bondholders;
 - The costs required to issue bonds are significantly lower than the cost of equity. It is common for bond interest rates to be lower than the dividend rate, as stocks are riskier investments than bonds
 - Financing by bonds suits companies because they access capital without changing the structure of equity
 - The payment of the interest on the issued bonds is an operating cost that can bring certain savings to the business entities when paying the profit tax
 - The use of bonds, with the implementation of redemption provisions in the contract, provides a great deal of flexibility in the financial structure.

¹Jovanovski, P.2006.*Financial markets and institutions*.European university. Skopje

² Vujovic, S.2005.*Fundamentals of financial menagment*. Beograd.

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The disadvantages of financing by issuance of bonds to business entities are:

- Bonds as a source of financing for business entities carry with them fixed liabilities. If the issuer achieves bad business results and does not have a sufficient level of income, it may find itself in a situation where it is not able to fulfill its obligations on the basis of the issued bonds, which is followed by liquidation.
- The larger volume of bonds used as a source of financing leads to an increase in financial leverage, which in turn increases capital costs.
- The bonds have a fixed maturity period when the principal amount shall be paid.
- The long-term bonds of the business entity are a long-term liability that carries a high level of risk.
- The issue of long-term bonds is characterized by stricter conditions than the issue of short-term financial instruments or share instruments.

Financing of the corporate sector through the issuance of securities is present in developed countries. Before the company decides whether to provide the necessary capital through the issuance of securities, it is necessary to make a detailed analysis of the current financial situation, as well as future opportunities for profit. The successful performance of the company in the capital market, i.e. the attraction of potential investors, is largely determined by its successful operation in the past, which is often a problem for small and new enterprises. Nevertheless, in some industries, some start-up companies manage to finance themselves by issuing shares on public markets.¹

2. RETROSPECTIVE DEVELOPMENT OF THE CAPITAL MARKET IN THE REPUBLIC OF NORTH MACEDONIA

The modern history of the Macedonian capital market is related to the structural changes in the 90s of the 20th century, i.e. in the period when the process of transition of the country began. Namely, the enterprises from then, in the dominant ownership of the state, faced one of the most serious challenges, transformation of the social capital into private i.e. share capital. As a consequence of the privatization process, a large number of newly formed joint stock companies appeared which needed adequate market infrastructure for transfer of the newly created securities to the capital market of the Republic of Macedonia.

In this way, the constitution of the Macedonian Stock Exchange began as an important institution whose existence led to the development of the capital market in the Republic of Macedonia. The normative conditions for the establishment of the first organized securities exchange in the Republic of Macedonia were created with the adoption of the Rules on the conditions for operation of an effective stock exchange in March 1995 by the Securities and Exchange Commission, after which a Founding Board was established to take over the necessary preparatory activities for the establishment of the stock exchange and by the middle of 1995 were prepared the

¹Stevenson, H. H. and W. A. Sahlman.,1991 eds. Introduction to the Entrepreneurial Venture. Boston, MA: Harvard Business School Press

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Elaboration for establishment and operation of the Stock Exchange, the Statute and the Agreement for establishment. On September 13, 1995, the Constituent Assembly of the Stock Exchange was held, at which it was established as a joint stock company on a non-profit basis, with a founding capital of 1 million German marks. Although it was founded in September 1995, the birthday of the Macedonian Stock Exchange is associated with March 28, 1996, when the stock exchange bell rang for the first time, which marked the official start of trading.

The basic functions of the Macedonian Stock Exchange are:¹

- Trading with securities
- Cotization and determination of the price of the securities subject to trading
- Transparency in announcing relevant information for stock market operation
- Organization of different seminars and educational trainings for potential investors.

Trading on the Macedonian Stock Exchange is performed on two markets, namely:

- Official market and
- Regular market that contains the market of publicly owned joint stock companies and free market.

The official market is a market of listed securities and it is divided into:

1. Listing of equity securities
 - Super listing
 - Stock listing
 - Mandatory listing
2. Listing of debt securities
 - Bonds
 - Short-term securities.

Companies, with built performance and clearly defined development goals, which prefer additional capital and a wide circle of investors, are listed on the official market of the Stock Exchange. With the listing of the shares on the Stock Exchange, the management of the company sends a clear message to the potential investors that the company is managed transparently. Thus, the company undertakes to continuously inform the public about all relevant activities and assessment of the financial position, thus exposing the performance of the company to public assessment.

Companies listed on the official market have several benefits of the listing:

- Opportunity to raise new capital by issuing new securities,
- Higher rating and reputation of the company,
- Increased liquidity and market formation of the share price,
- Increasing the value of the company and the possibility for daily assessment of the value of the company,
- More effective protection of investors, issuers, and small shareholders,
- More efficient implementation of the principles of corporate governance,

¹Law on securities, Official Gazette of RM, 05/2010

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- Simplified access to foreign stock exchanges.

The regular market is a market of unlisted securities and is divided into a market of joint stock companies with special reporting obligations and a free market.

On the sub-segment Market of Joint Stock Companies with special obligations for reporting on the Stock Exchange are traded unlisted securities issued by joint stock companies kept in a special Register of Securities and Exchange Commission and they have obligations for informing the public and the Securities and Exchange Commission, in accordance with the Law on Securities.

Free market is market segment in which all other securities are traded except those traded on the Official Market and the Joint Stock Market with special reporting obligations.

The first significant change in the trading on the Macedonian Stock Exchange was in 2001 with the introduction of the Electronic Trading System (ETS) which simplified the trading process, because the trading on parquet is abandoned and began trading electronically, i.e. the execution of orders from the premises of the members of the stock exchange, i.e. brokerage houses, according to the model of continuous bidding and use of the method of computer adjustment of securities prices.

The EST system enables monitoring of the trading on the Stock Exchange through three views:¹

- Market by prices, which provides information on prices and quantities offered for a particular security on the buying and selling side
- Statistical trading overview or overview of traded securities which contains information on the nominal, maximum, minimum, initial, and final price achieved during trading with a particular security, as well as the number of concluded transactions, quantity and realized turnover
- Concluded transactions, from which an overview can be obtained individual data on all concluded transactions for a particular security in terms of price, quantity, and value, as well as the time of conclusion and transaction identification number.

In order to get a realistic picture for the functioning of the Macedonian Stock Exchange from its inception until today, the following table shows the development of the Macedonian Stock Exchange from 2005 to 2019, i.e. the number of listed companies, the total turnover of the stock exchange, market capitalization of listed companies and MBI 10.²

¹ www.mse.mk

² The information is taken from the Annual reports for the stated years on www.mse.mk

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Table 1.

Year	Number of listed companies	Total turnover (MKD)	Market capitalization (MKD)	MBI10
2019	100	7.700.625.682	189.458.777.754	4.648,89
2018	105	10.414.067.246	165.558.732.279	3.469,03
2017	107	4.738.444.919	139.831.770.805	2.538,86
2016	109	3.023.394.172	120.148.758.617	2.134,91
2015	114	2.660.494.514	107.732.093.276	1.833,26
2014	115	5.600.304.948	111.051.319.934	1.844,20
2013	116	3.234.557.987	109.334.567.56	1.738,86
2012	32	5.600.304.948	120.370.521.057	1.731,18
2011	32	13.655.857.674	127.604.837.784	1.974,86
2010	34	5.842.963.073	135.089.617.756	2.278,92
2009	36	6.732.333.490	136.963.407.038	2.751,88
2008	38	12.378.962.326	124.503.220.753	2.096,16
2007	38	41.702.320.447	309.074.466.349	7.740,79
2006	43	31.017.933.488	108.918.468.343	3.702,54
2005	57	8.889.567.513	74.397.929.106	2.292,04

In 2019, 100 companies were listed on the Stock Exchange with a total turnover of 7,700,625,682 and this year is less successful than the previous one. In 2018, the number of listed companies is 105 and this year is considered a successful year with 10,414,067,246 denars (over 169 million euros), which is 119.78% higher compared to 2017. The market capitalization of listed shares on December 28, 2018 reached 158.77 billion denars (about 2.58 billion euros, which is 24.16% of GDP) and increased by 19.43% compared to 2017, while the market capitalization of bonds amounted to 3.39 billion denars (55.13 million Euros) and decreased by 2.96% compared to 2017. The value of the Macedonian Stock Exchange Index MBI10 on 31.12.2019 was 4,648.89 and is higher by about 34% of the value of MBI10 in the previous year. The value of the Macedonian Stock Exchange Index MBI10 on 28.12.2018 was 3,469.03 which is 36.64% higher compared to the value of the index achieved on the last trading day in 2017 when it was 2,538.86. The success this year, mainly for the entire economy in Macedonia, is primarily based on resolving the name dispute with Greece. From the previous table it can be concluded that during the development the biggest increase was registered in 2007 when the turnover of 41.7 billion denars was realized, and the Macedonian stock exchange index MBI-10 reached its highest value, breaking the limit of 10,000 index points (on 31.08.2007 it was 10,057 index points). It is considered the most successful in the history of the Stock Exchange, primarily due to successful takeovers, especially in the banking sector. This year, on February 12, the Macedonian Stock Exchange started with the application of the new listing rules, which introduced a new sub-segment Super Listing on the Official Market. And according to the realized turnover and the value of MBI-10, it has the lowest value in 2013. All this is influenced

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by the trends in the world economy in 2013 and the debt crisis in the EU, the slight growth of the Macedonian economy and the unstable environment greatly affected the restraint of investors from investing in Macedonian securities (especially the small presence of foreign investors) and securities liquidity.

3. THE ROLE OF THE CAPITAL MARKET IN FINANCING THE BUSINESSES IN THE REPUBLIC OF NORTH MACEDONIA

Transactions with long-term financial instruments, stocks and bonds are realized on the capital market of the Republic of Macedonia. The capital market in our country is organized as a primary and secondary market.

On the primary capital market in the Republic of Macedonia, activities that are taking place are: new issue of securities, approvals for offer for sale of own shares as well as approvals for giving public offer for purchase of securities. In this market, are traded long-term securities, mainly, government bonds with different maturities, ranging from two to fifteen and some up to thirty years, as well as treasury bills, where the government is regularly present as a issuer in the primary market, in accordance with the published calendars of securities auctions. Shares are also issued on the primary market, which can be issued publicly or privately. The issuance of shares is usually done to raise funds for companies to achieve the planned growth and development. Large companies raise funds publicly and privately. At public issues, securities are sold to hundreds, and possibly thousands of investors, with a formal agreement controlled by the public authority. Unlike the public, the private sale has a limited number of investors, sometimes only one and with much less control. An example of a private issue is a loan from a group of insurance companies to a corporation. The following table analyzes the value of new issuance of shares issued by non-financial institutions for a period of 10 years (2009-2018). Also that value is expressed in% participation in GDP for the year under analysis.

Table 2.

Year	Emissions of long-term securities from non-financial institutions (mil. denars)	GDP	% participation in GDP
2018	878	658.053	0.13%
2017	0	616.600	0%
2016	0	598.881	0%
2015	117	558.240	0.02%
2014	6.059	525.620	1.15%
2013	10	499.559	0.002%
2012	7.295	458.621	1,59%
2011	0	461.730	0%
2010	2.897	424.762	0.68%
2009	5.170	409.100	1.26%

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From the table it can be concluded that the participation percentage of the issues of shares from non-financial institutions in relation to GDP is at a very low level or is 0%. The largest % of GDP was in 2012 and it was 1.59% due to the fact that the total value of new issues of long-term securities in 2012 increased significantly compared to the previous year (from 5,376 million denars in 2011 to 20,497 million denars in 2012), mostly as a result of the realized issues of government securities and the increased amount of shares issued by non-financial companies. However, this percentage is not very significant. In 2011, 2016 and 2017, the corporate sector focused on financing through the banking sector. In fact, companies are more oriented towards obtaining financial support from banks, in terms of providing capital through new issues in the capital market. In 2018, long-term securities issues were realized in the amount of 25,217 million denars, which is an increase of 18.4%, i.e. 3,925 million denars compared to 2017. Newly issued long-term securities participate with 3.8% in GDP for 2018, which is an increase of the participation by 0.4 percentage points. The most active issuer of long-term securities is the Ministry of Finance of the Republic of North Macedonia, to provide sources of financing for the state budget needs and for the purposes of public debt management. In the segment of issuing equity securities in 2018, there was some movement in the primary capital market. Namely, in this year, issues of non-government securities in the amount of 2,887 million denars were realized, compared to 249 million denars in 2017. However, with a participation of 0.4% of GDP, newly issued equity securities are still of little importance to the domestic financial system. In 2018, most of these securities were issued by banks through a private offering and realized three new issues of shares worth 2,009 million denars. The rest of the securities in 2018 were issued by non-financial institutions in the amount of 878 million denars, i.e. 0.13% of GDP. From the table it can be concluded that the importance of the capital market is very small in our country due to the modest supply of securities by the corporate sector. In fact, the corporate sector is still focused on the traditional way of financing, i.e. through the banking sector.

On the secondary capital market in the Republic of Macedonia is the Macedonian Stock Exchange AD Skopje, which operates as an auction market and consists of two segments: the official market and the regular market. On the official market is performed listing of shares and listing of bonds. Listing of securities means the procedure of entering a certain security on the official market in accordance with certain criteria prescribed by the Stock Exchange and the obligation to regularly publish price sensitive financial and non-financial information and data to the public. The listing of shares on the Macedonian Stock Exchange is organized as: super listing - where the sole issuer is Komercijalna Banka AD Skopje, stock exchange listing and mandatory listing.

The main participant in the listing of bonds is the Republic of Macedonia, and except the Ministry of Finance of the Republic of Macedonia, all municipalities in the country have the right to issue bonds.

The regular market is organized as a market of joint stock companies with special reporting obligations and a free market. The market of joint stock companies with special reporting obligations is a market segment of the Stock Exchange on which the unlisted securities issued by the joint stock companies with special reporting obligations are entered, in accordance with the Law on Securities. Free stock market

which is part of the stock exchange of long-term securities on which non-listed securities are traded. Unlisted, are named securities without listing. It comes from a segment on London stock exchange that is called USM (Unlisted Securities Market).

3.1. MEASURES AND RECOMMENDATIONS FOR THE PURPOSE OF ENSURING OPTIMAL CAPITAL STRUCTURE OF MACEDONIAN BUSINESSES

In the Republic of North Macedonia, the capital market is insufficiently developed, and it is necessary to be undertaken appropriate measures that will encourage its development. Having in mind that the Republic of Macedonia is a developing country, it is necessary to activate the resources that are created through the sale of financial instruments on the capital market, in order to stimulate the development of the financial sector and, accordingly, the overall economic growth. In the capital market, financial institutions play a major role. The state remains the most active issuer of long-term securities, while business entities almost do not use market financing, in terms of raising funds through the issuance of new shares and debt instruments, which is a limiting factor for significant growth in the total volume of activities in the corporate sector. According to the ownership, in the structure of government securities, banks still have the largest share (46.3%), followed by pension funds (28.8%) and the Deposit Insurance Fund (16.6%). Namely, the business entities in the Republic of North Macedonia are truly little informed about the benefits from the issuance of securities. Most of them acquire the necessary capital through unfavorable bank loans, which are characterized by extremely high interest rates and unfavorable conditions in the repayment terms. This way of financing the business entities can bring their liquidity and profitability into question. An alternative way to acquire additional capital would be to issue securities. Thus, if the necessary capital for maintaining the reproduction process would be obtained by issuing securities, they would gain greater benefits and less risk in terms of the method of financing through unfavorable bank loans. Therefore, in addition to the introduction of mandatory listing of business entities in the Republic of Macedonia, it is necessary to introduce a modern information system that, in some way, would encourage business entities to issue securities. A positive effect for the Macedonian capital market is the regional connection of the Macedonian, Bulgarian and Croatian stock exchanges, as well as the establishment of the CEE link platform, i.e. of the regional securities trading infrastructure listed on the three stock exchanges. Through the possibility of investing in securities on these stock exchanges, new investment opportunities were opened for Macedonian investors, which can contribute to new development opportunities for the domestic brokerage community. This connection has contributed to a larger trading volume and a larger number of investment alternatives for domestic investors abroad, but also for foreign investors in the Republic of Macedonia. This connection has contributed to removing some of the weaknesses in the functioning of our capital market, as well as encouraging economic and financial cooperation in the region, as well as in the field of future development of the capital market in individual countries and throughout the region. The benefits are of great importance for the Macedonian capital market and refer precisely to the regional connection of the three stock exchanges: increasing the supply and demand of securities, opened the opportunity for investors from our country to buy securities that

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will be traded through the regional platform, same as and the possibility for securities from our issuers to be traded through the regional platform; our companies have become more visible in the regional capital market, which is very important for companies and all this will contribute to reducing the large deviation of stock prices from the fundamental value of companies. To overcome the problem of lack of public information, as well as to achieve a satisfactory level of knowledge in the field of functioning of the capital market, it is necessary to include a number of experts in this field in the educational process and organizing seminars that would have a scientific character, a large number of conferences, which can be attended by all interested parties, which would be a great solution. To hold specialist courses for people who intend to invest free funds in financial instruments. Also to organize courses and trainings for the employees in the financial institutions that deal with investments in securities so that they can increase the efficiency in the operation and increase the number and type of services they offer to their clients.

CONCLUSION

The capital market usually has a great importance in the financial intermediation between the "savers" and the investors and at the same time it has a great importance for the economic growth of the country. However, the importance of the capital market for the Macedonian financial system is small, primarily due to the modest supply of securities and the small volume of stock exchange trading with these instruments. The share of long-term securities issues, as well as the turnover from classical stock exchange trading, in GDP, is still at an exceptionally low level.

The insufficient development of the capital market in our country is due to the lack of innovation and competitiveness of the issuers, on the one hand, and the insufficient information and uncertainty of the potential investors in the Macedonian companies, on the other hand. The most active issuer of long-term securities is the state, and as investors are the private companies. The net purchase of these entities in 2018 has more than doubled compared to the previous year and had the largest share in the growth of turnover from classic stock exchange trading. The positive developments in the secondary capital market, present in the last three years, do not have a significant contribution to increasing the role of this market segment in the overall financial system. The current situation in Macedonia speaks of a situation in which expensive bank loans are most prevalent, precisely because of the lack of public information about the benefits of investing in securities. For businesses, this way of raising funds is terribly negative because it disrupts their capital structure and long-term financial balance. In order to achieve a continuous growth and development of the capital market of the Republic of North Macedonia, it is necessary to set all long-term goals followed by strategies for their achievement, and all this must be assisted and coordinated by a joint coordination body, which should be composed of representatives of regulatory bodies, as well as institutions and other important stakeholders in the capital market of our country.

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THE IMPACT OF CREDIT RISK ON THE OPERATION OF BANKS IN THE REPUBLIC OF NORTH MACEDONIA

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Abstract

Banking institutions represent the backbone of the financial system of any national economy. In the last few decades, the banking sector has been affected by dramatic changes in the environment as a result of the impact of deregulation, competition, consolidation process, globalization, technological change, etc. In order to maintain, but also to improve their competitive position, banks respond to such changes by expanding the offer of products and services not only in the country but also abroad. In this way, the activities of modern banks were significantly diversified, and the banking activity was transformed from a relatively restricted competition into a highly competitive activity. However, in parallel with these processes, the risks to which the banking institutions are exposed have increased, due to which it is necessary for the banks to create and implement adequate risk management strategies. Banks in their operations are exposed to several types of risks that hinder the normal course of their activities. Namely, the risks are an opportunity for an activity undertaken by the bank to have a negative result and may cause a decrease in the bank's earnings or capital. Due to the existence of risks, banks should be able to establish appropriate policies and procedures for taking and managing all types of risks to which they are exposed during their operations. Risk management plays a central role in the success of the bank's operations. The types of risk to which banks are exposed in their operations are credit risk, liquidity risk, market risk, operational risk and insolvency risk. But of all these risks, the most important is the credit risk and the bank's exposure to this type of risk. Credit risk is a risk of loss for the bank due to the inability of its client to settle its liabilities to it, in the agreed amount and / or within the agreed deadlines. The higher the credit risk exposure, the greater the chance of incurring a loss.

Keywords: bank institutions, credit risk, loss

JEL classification: G1, G2, G32

INTRODUCTION

Banks in their operations are exposed to several types of risks that hinder the regular flow of activities that they perform. Due to the existence of risks, banks should be able to establish appropriate policies and procedures for taking and managing all types of risks to which they are exposed during their operations. Proper management of all banking risks includes timely detection of key financial risks that hinder the bank's operations, as well as taking appropriate measures to reduce the bank's exposure to risks, as well as finding the most appropriate methods of management and reduction of different types to which risks to which a bank is exposed.

Risks are the possibility that an activity undertaken by the bank will have a negative result and may cause a decrease in the bank's earnings or capital. If the impact of risks is not monitored, it can all contribute to serious losses in future operations, so that as a consequence there may be a complete threat to financial stability and security. Banks in

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their operations are exposed to the following types of risks: credit risk, liquidity risk, market risk which include interest rate, price and foreign exchange, operating risk and insolvency risk.

In this research I will focus on credit risk due to the fact that credit risk is the biggest threat to the bank and is the most significant. Credit risk is the type of risk that refers to the financial loss of the bank if the client, i.e. the debtor fails or is not able to fulfill its contractual obligations. Above all, this type of risk arises from the given loans and advances to clients and other banks, issued guarantees and credit letters and investments in securities. When one of the clients of the bank for any reason will not be able, i.e. will not have sufficient funds to fulfill its obligations to the bank, then the credit risk arises. Also in this section I will work out the types as well as ways to successfully manage credit risk. I will also highlight the internal and external factors that influence the proper assessment of this risk and the policies that the bank should use in its management to be successful, maximizing its profits.

1. CREDIT RISK

In the part of financial theory, risk is defined as a deviation or deviation from the expected results that occurred as a result of variations in financial variables. In fact, the risk is a "risk of loss".¹

There are several definitions of risk, but what they all have in common is that risk refers to uncertainty and possible losses in conditions of uncertainty.²

The first and most significant type of risk to which the operations of the banking sector are exposed is credit risk. Credit risk is a risk of loss for the bank due to the inability of its client to settle its liabilities to it, in the agreed amount and / or within the agreed deadlines.³ In fact, when one of the clients that the bank has, for subjective or objective reasons will not be able, i.e. will not have sufficient funds to fulfill its obligations to the bank that have been previously created and have a certain amount and time of execution, then the credit risk arises. Most of the assets of a bank are concentrated in credit placements that bring significant and high income, but proportionally those credit placements also carry the greatest risk to which the bank is exposed. If the client of the bank, i.e. the debtor does not fulfill its obligations on time on the basis of a previously concluded agreement, the bank will suffer a large loss. Credit risk is the dominant risk in banking operations calculated according to its size and the size of the potential loss that would be suffered by a bank that is exposed to this type of risk. Credit risk arises at the moment and when there is a certain uncertainty by the bank that the debtor or borrower will fulfill its credit obligations in the scheduled time. Banks have a large number of debtors and they can be individuals or legal entities, as well as governments and therefore there are different types of liabilities (from loans to derivatives), so credit risk can occur in many types. Credit risk, i.e. the bank's exposure to credit risk is still considered to be the most important reason for bank

¹ Vaughan, E. and Vaughan, T., 1995. *Basic of insurance- Risk management*, Mate, Zagreb

² Prof. d-r. Cvetinovic. M. 2008. *Risk management in financial operation*. Beograd.

³ Decision for risk management - NBRM, „Official Gazette of RM“, no. 42/2011

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bankruptcy due to the fact that more than 80% of the bank balance sheet refers to the management and minimization of credit risk.

1.1. LOANS - A SOURCE OF CREDIT RISK

The biggest and most obvious sources of credit risk are the loans that banks grant to their clients. The credit risk starts from the day when the client's loan is approved and lasts until the day when the client will pay the last installment, i.e. it lasts until the day until the client fully fulfills the obligation according to the agreed terms. Each bank takes into account the fact that over time, the situation of customers may change, so for some customers creditworthiness may deteriorate as a result of subjective factors or as a result of changes in the economic cycle. It should also be taken into account that the creditworthiness of some customers may deteriorate and then improve over time. The main role in measuring the credit risk in the loan approval process is the quality processing of the loan application by the loan applicant. Therefore, in order for a bank to be able to successfully manage the credit risk, it is necessary to set up a quality system for analysis of the creditworthiness of its clients. In each analysis of the creditworthiness of the client, the so-called factors 5-C are dominant:¹

- the character of the borrower (Character);
- the size of its capacity or ability, i.e. its ability to pay (Capacity);
- the size of the capital or wealth of the debtor (Capital);
- conditions for securing a loan (Collateral);
- conditions for its operation (Conditions).

2. CREDIT RISK EXPOSURE OF BANKS IN RNM

This section analyzes the credit risk exposure of banks in our country from 2015 to 2019. Three banks were taken in the research (large - Stopanska Banka AD Skopje, medium - Stopanska Banka AD Bitola and small - Capital Bank AD Skopje) Data are obtained from the Annual Reports on the banks' websites.

Table 1.

Bank	2015	2016	2017	2018	2019
Stopanska Banka AD Bitola	8.499.267	9.388.200	9.930.204	9.212.302	11.718.318
Stopanska Banka AD Skopje	86.146.672	89.321.027	87.130.800	89.607.090	96.584.265
Capital Bank AD Skopje	2.829.880	2.970.445	2.547.491	2.280.269	2.584.349

¹Vunjak N., and Kovacevic Lj.2002*Banking*, Becej

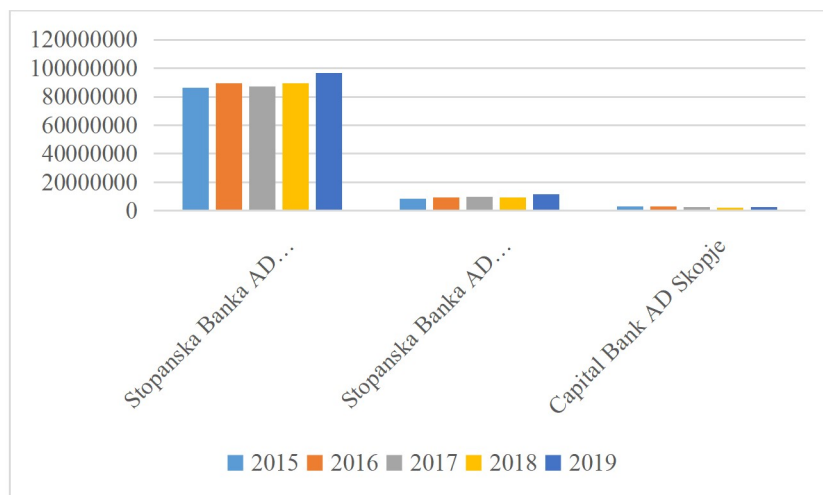


Figure 1.

According to the previous table and chart, it can be noticed that the largest bank, i.e. Stopanska Banka AD Skopje, has the highest credit risk exposure. The highest exposure is in 2019, i.e. 96.584.265, and the lowest in 2015, i.e. 86.146.672. The middle bank, i.e. Stopanska Banka AD Bitola also has the highest exposure in 2019, i.e. 11.718.318, and the lowest in 2015 8.499.267. This bank in 2019, despite the largest credit exposure in the last 5 years, made the largest profit in 2019. Capital Bank AD Skopje, which belongs to the group of small banks in the Republic of North Macedonia, compared to the large and medium-sized bank in the survey has the lowest exposure to credit risk. This is due to the fact that customers are more focused on larger banks and have more trust in them. According to the research data, it was concluded that large banks are more exposed to credit risk, and smaller ones less. This is primarily due to the fact that legal entities and individuals use their services more. Therefore, the impact of credit risk is much greater in large banks, unlike smaller ones. In fact, according to the specific research, the impact of credit risk on Stopanska Banka AD Skopje is almost 5 times higher than that of Kapital Banka AD Skopje. The following is a chart that better shows the difference in credit risk exposure of the three analyzed banks.

According to the research in 2019, the concentration of credit risk by sectors and activities is different. Stopanska Banka AD Skopje has a credit risk exposure based on individuals in the amount of 53.809.448 (which is more than 50% of the total credit risk exposure in 2019). This is due to the fact that most of the loans are granted to individuals. Stopanska Banka AD Bitola concentration of credit risk in 2019 is the highest in the activities related to finance and insurance, i.e. 3.582.559. This refers to the fact that this bank is more focused on financing legal entities than individuals. Kapital Banka AD Skopje also has the highest concentration of credit risk in the activities related to finance and insurance, i.e. 744,978 and natural persons 783,972.

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2.1. THE IMPACT OF CREDIT RISK ON THE BANKING SECTOR IN REPUBLIC OF NORTH MACEDONIA

At the end of 2019, the banking sector faced a new situation caused by the pandemic of Covid 19. This situation is the most serious global shock with strong negative consequences for economic growth, the performance of companies and the population, which would have negative effects on the operation of domestic banks. All this caused negative effects on the activities of banks, and above all on the level of lending activity, the quality of the loan portfolio, and most of all on the profitability of banks. In 2019, as in previous years, the banking sector maintained its stability. The National Bank, through the constant improvement of the standards in accordance with the European regulations, but also the banks with their way of working, enabled maintaining high stability. In 2019, credit risk is the most dominant risk in the operation of banks. Exposure to this risk shows a decrease in 2019 due to the fact that the non-performing loan rate decreased to a historic low of 4.8%. This decline is largely due to the write-offs of non-performing loans that banks made in accordance with changes in credit risk management regulations, i.e. from July 2019 introduced the obligation to write off non-performing exposures that are fully reserved for more than one year. The majority, i.e. 95.2% of the banks' loans are repaid regularly or with a delay of up to 90 days. Non-performing loans are most often provided by the corporate sector. The ratio between non-performing and total household loans is at historical low level (2.0%). Although the indicators showing the credit risk exposure have improved, there are still some movements in the loan portfolios of banks that deserve more careful monitoring. The following table shows data on the total credit risk exposure (in millions of denars) of the banking sector from 2015 to the first half of 2020. The data are given by group of banks.

Table 2.

Bank	2015	2016	2017	2018	2019	30.06.2020
Large	315.830	355.659	368.342	389.961	433.438	443.385
Medium	127.805	98.467	99.824	105.268	123.449	118.393
Small	16.024	15.550	16.034	15.964	17.213	17.214

According to the data in the table, it can be concluded that the exposure of the banking sector to credit risk is increasing from year to year in all groups of banks. But the impact of credit risk did not contribute to many negative effects due to the fact that the percentage of non-performing loans is low. The following table will show the percentage of non-performing loans for the same period.

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Table 3.

Bank	2015	2016	2017	2018	2019	30.06.2020
Large	12.5%	7.3%	7.3%	5,7%	4.4%	4.3%
Medium	5.7%	3.5%	2.1%	3.3%	6%	6.1%
Small	16%	9.3%	9.6%	6.2%	3.9%	3.9%
Average	10.8%	6.6%	6.3%	5.2%	4.8%	4.7%

From the table it can be seen that the percentage of non-performing loans was the highest in 2015, and thus the largest was the credit risk that affected the operations of banks. The largest percentage was with small banks that had approved loans to high-risk clients. But over the years the rate of non-performing loans has been gradually declining as a result of the procedures and analysis of clients' loan portfolios by banking experts. On 30.06.2020, despite the pandemic COVID 19, the non-performing loans rate is 4.7%. In fact, in the beginning of 2020 (i.e. March 2020) due to the COVID crisis, the National Bank made changes in the existing regulations in the field of credit risk management, by temporarily easing the credit burden of borrowers in the coming months, to easily overcome the crisis. The changes gave space to banks, in agreement with borrowers, to be able to offer more favorable contractual terms on existing loans ("grace period" in loan repayment, extension of maturity, lower interest rates or approval of new credit exposure for closing the existing one), i.e. to ease the burden of repaying the debt to the clients. A change was also made regarding obtaining the non-functional status (the threshold for acquiring non-functional status was moved from 90 days to 150 days). But despite the changes in the regulation for credit risk management, it is realistic to expect the end of 2020 to end with major negative effects that will affect the creditworthiness of customers, not only legal entities, but also individuals. . This primarily refers to irregular incomes. Because of all this, the credit risk is expected to be at a higher level.

CONCLUSION

From this research it can be concluded that in the modern conditions of the banks as a result of the globalization of the financial markets there is an increase in the risks to which the banks are exposed and which should be managed properly. The modern operating conditions of banks are very complex. Due to this fact, it is necessary to timely identify all types of risk, i.e. the correct perception of the size and impact of the risk on the daily banking operations. It is also necessary to take adequate measures to protect against risks that are important for the successful operation of banks. Of all types of risk, the most important is the credit risk and its impact on the operations of banks. The first part gives a general overview of credit risk. Then, in the second part of this research, a comparison was made between three banks (small, medium and large), i.e. the credit risk exposure over a period of 5 years was analyzed. Then, an analysis of the entire banking sector was made, i.e. the credit risk exposure from 2015 to

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30.06.2020 and the new situation with the COVID crisis was reviewed, as well as the impact of the credit risk in conditions of pandemic. However, according to the rate of non-performing loans, which is low in our country, it can be concluded that the credit risk therefore does not contribute to some major negative effects on the operations of banks in our country. Due to the fact that 95% of the clients settle their liabilities within the agreed deadline, the impact of credit risk on the banking sector is not high.

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THE PATTERN BETWEEN CORPORATE STRATEGY AND DIGITALIZATION IN THE RETAIL SECTOR IN REPUBLIC NORTH OF MACEDONIA CASE STUDY OF A RETAILER

Gjorgjina Sherovska¹

Abstract:

The gender pay gap is a complex issue caused by a number of interrelated factors and has inevitable impact on the status of women in their economic and social life. The objectives of this paper are concentrated in investigating the sex-segregation by economic activity in the labour market and its relationship to the gender pay gap across Europe. Dissimilarity index is calculated and sectoral gender based segregation in EU during 2010 was on average 0.30, meaning that 30% of the employed population would need to change economic activity in order to have an equal distribution of men and women. The findings of cluster analysis showed the paradox that some countries like Luxemburg, Belgium, Poland have high dissimilarity indices and lowest percentage of gender pay gap or Scandinavian with the highest dissimilarity indices have gender pay gap around the mean on the European level.

Keywords: corporate strategy; digitalization; retail; strategic management

JEL classification: L10, M31

INTRODUCTION

The key element in managing corporate enterprise is an adequate formulated corporate strategy. Comprising both business portfolio conception and determination and allocation of sources for creating competitive advantages, the corporate strategy contributes to business performance enhancement as well as shareholder value added elaborates Goold et al. (1998). Traditional corporate strategy emphasizes strategic positioning and acquiring or building valuable resources as the basis of creating sustained competitive advantage and superior, long-term performance. On contrary the implication is that the new corporate strategy focuses on strategic processes, as a modified and more flexible form of traditional corporate processes explain Eisenhardt et al. (1999). This is, however, not as easy as it may sound. Johnson et al. (2011) explains that the environment is under constant change: for example, the market demand can shift, new regulations can occur, technology can change, and new competitors can enter the market. Understanding environmental changes and adapting a suitable strategy is essential in order to satisfy customer needs, in other words, it is essential for survival. When the effects of strategic drift become evident, i.e. a significant downturn in performance or customer satisfaction, the company has only one option; transformational change states Johnson et al., (2011). A transformational change can take several forms, the company can for example change its products, market and market focus or how it is structured. If the company fails to carry out

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necessary changes, the result will be bankruptcy. By including technology in the strategic retail model, the understanding of how technological solutions can contribute to create excellent consumer experiences can be discussed. As Hall (2013) says, the technology constituent has been added due to the digital revolution and increasing importance of incorporate technology in retailing. Digitalization is used to describe any changes in the organization and the organization's business model due to their increasing use of digital technologies to improve both the performance and the scope of the business says Westerman et al. (2011). According to Matzler et al. (2016) digitalization, means combining different technologies (e.g. cloud technologies, sensors, big data, 3D printing) opens unforeseen possibilities and offers the potential to create radically new products, services and business models. While digitalization has a long history in retailing says Watson (2011), the significance of the transformation is becoming increasingly visible. New digital businesses and business models aim to make full use of advances in information technology and for example van Alstyne et al. (2016) dub digital platforms as having created new rules for strategy altogether. Although this general term involves all types of digital technologies, we focus on the integration of Internet connected digital technologies in particular and on the interface between retailers and consumers. Digital technologies and innovations [have] and [are still] changing the way of doing businesses and has revolutionized the retail industry says Rogers (2016). The embedded usage of digital technology has managed to achieve great success in companies, however Kiel et al. (2016) argues that the usage of digitalization has indeed increased the number of opportunities for the companies but also put pressure "to critically reflect their current strategy" and "to systematically and early identify new business opportunities". It is the learning-driven approach of sensing, seizing and reconfiguring in particular, which provides the business with opportunity to adapt and meet changing requirements in alignment with the business strategy states Teece (2018). In retailing, there are many examples of activities performed by the consumer that were previously, or in other settings, performed by the retailer and vice versa. In various forms of retailing, different actors (retailer personnel, customers, partners) can be involved to different extents, and customers can be co-producers and co-creators (Sorescu et al., 2011). In this context, one can assume that digitalization has a de facto influence on every industry as it impacts corporate strategies and challenges existing business models to be reconsidered and adapted (Linz et al., 2017).

In this context, the goal of this research was to explore if and how digitalization influences a company's corporate strategy. To explore this research question, one retail chain of supermarkets was chosen as sample. A quantitative empirical research, incorporating a questionnaire was applied to provide insights and cast light on the practical and theoretical implications of the data collected.

1. THE IMPORTANCE OF DIGITALIZATION IN RETAIL CORPORATE STRATEGY

It's evident that digitization has become a critical asset in many companies' quest for growth. One of the fundamental questions in strategic management relates to corporate scope, which defines the portfolio of products and businesses as well as activities that are carried out within a company's direct control and ownership. Considering a competitive strategy as part of the corporate strategy under digitalization raises the

question to which extend the business can be impacted by digital technology. These digital technologies are fundamentally reshaping traditional business strategy as modular, distributed, cross functional, and global business processes that enable work to be carried out across boundaries of time, distance, and function, explain Banker et al. (2006). This has led to challenging situations in a corporate context: manifold new technological opportunities are perceived, but people are uncertain how to use and implement them simultaneously in terms of product and service offers state Lerch (2015). That is tightly related to fact that digital technologies are also transforming the structure of social relationships in both the consumer and the enterprise space with social media and social networking as Susarla and Tan say (2012). This leads to a moment where digital platforms are enabling cross-boundary industry disruptions, and thus inducing new forms of business strategies according to Burgelman et al. (2007). According to Rai et al. (2012), the formulation of digital business strategy includes the design of products and services and their interoperability with other complementary platforms, and their deployment as products and services by taking advantage of digital resources. If the single business model elements and how they change is examined more carefully, the findings of the recent studies have pointed out that the value proposition, internal infrastructure management and customer relationships are mainly influenced by digitalization agree Arnold et al. (2016) and Kiel et al. (2017). Digitalization is not a new phenomenon in retailing; indeed, it has been an important part of retailing and changes in retailing, since at least the 1970s explains Watson (2011) through electronic cash systems, barcodes, point-of-sale data, EDI with suppliers, etc. With the emergence of the Internet during the late 1990s, new companies arose that were focused on e-commerce. Soon, the multi-channel retailing developed and has gradually shifted to a focus on omni-channels explains Verhoef et al. (2015). However, it is not only the direct communication between retailers and consumers that is becoming digitalized but also the communication between consumers through social media or various forms of third-party communication stress Zhou (2015). Although e-commerce is part of digitalization, its impact extends far beyond e-commerce and includes the transformation of physical products into digital services, consumer recommendations in social media, and the incorporation of digital devices into the purchasing process, such as online information searches leading to offline purchases explains Pauwels et al. (2011). An increased use of digital technologies has enabled the replacement of cash payments with digital payments. In addition to various online transactions and credit and debit card payments in stores, there has been a proliferation of tools for mobile payments says Taylor (2016). Voropanova (2015) adds that digitalization has provided consumers with new tools for navigating, such as by finding their way in stores through shopping lists ordered according to the aisles in the particular store provided by retailers or third parties and shareable between users. For consumers, these corporate strategies create more possibilities to satisfy hedonistic needs through the facilitation of novel types of digital consumer-to-firm engagement elaborates Sashi (2012), consumer experience and consumer value. In addition, traditional in-store purchase or home delivery, new forms of distribution for groceries using online ordering have emerged in recent years, such as click-and-collect and so-called 'click-and-drive' says Colla (2012), where goods are picked up at a collection point. With mobile digital devices, new solutions for delivery services are emerging

that also involve consumers in new forms of value co-creation add Bahn et al. (2015). Prices and pricing are parts of the offering that may change considerably with digitalization. Digitalization creates a number of opportunities, such as customized promotions or dynamic pricing states Grewal et al. (2011), that may be used for online as well as in-store sales. Rogers (2016) states five different domains of how digitalization changes the way of doing business and building corporate strategy, is in the customer perspective. In the digital age, customers are constantly interacting with other customers, and by using digital tools, they are even more influential. Therefore, it is critical for companies to use social media and interact with their customers. The second domain is competition, where the digitalization vanishes the boundaries between competition and cooperation. It will be possible to cooperate with a competitor in order to handle the same challenges that may occur from the outside of the industry and together push each other and hence develop the industry (ibid). Data is the third domain in the digitalization process, which is how to manage and utilize the information available. There are an immense of data and information accessible, and with the improved technology, it is a new way of doing analyses and enhances new ways of business activities. The data is crucial for the daily operations of the businesses. The fourth domain is the innovation process. The digital technologies make it easier for companies to quickly develop new products and test them on the market to receive feedback from the market continuously from the start until launch. The last domain, presented by Rogers (2016), is value. He means that companies need to shift their value proposition regularly to meet the customer's expectations and being agile. Weill and Woerner (2018) agree with Rogers (2016) that value proposition is essential for a company. Roger (2016) adds "Companies that were established before the Internet need to realize that many of their fundamental assumptions must now be updated". Berman (2012) discuss the factor in times of digital transformations companies must have a cohesive business plan for integrating physical and digital operations in order to be successful in the transformation. He further states that, in order to be successful in the digital transformation, it is crucial to interact and collaborate with the customers online all the time with social media, for instance. Since the consumers are linked with the Internet all along, it is natural to always interact with them. Digital transformation is not about having the latest or most advanced technology; it is about the process of change. How the change is implemented and if it is implemented in the right time is crucial for success explain Weill and Woerner (2018).

2. METHODOLOGY AND DATA

To explore the research question of "how digitalization influences a company's corporate strategy", one retail chain of supermarkets was chosen as sample. A quantitative empirical research, incorporating a questionnaire was applied to provide insights and cast light on the practical and theoretical implications of the data collected. In the present explorative study, the company chosen did not constitute a representative sample but served rather to illustrate the connection between impact of digitalization in the corporate strategy in the retail sector. As a guideline of the questionnaire McKinsey Global Survey "The digital tipping point" was taken as a direction, as well as "Unlocking success in digital transformations", again from McKinsey analysis report.

3. ANALYSIS AND RESULTS

Data collected from representatives of the retail industry indicated that the influence of digitalization on various aspects of value creation was perceived as the industry's dominant theme. The top management has a vital role in determining the corporate strategy along with the digital one. When asked for the level of support and involvement in the digital initiatives, most of them, 40% of the management stated that they are supportive, yet they are not directly involved. On the second graph the involvement has been separated by role of the top management. It can be noted that the chief of marketing and chief of credit control are supporters and sponsor of the initiatives, while chief of commerce and informational officer are supportive and directly engaged in the initiative. On the second graph the involvement has been separated by role of the top management.

With 50% agreement, "Creating new business or tapping new profit pools" is expected share of organizations' overall growth that will result from digital efforts, 30% are split for building competitive advantage in an existing business, and the rest 20% for shoring up existing business and keeping pace with competitors. The percentages of responsiveness have the same split on the question "What are the top 3 digital trends your company?" where 50% agree that is the digital innovation of products, operating model, or business model, 30% digital engagement of customers and 20% for big data and advanced analytics.

For the following statements the responses were asked to rank between "currently" or "in 3 years' time" what is their perception on the top ranked trends as a share of the overall digital-budget spending. 80% voted for currently for "Digital engagement of customers", 20% in the next 3 years. For "Digital innovation of products, operating model or business model" 70% stated currently and 30% remained the relevancy in 3 years' time. "Big data and advanced analytics" share the same percentage as the previous statement. While 90% agree that in 3 years' time, "digital engagement of employees, supplier or business partners" will be relevant and only 10% consider that now. 60% of the responders consider business processes too inflexible to take advantage of new opportunities as a structural issue to meet digital goals, which is a quite large percentage. The remaining 40% are split between the "inability to adopt an experimentation mind-set that is key for best practices" and "organizational structure not designed appropriately for digital". In the following set of answers, the top management was asked to rate talents on a rating scale of 1-5, where 1 is 'not important' and 5 is 'very important', on the question "In what areas you consider your organizations' needs for digital talent will be most pressing, next 12 months?". Analytics and data science 60% ranked them as very important, while 40% important, which indicates the value of it on a company level. Mobile and online development were ranked same as the Analytics and data science. The opinion of "Cloud and distributed computing" were split 50%-50% between the top management. "Joint business and IT expertise" are important for 60% of the top management, while 40% consider it moderately important. "Cybersecurity" for 60% of the responders is noted as important, as important, 20% as moderately important and the remaining 20% as important. Agile development which comprises various approaches to software

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development under which requirements and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customer/end user, is 40% important according to responders as talent, while 60% are equally split between slightly important and moderately important. Regarding “Partner and vendor management” 40% consider it as important, 30% very important, 20% slightly important and only 10% moderately important. The responders were asked to state the success rate of key performance indicators and communication of the transformation’s timeline. The statement was in a ranking talent on a rating scale of 1-5, where 1 is ‘not important’ and 5 is ‘very important’. 40% of the top management considers leadership-development program focused on leading cross-functional teams as moderately important. 30% as slightly important, while for 20% is only important and for 10% very important. 50% of the responders agree that it is moderately important to offer programs that will develop skills for coaching others in the new ways of working, to that coherent 40% that think it is important while 10% considers it very important. For 40% of the responders setting hiring goals based on specific skills or needs is important, moderately important also for the other 40% and only 20% consider it very important. 50% state that it is important to define which skill-building programs are necessary to run (including number of employees to include in each), to that 10% add stating that is very important, with 20% moderately agreeing the importance while only 10% think it is slightly important. With same 36.36% percentage as important and very important, the responders present their opinion that new processes are important for how employees work and collaborate with each other, 27.27% consider it as moderately important. Unitarily 100% of the top management agrees the high impotency of in terms how digitization would change overall business strategy. This and the following questions present the success of clear targets for key performance indicators and communication of the transformation’s timeline. Also, a large percent of 63.64% considers that is very important on how digital initiatives would enable organization to reach business goals, 36.36% also think of it as important as clear targets for key performance indicators and communication of the transformation’s timeline. Digital products and/or services to be added to organization’s portfolio, is 45.45% considered as slightly important, with 54.55% not important. Opinions are divided in regards of “New processes for how employees work and collaborate with external partners” where 18.18% have opinion that is very important along with 27.27% which consider it as important. 18.18% stated that is moderately important while the percentage between slightly and not important is the same, 9.09%. The new approach to meeting customer needs with 45.45% is considered as very important however in the overall result on this statement importance is being noted. Regarding the demographic part of the questionnaire, the males were dominant with 63.64% and females with 36.36%, most of them with the age range of 45+ (54.55%) and between 31-44 years old with 45.45%. Most of them have finished bachelor’s degree (54.55%) and master’s degree (45.45%). Regarding the roles of the top management, we had as responders, two chief commercial officers, two chief financial officer, two chief of business development as well as two information officers. Other managers that participated in this questionnaire, where the chief of credit control, chief of marketing and chief executive officer.

CONCLUSION

The findings of this research have contributed to the literature on corporate strategy and digitalization. Recent theoretical approaches were applied to explore digitalization and corporate strategy in retail. By offering their practical examples and insights, it can be outlined the influence of digitalization in corporate strategy. In the food sector, the companies also need to have a sustainable point of view. Regarding the findings coming from the research of the retail company taken as case study for the purpose of this research paper it can be noted that the company is highly focusing their corporate strategy towards digital platform that will be beneficial for all sides involved in the process, from the top management, to the employees up to the final customers, as well as the suppliers. Having a well established corporate strategy is the most asset a company can have, especially if all engaged in that process, starting from the top management are in the same line of agreement and they understand the importance of the digitalization. This company has well established action plan with considerable timeline given for adaptation in terms of starting the process and delivered results. However, they admit that business processes are too inflexible to take advantage of new opportunities as a structural issue to meet digital goals which is most likely because of the nature of the business. The top management answers were split between the inability to adopt an experimentation mind-set, listed as key for best practices and organizational structure not designed appropriately for digital structure. That is understandable since the process of digitalization is not new to the retail industry as literature points out. Digitalization in retail it has been an important part of it and changes in retailing since 1970's that indicates that the process lasts and takes time. That is why the FMCG actors cannot handle all parts of the digitalization themselves, the suppliers and manufacturers must contribute as well and doing transformations to change the existing business environment.

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APPENDIX

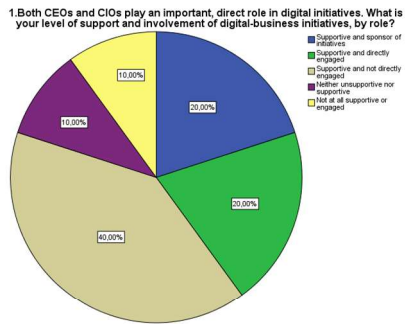


Figure 1: What is your level of support and involvement of digital-business initiatives, by role?

Source: authors research



Figure 1.1: What is your level of support and involvement of digital-business initiatives, by

Source: authors research

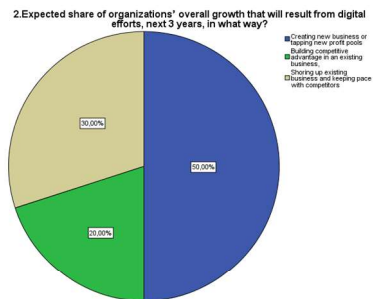


Figure 2: Expected share of organizations' overall digitals

growth that will result from digital efforts, next 3 years, in what way?

Source: authors research

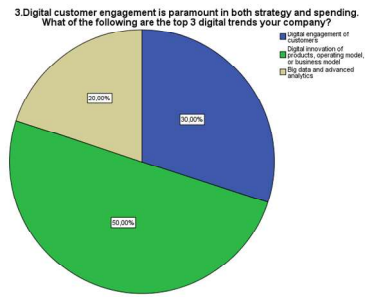


Figure 3: What of the following are the top 3

trends your company.

Source: authors research

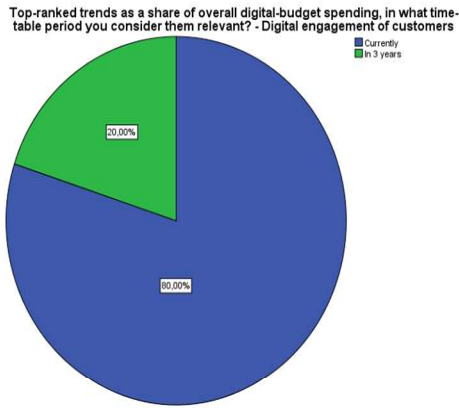


Figure 4: Top-ranked trends as a share of overall digital-budget spending, in what time-table period you consider them relevant?

Source: authors research

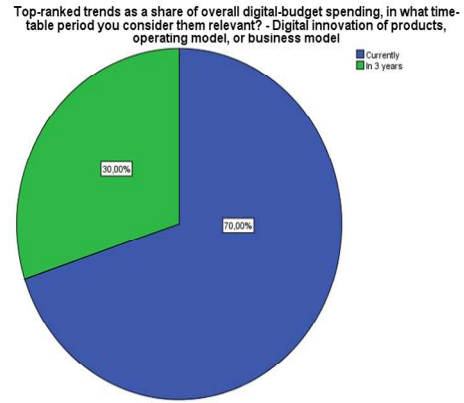


Figure 5: Top-ranked trends as a share of overall digital-budget spending, in what time-table period you consider them relevant?

Source: authors research

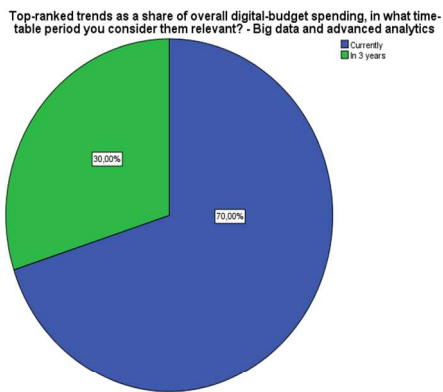


Figure 6: Top-ranked trends as a share of overall digital-budget spending, in what time-table period you consider them relevant?

Source: authors research

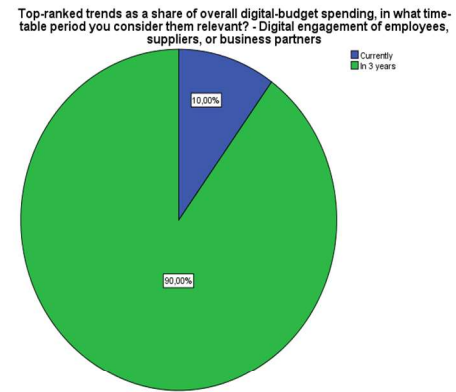


Figure 7: Top-ranked trends as a share of overall digital-budget spending, in what time-table period you consider them relevant?

Source: authors research

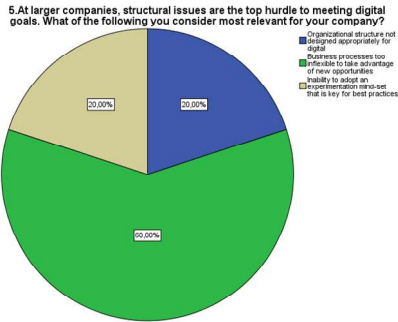


Figure 8: At larger companies, structural issues are the top hurdle to meeting digital goals. What of the following you consider most relevant for your company?

Source: authors research

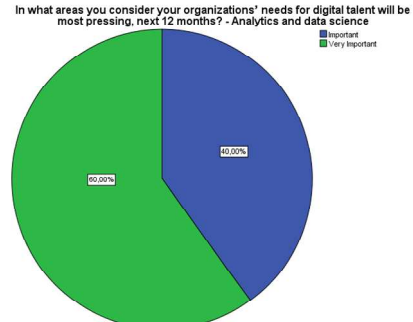


Figure 9: In what areas you consider your will be organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

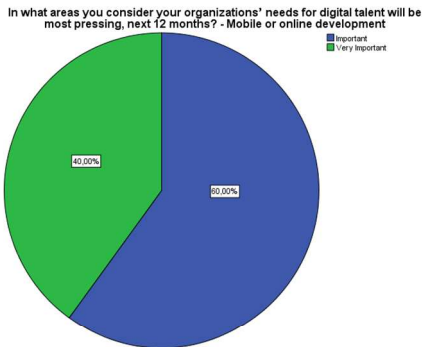


Figure 10: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

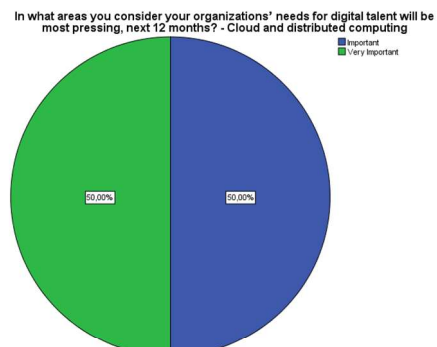


Figure 11: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

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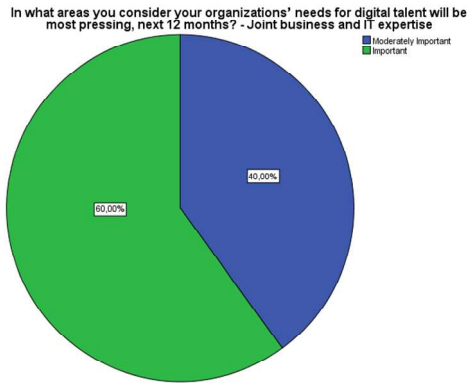


Figure 12: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

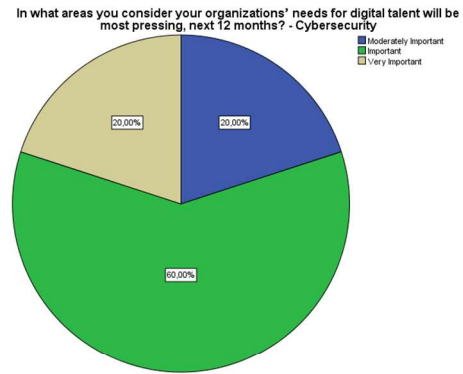


Figure 13: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

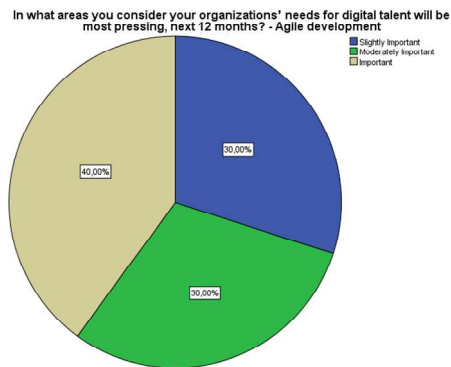


Figure 14: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

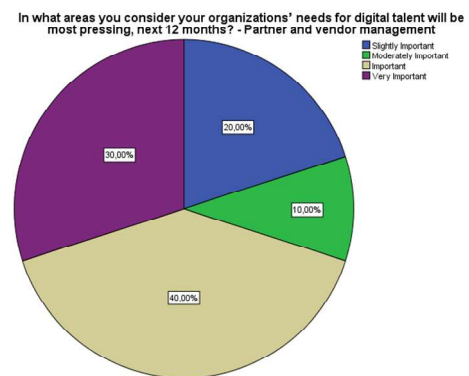


Figure 15: In what areas you consider your will be top organizations' needs for digital talent most pressing, next 12 months?

Source: authors research

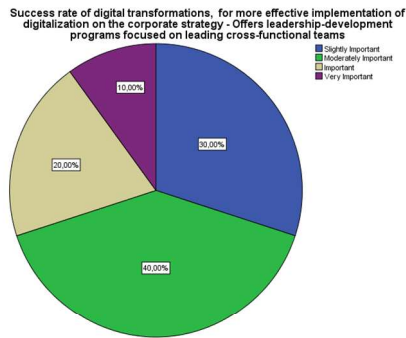


Figure 16: Success rate of digital transformations for more effective implementation of digitalization on the corporate strategy for digital talent
Source: authors research

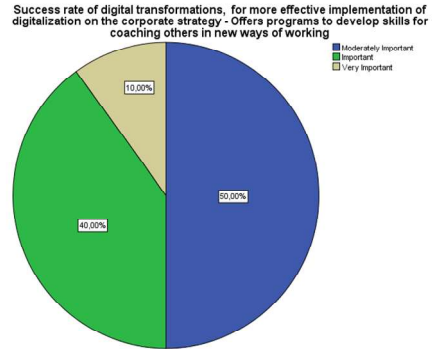


Figure 17: Success rate of digital transformations for more effective implementation of digitalization on the corporate strategy for digital talent
Source: authors research

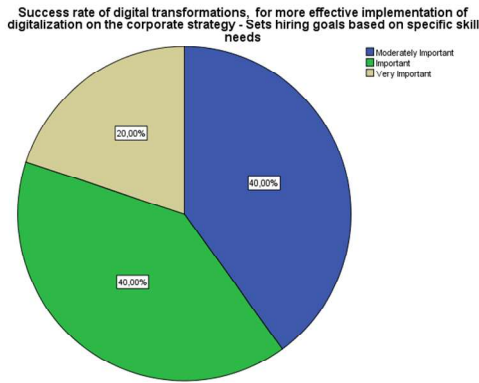


Figure 18: Success rate of digital transformations for more effective implementation of digitalization on the corporate strategy for digital talent
Source: authors research

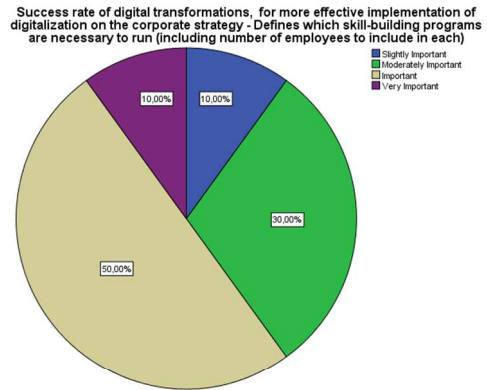


Figure 19: Success rate of digital transformations for more effective implementation of digitalization on the corporate strategy for digital talent
Source: authors research

ORGANIZATIONAL STRUCTURE CHANGES WITHIN THE BANKS

Valentina Angelkoska¹

Abstract:

For successful operation, banks are constantly implementing changes in their organizational structure. These changes are due to various internal and external factors. Organizational structures within the banks are complex and specific for the banking sector, as well as for each bank. In this paper, organizational structures of several banks will be analyzed. Contemporary trends will be illustrated with the organizational structures of few international banks. As a case study, the changes in the organizational structure of one the biggest banks in the Republic of North Macedonia will be analyzed.

Keywords: banks, organizational structures, change management

JEL classification: G21, L22

INTRODUCTION

Each organization has its own organizational structure. The organizational structure is a dynamic category. Depending on the internal and external factors, there are different needs for changes in the organizational structure. The mission, vision, strategic goals, growth and development of the company, competition, modern trends and globalization, the organizational environment, but also the internal needs of the companies in order to increase the effectiveness and efficiency, improvement of the internal processes. They often lead to processes of change. In this context, change management is a current topic, which is frequently on the agenda of managers in modern companies. The movement of the organization or its certain segments or processes from the present to a future condition characterizes the management of changes as a prerequisite for efficiency and effectiveness in the organization. Therefore, the changes and the process of change have been the subject of many researches and the results of this are the existence of several theories and models of change, each with its own specifics.

The process of change is a complex process, which aims to implement a clearly defined and designed change that would have a positive effect on the work and results of the company. Most often the need for change, for example in the organizational structure is determined by the daily work, from the plan for improvement in the organizational structure or in the organization for change on the one hand, but on the other hand it arises from the shortcomings of the existing organizational structure and of necessity for change. With the positive changes in the organizational structure, the theory and the practice confirm the improvement of the efficiency and effectiveness in the companies.

The process of change requires special preparations, strategy for the process and implementation of the change through the precisely defined phases of the process of

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change, such as: assessment of the need for change, decision-making for change, implementation of the change and its evaluation.

Most often in the process of change, structures from the organization itself implement the process of change, but very successfully the changes are carried out by the so-called agents of change. It is desirable that the organizational transformation is maximally designed, for example, through the existence of programs and strategies for organizational transformation, proper management of the transition by appropriate levels of managers in the organization.

The process of change is followed by appropriate resistance to change, especially in the process of its implementation. Resistance to change is closely related to the culture in the organization, most often resulting from fear of change in combination with already established habits, norms, values, etc. However, the sources of resistance to change can be different: the natural psychological fear of the unknown, economic fears, habits that are difficult to change, the possible need and resistance to additional training and retraining of staff, the fear of the repercussions of the change on the personal status of the employees, on the interpersonal relations, etc. Despite the existence of such serious sources of resistance to change, there are still ways to overcome it. The change should be viewed positively in the direction of opening new opportunities, but there are few structures that view the change in this way.

This paper analyses the organizational structures in the banking sector and the process of implementation of modifications in them. The paper is structured as follows: Section 1 illustrates the world trends in the banking sector regarding their organizational charts; Section 2 presents a brief summary on Macedonian banking sector; a case-study of changes in the organizational structure of Stopanska Banka AD Skopje is analyzed in Section 3; the last section is discussing the conclusion.

1. WORLD TRENDS FOR ORGANIZATIONAL STRUCTURE IN THE BANKING SECTOR

Banking is a business with a long history. From the very beginning until today, banking has undergone many changes with the upward development line. Today, our environment largely consists of various types of banking services, without which we cannot even imagine our modern life.

The changes, as the main feature of the business development, are often present in the banking sector and in the organizational structures of the banks, leading to increasing the efficiency and effectiveness, and thus improving the performance, higher profit, development, and expansion into other markets, growth.

The process of changes in the organizational structures of the world banks has been taken as seriously as possible and the process of changes itself is taking place with all its elements. This section presents the current trends in the organizational structures of banks through the presentation of the organizational structures of three banks from different parts of the world: National Bank of Greece (NBG) Athens, JP Morgan Chase (USA), and Barclays (UK).

NBG Athens

The organizational structure of NBG Athens (Table 1) indicates to a large bank with a developed business on the regional and world market. There is a mix of different types of structures, as follows:

- Market - there is a division into organizational sectors according to the type of clients, e.g. for corporate banking, for households, for corporate banking investments, etc. This division is most often made due to the principle of customer orientation in terms of the best service according to his needs.
- The division of global banking into retail, working with corporate clients and investments is visible.
- Geographical - NBG Athens obviously has a developed international business and accordingly an organizational part has been formed in the field of international business in Southeast Europe, America - South Africa.
- Matrix - the existence of division by product and by function is evident.
- High - this organizational structure has a relatively high vertical hierarchy and the existence of line managers. Accordingly, there is a rich horizontal as well.
- There are several executive lines of different character: some are in the function of servicing the client as explained above, while the others are the function of the operations of the bank that support the business, as well as those that take care of proper and legal operation, administration and reporting.
- In addition to business and operational segments, a special executive line represents risk assessment and management, an area that is extremely important for banking and its importance and role is only increasing.
- The role of internal audit is especially highlighted, which is a common case in banking.
- Decentralization, streamlined delegation of management and control at several levels.

JP Morgan Chase (USA)

The organizational structure of JP Morgan Chase USA is shown in Table 2. The organizational structure is based on the same or similar principles:

- The organizational structure partially depends on the segmentation of the market and the orientation of the bank itself, it becomes a mix of structures, but again the market structure dominates, i.e. the structuring according to the type of clients and the offered services.
- In accordance with the above, the orientation towards the needs of the client is obvious.
- The main one is the division of global banking into retail, working with corporate clients and investments.
- Risk management and control as an extremely important segment in banking is singled out.
- Separation of services in the function of business support, legal operation and reporting and treatment of external institutions.
- The geographical location is noticeable with the existence of a certain department which of the structure and gives characteristics of geographical.

Barclays (UK)

The organizational structure of Barclays UK is very similar to that of JP Morgan Chase USA (Table 3). They represent two modern and successful banks that characterize the banking sector of highly developed western countries. This organizational structure is characterized by compliance with modern trends of globalization in the market, the more organizational parts that provide elements of the market structure, are organized globally. More precisely, the division in the structure according to the market segmentation, according to the type of clients and the services provided to them, has an element of division of the global market in the entire network of countries where this bank operates.

Modern world trends in banking refer to customer orientation and organizational structures with strong elements of market structures made in accordance with the market segmentation and the services and products offered. The role of risk management and control is of particular importance, especially all those segments that serve to support the main business and banking operations, segments that take care of the legal conduct of correspondence with the institutions in the country. The influence of the globalization of the market is also noticed, because in a certain part of the western banks the segmentation of the market is in the sense of the global market, and not the local one. The regional banks still have a special department that takes care of the international market.

2. ORGANIZATIONAL STRUCTURES IN THE BANKING SECTOR IN THE REPUBLIC OF N. MACEDONIA

The banking sector in the Republic of N. Macedonia has gone through a difficult period in the past decades. At the end of the last century, the process of transition and separation from the Yugoslavia was particularly reflected in the banking sector. At that time, the types of banking services were modest. The political situation, the transition and the market dictated this pace. The banks were slowly privatized as the EBRD became a significant shareholder, aiming to rehabilitate and modernize the banks in order to attract foreign shareholders and revive banking. The privatization process was particularly topical. In recent years, almost all banks have acquired a majority foreign shareholder - modern banks from the Western world and regionally successful banks that are excellently quoted on the international banking market.

This whole process of changes caused radical changes in the organizational structures of the banks in N. Macedonia. From banks that had the characteristics of the banking organizational structures of the former system with all the consequences of the separation of the republics into independent states and the transition, the banks in N. Macedonia have grown into modern banks oriented to customer needs, market segmentation etc. The banks in N. Macedonia have become very similar to the modern world banks both in their services and in their organizational structures, as well as in relation to the other segments of their operation.

In general, Macedonian banks are moving towards the modern world trends in the banking sector. Their majority foreign shareholders also have a great influence in this

direction. Of course, the size of the market, the standard, the political and economic condition of the country should be taken into account.

3. CASE STUDY: CHANGES IN THE ORGANIZATIONAL STRUCTURE OF STOPANSKA BANKA AD – SKOPJE

Stopanska banka AD - Skopje (hereinafter: the Bank) is a bank with the longest tradition on the Macedonian market. Founded as the first bank in Macedonia in 1944, Stopanska Banka laid the foundations for banking operations and is still a leader in the development and implementation of the most modern financial products and services for the population and for the legal entities operating in Macedonia.

At the beginning of 2000, the management package of shares from Stopanska Banka AD - Skopje was bought by the National Bank of Greece - the largest banking group in Southeast Europe. With this significant step, the Bank continued its growth and development into a successful company in accordance with world banking standards.

Following the takeover by NBG, Stopanska banka AD - Skopje strengthened its competitiveness through intensive changes in the organizational structure. The bank introduced a sophisticated information system and a new organizational structure, cleaned up its loan portfolio, introduced standardized procedures for credit decision-making, risk management and procurement, improved the structure of employees and became the leading company in the country in corporate governance. Today, Stopanska banka AD - Skopje is a bank with the largest number of clients in the retail market, a bank with the most developed network, the largest portfolio of credit and deposit products and a bank with the largest assets.

3.1. NEED FOR CHANGE

Given the history of the Bank, as well as having in mind the change in the ownership structure of the Bank, the need for changes in the organizational structure of the Bank inevitably follows. The changes in the organizational structure were primarily aimed at improving the efficiency and effectiveness of the Bank. There are even more reasons and needs for change, among which the most important are:

- the change in the shareholder structure of the Bank;
- the needs of the clients that are increasing are directed towards customer service according to the type of the clients (corporate, retail clients, etc.);
- the need to change the structure and organization of the Bank in the direction of a similar organization and structure of the shareholder;
- changes in the environment (change of market needs, competition, globalization, etc.);
- changes in the legal regulations and, accordingly, the need for changes in the internal acts of the Bank;
- development and growth of the Bank with a clearly defined vision, mission and strategy;
- difficulties in the management and control at each level;
- changes in the managerial staff and change in the structure of the employees;

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- following the modern world trends in banking, adjusted to the domestic market;
- need for staff specialization and clear definition of functions;
- needs for changes in culture that will be followed by changes in accordance with the above reasons and needs for change.

These are the main reasons for the constant changes in the organizational structure of the bank, and thus the chances for them were used and with the time passed with the changes, the Bank became a more efficient and effective organization.

3.2. WEAKNESSES IN THE PREVIOUS ORGANIZATIONAL STRUCTURE

The main weaknesses, reasons and needs for change, which resulted from several identified factors, are listed below, as follows:

- Framework organizational structure with the existence of many sectors and other services directly responsible to the Board of Directors at that time consisting of two members. Such a structure, given the growth and development of the Bank, formed a whole of segments that could hardly be managed, controlled and coordinated by the Management Board in the said composition.

- Considering the development and the needs of the market, there was a need for profiling of segments that will be oriented towards the needs of the client, which in the stated organizational structure was not the case. Thus, customer service has become difficult and inefficient.

- The shareholder saw the weaknesses of the Bank and asked it to change the organizational structure of the NBG Athens, in accordance with the size of the Bank and the needs of the market.

- Changes in the environment, such as existence of more banks with foreign capital, which follow the organizational structures and the organization of the work of their foreign shareholders, which are well quoted in the international banking sector. The changes in the competition in terms of offering products and services oriented to the needs of the client. Globalization as a process that led to a certain unification of the market, especially the regional market.

3.3. CHANGE PROCESS AND PROCESS ANALYSIS

The process of change mainly began with the awareness of the need for change. Then followed an analysis of the factual situation and the factors that led to that situation, as well as their clear definition, differentiation, analysis of the characteristics that should give a real direction to the actions to be taken. The changes envisaged in the strategy, respectively for the change in the organizational structure, took place at three levels: at the level of the business, i.e. at the level of the sectors, at the corporate level and at the functional level.

The steps taken in this process took place in the following order:

a) Assessment of the need for change - Based on the reasons for change, the need for change in the organizational structure of the Bank was assessed by recognizing the problems and identifying the sources of problems (the culture of the bank, the control systems and the teams, the policies, the procedures, the communication, the motivation, etc).

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b) Making a decision for change - The required future balance was defined. There was a precise picture of what the organizational structure of the Bank and the strategy should look like at the business level. Possible obstacles and resistance to change were also identified.

c) Implementation of the change - In order to implement the necessary and planned change in the organizational structure of the Bank, a special team for implementation of the change was formed. The activities of the team were determined in a detailed plan which was implemented within the envisaged medium-term period of one year for the implementation of the change. The change was implemented at all levels, but started with top-down implementation.

d) Assessment of the change - The process of change in the organizational structure of the Bank is still an ongoing process. The Bank assesses the change by monitoring the parameters for change in market share, profits, as well as assessing the ability of managers to meet their goals in the new organizational structure, assessing how efficient and effective the implementation of works in the Bank after the change, bench-marking is used as a tool. Measuring instruments exist both at the level of the bank and at the level of the business, i.e. the sectors and their directorates.

Analysis of the type of change - The change that has taken place in the organizational structure of the Bank can be assessed as:

- strategic - due to the fact that the change referred to long-term and strategic segments with the movement of the future situation defined in the strategic vision and mission of the Bank, in the corporate philosophy for the growth of the Bank, the system of the values related to the employees and the clients, the competitive positioning and the strategic goals for achieving and maintaining the competitive advantage, as well as for the development of the market of products, i.e services offered by the Bank.

- operational - due to the change that was made in the organizational structure of the Bank, it was mandatory to make changes in the policies and procedures in the Bank, as well as in the operating arrangements.

- transformational - with this change in the organizational structure of the Bank the old system of organization of work and communication was abandoned. The changes did not refer exclusively to the organizational structure, so many other segments underwent a change, such as the control systems, culture and the value system within and towards the clients, the basic postulates on which the Bank's operations were based.

- revolutionary, but at the same time evolutionary - considering the fact that the change happens in the medium term, i.e. it can be said in the short term of one year in which there were drastic changes in the organizational structure of the bank and in the way of organization of the work and the other segments, the change that can occur can be assessed as revolutionary. However, in the long run, following the history of the Bank, especially the period of the last twenty years, considered by its privatization, having in mind the above reasons for change, the change can be assessed as evolutionary in another dimension in which it can be said that the changes that have taken place in the Bank are a natural and evolutionary process. Especially having in mind the reasons for the change and the period in which they gradually appeared.

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The Bank undertook a transformation managed by the team created for that purpose, with participation of line managers and eventually all employees, without the participation of external agents for change. The process of transformation also contained elements of leadership, of which the Bank has supreme leadership, which motivated the managers and employees to strive to achieve higher and long-term goals.

3.4. DESIGN AND IMPLEMENTATION OF THE NEW ORGANIZATIONAL STRUCTURE OF THE BANK

Due to the already stated reasons and the need for change, the new organizational structure of the Bank was designed. A special team for the implementation of the change was formed for the implementation of the new structure. However, the line managers of the Bank from all levels, as well as all employees, were involved in the implementation process.

The new organizational structure of the Bank has been significantly changed from the previous one. The main amendment consists firstly, in the application of the organizational structure according to the type of clients and secondly, elements of application of risk protection provided by the Banking law.

According to the new structure, the Bank is managed by the Chief Executive Officer of the Bank and the Board of Directors. The Board consists of 4 members. The Board of Directors and the CEO are responsible for their work to the Supervisory Board, and the Supervisory Board is responsible to the General Assembly of Shareholders.

Corporate governance bodies are the Supervisory Board, the Risk Management Committee and the Audit Committee.

According to the structure of the Board of Directors, there are 4 executive lines: for corporate works, for retail banking, for risks and for finance and operational activities. Within each executive line, the divisions in the Bank are grouped accordingly, as shown in Table 4.

A mix of several types of structures in the Bank can be noted, as follows:

- market structure - according to the type of clients (corporate and household);
- functional structure - the division by functions is evident;
- geographical structure - in the part of the organizational structure of the branches;
- matrix structure due to the fact that there is a division both by function and by product.

3.5. DESIGN AND IMPLEMENTATION OF THE NEW SERVICE MODEL IN THE BANK

In accordance with the strategic goals of the Bank in the process of changing the organizational structure, the principle of customer orientation dominated. The basic postulates of this principle are as follows:

- customer service differentiated according to each customer segment;
- types of branches determined by customer segments, in terms of sales and services;
- sales and services supported by a sales-driven organization focused on sales.

The segmentation of the clients in the part of retail banking and the segmentation of the clients in the part of the work with corporate clients are shown in Figures 1a and 1b, respectively.

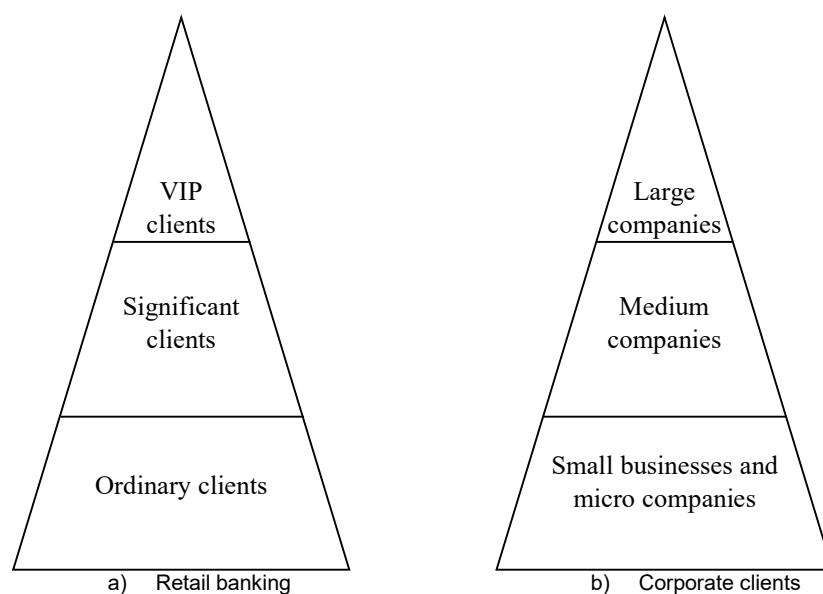


Figure 1. Client segmentation
Source: Author

The criteria shown in the two figures are based on customer segmentation depending on the specific characteristics of the market. This segmentation is directly related to the organizational structure of the Bank and the mix of structures in which the market dominates. For each segment of clients, the Bank offers a specific model of services and products.

The segment of significant clients (VIP client), is particularly important to understand, as a small number of clients own a large percentage of deposits / assets.

All branches of the Bank serve the mass population, and the servicing of the significant clients (VIP clients) and/or micro business clients depends on the local needs of the market.

The organization in the branches has a flat structure and reflects the different segments of clients that are serviced.

In order to determine the need for the number of branches, the systematic approach is used by determining the number of branches in accordance with the required services and products, predicting a potential index for the micro-market and collection of relevant information on the potential for demand for services by micro-business companies and/or medium and/or large companies.

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Each of the segments according to the market operating in the branches is responsible for the respective executive function in the structure of the Bank. The regional concept is described above, as is the dual responsibility.

The staff in the branches is highly professional and trained according to the service model that is applied.

Given that the Bank is a dynamic and functional unit, and despite the fact that the new service model and the new organizational structure were implemented in a relatively short period, the Bank is already considering the need for further changes to improve the new structure and the new service model.

3.6. BENEFITS FROM CHANGES IN STOPANSKA BANKA AD SKOPJE

With such a combined structure of the Bank, the gains are already evident:

- increased efficiency and effectiveness of the Bank, visible from the results of the Bank's operations and from the satisfaction of the clients (surveys were conducted in the process of implementation and after that);
- better customer service - satisfied customers;
- opportunity for better presentation of the Bank's products and services to its clients;
- moving forward ahead of the competition and following the events in the competition, following the modern trends in banking;
- opportunity for development of new products of the Bank and improvement of the existing ones;
- modern approach to clients and modern way of internal communication;
- development, monitoring and control of business processes;
- improving the system of control, delegation or decentralization of management, and thus the control at different levels, instead of concentration on the top;
- better hierarchical and line positioning;
- specialization of employees and managers, which leads to deepening of knowledge and skills in a certain segment and formation of highly profiled staff at the level of the entire Bank, capable of efficient and effective maintenance of the existing condition and movement towards good condition in accordance with the vision, mission and strategy of the Bank;
- change and improvement in the organization of work and abandonment of the outdated system of work organization and communication;
- positive changes in the Bank's culture;
- a structure in accordance with the structure of the shareholder, one of the leading banks in the region with a proven business and reputation, is established;
- optimal use of resources (precisely profiled professional staff and proper and complete use of resources);
- creation of new jobs - a challenge for the Bank's employees;
- change of the Bank's policies and procedures and their harmonization with the new organizational structure, processes and organization of work;

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- creation of modern branches with a modern approach to customers, even spatial reorganization of the interior of the branches in accordance with the new service model, which now look more modern and in which customers receive high quality service;

With all these gains, the Bank strengthens its position as a leading bank on the market, gains a larger share of the market, greater profit, stability, development and growth, with one word of security and in every way becomes a leading bank in the country.

CONCLUSION

Organizational structure of the most influent banks in western countries are of complex nature, mainly oriented to the client needs. The banks in N. Macedonia are following the trends of the modern international banks both in their services and in their organizational structures mainly due to the influence by the majority foreign shareholders.

Empirical observations of the changes in the organizational structure in the banking sector in N. Macedonia were given through consideration of the case study of changes in the organizational structure of Stopanska banka AD - Skopje.

Stopanska banka AD - Skopje has implemented a process of change that moves towards maximum approximation to world and regional trends in accordance with our market, and it resulted in a market organizational structure that is segmented according to the type of customers and their needs, orientation to types of products in accordance with the customer's requirements, i.e. orientation towards the customer's needs. New organizational chart has elements of a matrix structure, as well as a geographical structure, with emphasis on risk management and control, separation of the segments that take care of business support, administration, legal work, etc.

It is obvious that when there is a change in the organizational structure, which is essential and complete, in that case all segments of the company's operation are subject to the process of change. What is encouraging is that the change in the organizational structure can make big changes in the organization, in the described case the change had a positive impact on the effectiveness and efficiency of the bank as a whole and separately on its internal segments.

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CONTENT ANALYSIS OF ONLINE CUSTOMER COMPLAINTS: CATEGORIZATION AND EFFECTIVE RESOLUTION

Nina Angelovska¹

Abstract

Handling customer complaints is critical for online business success. The focus in this study is to investigate the complaints and categorize customer complaint behavior in order to find the most effective way of compensation for every complaint resolution. A sample of 220 complaints and related decisions collected from group buying site Grouper was content analyzed. The complaints were addressed via e-mail in the period from December 27, 2012 to February 17, 2015. All complaints were timely answered and resolved. Categorization based on language used and way of expression for experienced dissatisfaction combined with expected solution of the customer was done. The outcome showed that based on the language and way of expression, there are polite and aggressive complainers. Based on the expected solution three types of inquiries were detected: refund for dissatisfaction; expectation for solution; and complainers that did not expect something in return. We analyzed the offered resolution of the occurred dissatisfaction and offered possible answers for effective complaint management to each type of complainer. Not all complaints were resolved as inquired, but for some complainers there is an option for an alternative resolution. 80% out of the customers that have had submitted complaints continued to use Grouper' online services after the expressed dissatisfaction. Given the findings, several important recommendations to practitioners and academicians were made.

Keywords: Complaint management, Online business, Types of complainers, Grouper, North Macedonia

JEL classification: M30

INTRODUCTION

Customer complaint behavior refers to an action taken by an individual, which involves communicating something negative regarding a product or service to the supplier or other perceived influential party (Jacoby and Jaccard, 1981). Consumer complaint behavior is an important part of the service industry, which depends on satisfaction, and retention of customer. The concept allows a company to manage and analyze its own interactions with its past, current and potential customers and in the digital era it has been changed and looks dramatically different from it used to look like before (Bardicchia, 2020). Avoiding service failure is not always possible for companies (Ashwini and Kane, 2014) and in order to correct those failures, customer complaint is the healthy approach (Susskind, 2005). Customer complaint behavior can be viewed as a process that begins with consumers evaluating their consumption experience, which may or may not result in dissatisfaction. Excellent customer service therefore handles customer complaints in a manner that benefits both the customer and the firm (Ateke and Onwujariri, 2014). Day (1984) describes a considered process resulting from a consumer's evaluation of the significance of a purchase, their perception of the cost of complaining, their assessments of chances of success, their product knowledge and knowledge of the complaint process. This

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evaluation shapes the consumer's attitude towards complaining and helps determine whether they will complain. Dissatisfaction with a purchase can take alternative paths to resolution. Individuals can differ significantly in their perceptions about when and how to complain (Badghish et al., 2015). Consumers may choose to complain privately by changing brands, switching suppliers, or warning family and friends; complaining publicly, either directly by making a complaint to a retailer or manufacturer, or indirectly by reporting to an authority or bringing the complaint to the media or to a consumer group; or they may do nothing (Day and Landon, 1977; Singh, 1990). Customer complaint is a customer's expression of dissatisfaction towards a product, service or purchasing situation (Nakibin et al., 2011). Customer complaint is a formal or informal customer report regarding a problem with a product or service (Tronvoll 2012). Researchers showed that the business success in the long term is affected by the way a company handles company complaints (Roberts-Lombard, 2011). If ignoring customer complaints, it will expose as an unavoidable outcome poor service deliveries (Salami and Emueje, 2016).

Poor complaint handling procedures could damage company-customer relationship and cause customer dissatisfaction (Gelbrich and Roschk, 2010). Besides possible negative word of mouth promotion that in online business is very easy to be produced, it can cause low customer loyalty and significantly chances of customer retention. Marketing researchers found that consumers appears to feel a greater dissatisfaction with services than products (Best and Andreasen, 1977) and the most frequently mentioned reason for dissatisfaction is careless and unprofessional manner of the service (Day and Bodur, 1978). Butteli (2007) in the literature review of regarding studies of complaint behaviors noted that by complaining, customers expect different possible outcomes. Customers may hope for a tangible solution of a specific problem through a refund, exchange or repair; a psychological compensation obtaining apologies; or a social benefit, "preventing the cause for their dissatisfaction from occurring to other consumers" (Day and Landon, 1977). In other situations, a complaint has an objective to express anger and frustration for stress relief. Consumers do not really expect responses from the seller or the service; it is just a cathartic means (Nyer, 2000). Complainants can be classified by their response style. Based on a large random sample survey of American households, Singh (1990a) developed a typology that clustered core characteristics of complaining styles. According to this researcher there are 3 types of complainers: passives, voicers, irates and activists. *Passives* are consistent with non-complainers and least likely to take action. *Voicers* are those likely to voice dissatisfaction and seek redress from the seller. *Irates* are engaged in negative word of mouth or switched providers in addition to making a direct complaint to the offending provider and *activists* were inclined to complain to third party agencies, not only to obtain redress but to also achieve social outcomes Singh (1990a). While not explicitly linked to personality explanations of CCB differences, there are similarities with personality-based explanations of different complaining behaviors. In studies of consumer complaint behavior, extreme type A personalities are likely to voice complaints to the provider or a complaint agency. They are likely to openly express their complaining behavior and be straightforward about their expectations (Bennett, 1997). Extreme type B personalities are less competitive and less likely to openly express complaint behavior, and may choose to exit and complain privately (Baron and

Byrne, 1984; Bennett, 1997). Aggression as a trait of type A personalities figures prominently in research into how consumers complain. Type A personalities are more likely to participate in aggressive encounters with providers than type B (Baron and Byrne, 1984; Culpeper, 2001). Bennett (1997) found that aggressive complainers do not necessarily exit a relationship more than others; but this does not mean that the complaint has been handled properly: rather, the aggression expressed is directed at relieving the feelings of the complainer. Bandura (1973) comments that “discontent produces aggression not in those who have lost hope, but in the more successful members whose assertive efforts at social and economic betterment have been periodically reinforced [and] expect that they can effect change by coercive action” (p.19). According to Bolting’s (1989) study of dissatisfied hotel guests, assertive people were more likely to complain and to stand up for their rights (Fornell and Westbrook, 1979), while submissive people preferred to remain silent. Bolting’s (1989) found that vocal complainers had more assertive personalities and more self-confidence than hotel guests who complained to friends (WOM) or did not complain at all. Assertiveness is not part of aggressiveness as it does not involve the use of violent action (Phau and Sari, 2004); assertive people only become aggressive when their mode of complaint miscarries and they adopt another tactic. Singh’s (1990a) typology contrasts with others that focus on the recipient of complaint. For example, Goetzinger (2007) categorizes complaints into voicing a complaint to the seller, private complaining to family or friends, collective complaining to the public through offline/online channels, and third-party complaining to other parties and spread by them. Day and Landon (1977) categorize complaining action into public, private or no action taken. Broadbridge and Marshall (1995) support this classification. Public action covers both direct communication to a supplier seller and indirect public action such as complaining through media. Private action involves boycotting or warning family and friends; the default is taking no action.

The goal of this research is to investigate the types of complainers that addressed their dissatisfaction via e-mail to group buying site Grouper and to offer effective complaint resolution of each type of complaint. To reach the goal we use content analysis and following steps were done: (1) Categorization of the complaints received via e-mail in the period from December 27, 2012 to February 17, 2015 based on way of expression of dissatisfaction and expected solution; (2) Reasons for dissatisfaction were categorized; (3) Offered answers for the solution of declared dissatisfaction were analysed and (4) Based on all analysis scheme for appropriate answers to every type of complainer is suggested.

The remainder of the paper is organized as follow. Section 1 explains the model of group buying site Grouper and organization of complaint management. Section 2 explains data collection and methodology. Section 3 provides empirical analyses with the results regarding the categorization of types of complainers and offers solutions for effective complaint handling. The last section offers concluding remarks.

1. THE MODEL OF GROUP BUYING SITES

The new business model of group buying through daily deals, launched by Groupon, has sparked worldwide interest and has quickly spread through its clones in many

countries around the world. In the Republic of Macedonia, this concept was introduced by Grouper, and then the concept is applied by other group buying websites.

There is an opinion that the Internet can reduce the number of intermediaries or skip intermediaries due to information technology, which increases the efficiency of communication and reduces the cost of transactions (Malone et al., 1987). For example, many companies have their own websites that they want to get directly to buyers.

In this sense, the new business model for group discounts for daily deals can be considered as a new type of electronic intermediary. This business model is a mediation between retailers and consumers in order to meet and trade online. It supports and coordinates the trading processes between retailers and customers through various functions. Almost all the procedures of the traditional trading process are evident in the ongoing group buying. The model acts online via website where buyers can find attractive offers for different products and services at large discounts up to 90% of the regular price. Various offers are offered on a daily basis in cooperation with companies giving the services or vendors of products that receive promotion and high visibility in front of thousands of potential buyers. The mediator - the site offering the promotional deals - earns from a commission after a sale made by the advertised company as compensation for the customers brought to his door.

By playing the intermediary role in-group purchasing activities, Grouper is responsible for coordinating the work during the entire process, including initiating, negotiating, arranging, executing and most importantly satisfying both sides, companies and end-customers.

2.1. Complaint Management – Grouper

From an operational point of view, the complaint management process can be divided into 3 dimensions (Johnston 2001): availability for complaint, interaction between seller and buyer, and compensation policy. Completing the complaint takes away the customer's time, effort to communicate, and complain about dissatisfaction. Customer should believe that when something goes wrong there is someone who will solve the problem, or he has where to submit his complaint and express his dissatisfaction. This is especially important for loyal customers who have already built trust with the site to complain and request a solution in order to remain loyal.

Availability for complaint

Receiving a small number of complaints can lead companies to the wrong view that customers are mostly satisfied; while dissatisfied buyers may have turned to competition without ever expressing dissatisfaction (Stephens and Gwinner 1998; Goodmann 1990). It is therefore of great importance availability for the customers to send a complaint or dissatisfaction in a ease way. Communication channels through which customers can send a complaint to Grouper are: phone, Facebook message on inbox or public comment on the Fan Page, Twitter, Grouper forum available for every transaction and email. For the purpose of the research, the "e-mail" complaints channel was selected for detailed observation and analysis of one channel for complaints. In addition, the public comments that customers leave on forums and on social media are

of a different nature and can be treated differently and considered word of mouth unlike a private message that the customer directs to customer support in order to adequately solve the problem or dissatisfaction. Comments of a public nature that do not always require a solution are more appropriate forms for analyzing customer satisfaction from a particular company and brand.

Interaction between seller and buyer

Customers also appreciate the knowledge that the customer support shows because they feel that the person is competent and able to solve their problem (Gruber et al. 2006). In the case of telephone conversations with dissatisfied buyers, this is especially pronounced immediately upon the first contact, while in the case of complaints analysis by e-mail and their solution to the problem comes in a different form and formal language used by the company.

Compensation policy

Compensation for customer dissatisfaction should be a solution to its problem and aims to compensate the customer for the loss suffered and re-establish trust in the company (De Ruyter and Brach 1993).

Resolution of customer complaint in Grouper

As Grouper, is online mediator between the companies that promote themselves through deals offering discounts and customers who buy the coupons. Coupon redemption is made in the companies that made the offer: service or product. When the customer is dissatisfied with the service or product delivered by the company, or other problems, the complaint is addressed to the mediator Grouper. Upon receiving the complaint, the customer's support reads the message and, depending on the nature of the complaint, directs it to the responsible person for that type of complaint. If the complaint concerns the company offering the deal, customer support will redirect the complaint to the agent who is responsible for that cooperating company who further on discuss the problem with the company. If the nature of the complaint is technical, it will be redirected to the IT person responsible for the analysis and solution thereof. Once the person in the first line or the customer's support receives an answer from the relevant person, formulates a response and takes action to resolve the case, depending on whether it is a written response that solves the problem or refund and notification to the customer, the customer support closes the case. All complaints are handled immediately.

3. METHODOLOGY AND DATA

In collecting the data, we used secondary data from documentation of complaints taken from the online group buying site Grouper. The population in this research is all the consumers who have been expressing their dissatisfaction by complaining about the products or services. This research uses the purposive sampling method, a type of

non-probability sampling where the units that are investigated are based on the judgment of the researcher. 227 complaints addressed to Grouper via e-mail in the period from December 27, 2012 to February 17, 2015 in Grouper are subject to analysis. Out of these 227 complaints, 7 were complaints that were repeated or sent with the same content by the same customers several times, so the duplicates were removed and we had 220 complaints. After compiling the complaint mails taken from the Grouper web site we used content analysis as a method for summarizing each form of content by collecting the various aspects of the content. In 1952, Berelson defined content analysis as “a research technique for the objective, systematic and quantitative description of the manifest content of communication” (p. 18). In order to make the method applicable both in a quantitative and a qualitative approach, and without specifying the depth of analysis, Krippendorff (2004) defined content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 18). Downe-Wambolt (1992) underlines that content analysis is more than a counting process, as the goal is to link the results to their context or to the environment in which they were produced: “Content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena” (p. 314). “Content analysis is a research method used to quantify and analyze words, concepts and relationships in text” (McAlister and Erffmeyer, 2003, p. 345).

A single research may analyze various forms of text in its analysis. To analyze the text using content analysis, the text must be coded, or broken down, into manageable code categories for analysis (i.e. “codes”). Once the text is coded into code categories, the codes can then be further categorized into “code categories” to summarize data even further. Our research uses conceptual content analysis. Based on research question and a sample text in the complaints via process of selective reduction is coded into manageable content categories. By reducing the text to categories we can focus on and code for specific words or patterns that inform the research question. After reading all the complaints based on the description of the message, we created categories based on the similarities of the messages. For this research parameters that resulted in reading all messages as relevant for evaluation are: the reason for the customer dissatisfaction, the language and way of complaining, the expected solution of the problem and how it was resolved. In determining the reason for the customer dissatisfaction where in the complaints were identified several reasons, the strongest reason for the dissatisfaction was taken. The complete mail conversation was analyzed to detect types of complainers, are they angry or polite and what type of compensation dissatisfied customer is looking for. Also very important for the analysis is the type of compensation-dissatisfied customer got in the end for resolution of the problem. Content analysis was also made on the responses given to each complaint in order to resolve it, in order to categorize the manner of dealing with each customer.

To determine if the complaint resolution was good and customer continued to buy each complainer was connected to his database of bought coupons before and after the complaint. Analyzing the content, although essentially is a qualitative method, but analyzing written words, through categorization allows it to be a quantitative method. The results of the analysis of the content are expressed in numbers and percentages.

4. RESULTS

In order to determine the profiles of complainers, that expressed their dissatisfaction content analysis considering: the language used, the way of expression used by the user in the e-mail message, the elements of threat and the nature of the user expectations is done. The analysis resulted in 6 types of profiles of complainers that express dissatisfaction. Firstly based on language used and way of expression all complainers were divided in polite and aggressive. Additionally the complainers were categorized by the expected resolution in three groups: asking for refund, asking for solution and didn't ask for anything. This is in line with Day and Landon (1977) categorization of complaints expectation in 3 types of compensation: material solution; a psychological compensation obtaining apologies; and a social benefit. Table 1 shows the codes of categorized complaints, together with the number of occurrences of each specific user profile. The largest number, or 46% of the total number of dissatisfied users, by nature were polite complainers who shared dissatisfaction in order to get a solution to the problem.

Table 1 Profiles of complainers that express their dissatisfaction and frequencies

Code	Profile of complainer	Freq.	Perc.
1	Politely asks refund	36	16.4
2	Politely addresses dissatisfaction and seeks solution	101	45.9
3	Politely addresses dissatisfaction and doesn't expect nothing	25	11.4
4	Aggressively asks refund	31	14.1
5	Aggressively addresses dissatisfaction and seeks solution	11	5.0
6	Aggressively addresses dissatisfaction and threatened with inspection or leaving the company	16	7.3
Total		220	100.0

Source: Grouper, Authors' calculations.

All complaints were answered and appropriate solution was offered to resolve the problem occurred. As the web site, Grouper is intermediary between the retailers and consumers it is of great importance to see the type of problems customers addressed. Based on the similarities, content analysis categorized six reasons for the dissatisfaction of customers. Table 2 shows the categorization of the reasons of dissatisfaction and frequency of each. The most common reason why customers expressed dissatisfaction is difficulty in obtaining the service, i.e. the service provider has made it difficult for the customer to make upon coupon redemption. Difficulties caused by the company that create the dissatisfaction can be: refusal to make a reservation i.e giving priority to non-coupon customers, inability of the company to service the customer, etc.

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Table 2 Frequency of identified reasons for dissatisfaction

Code	Reason for dissatisfaction	Freq.	Perc.
1	Difficulties during coupon redemption by the service provider	107	48.6
2	Not satisfied with the quality of the company's service	74	33.6
3	Not satisfied with the attitude of the employees, the customer felt Degraded because is with coupon	16	7.3
4	A problem with the reliability of the information given in the deal	19	8.6
5	Complains about showing an unrealistic discount	3	1.4
6	Technical problems with the site	1	0.5
Total		220	100.0

Source: Grouper, Authors' calculations.

Crostabulation was used for the analysis of the profile of the complainer associated with the reason of dissatisfaction. Table 3 shows that most of the problems of dissatisfaction are companies that provide services and customers politely ask for refund or solution of the problem.

Table 3 Reason for dissatisfaction * Profile of the complainer, Crosstabulation

	Profile of complainer						Total	
	1	2	3	4	5	6		
Reason for dissatisfaction	1	22	63	3	9	1	9	107
	2	9	25	21	13	4	2	74
	3	3	3	1	4	4	1	16
	4	2	9	0	2	2	4	19
	5	0	0	0	3	0	0	3
	6	0	1	0	0	0	0	1
Total	36	101	25	31	11	16	220	

Source: Grouper, Authors' calculations.

The way in which any dissatisfaction and complaint was resolved and compensated was determined by analyzing the response that was returned to each customer. Three ways of resolution of the problems notified in the complaints are categorized and the frequencies are shown in Table 4. Most of the complaints were resolved with explanation and solution of the case (124, 56.4%). Almost 36% of the complainers got refund of the money to resolve the occurred dissatisfaction. 7.7% of the complaints were resolved with gratis service, replacement or repair.

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Table 4 Frequency of the ways of complaint resolution

Code	The way of complaint resolution	Freq.	Perc.
1	Answer with explanation and solution of the case	124	56.4
2	Reimbursement of the money	79	35.9
3	Replacement of the product or offered a gratis service or repair thereof	17	7.7
Total		220	100.0

Source: Grouper, Authors' calculations.

The profile of the complainer was analyzed associated with the way of problem resolution shown in Table 5. It can be concluded that most of the ways of resolution for all the types of complainers is with explanation and finding solution of the problem that occurred dissatisfaction. Most of the answers to the dissatisfied customers that sent a mail to complain were: "we are sorry about the problem occurred".

Table 5 The way of complaint resolution * Profile of complainer, Crosstabulation

		Profile of complainer						Total
		1	2	3	4	5	6	
The way of complaint resolution	1	6	73	17	17	6	5	124
	2	28	20	5	11	4	11	79
	3	2	8	3	3	1	0	17
Total		36	101	25	31	11	16	220

Source: Grouper, Authors' calculations

As a result of this analysis, we offer what is most effective way to deal with the dissatisfied customer, ie. managing the dissatisfaction of each individual user profile. In the offered answers for the different types of users, the user relationship is taken into account, i.e. the manner of expression in the complaint and the cause of his problem. The way in which the dissatisfaction of the user will be compensated primarily depends on the cause of his problem, which is considered individually. However, based on the other factors of the complaint, generalized answers are offered that can be applied in order to make compensation (material or non-material) and reach a solution to the user's case (Table 6).

Table 6 Types of complainers and ways to deal each of them

1	Politely asks refund	The best solution to neutralize the situation with this type of customer is to give an apology with a free service / product in order for the company to correct the mistake. If the customer refuses to visit the company, and the dissatisfaction is objectively justified, the last step is to make a refund.
2	Politely addresses dissatisfaction and seeks solution	A solution should be found for this buyer in cooperation with the service provider company depending on the reason for the dissatisfaction. The most common problem of this type of user is the difficulty in obtaining the service or making a

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		reservation.
3	Politely addresses dissatisfaction and doesn't expect nothing	This user should be informed that his / her opinion is of great importance and that it helps in deciding whether to cooperate with that company again.
4	Aggressively asks refund	It is necessary to carefully understand and offer him a solution or compensation, and if he does not accept it, to refund the purchased service / product.
5	Aggressively addresses dissatisfaction and seeks solution	It is best for this user to be compensated for the dissatisfaction with a certain free product or service from the company that is the cause of the dissatisfaction. If this is not accepted by the user, refunding the funds is the best solution for this type of dissatisfied user.
6	Aggressively addresses dissatisfaction and threatened with inspection or leaving the company	This user should first be neutralized by pointing out that the company is on his side. The best solution is to give him a refund indicating his incorrect attitude so that the user does not think that he received compensation for the threat that he would not otherwise have received.

In both types of users who expect a solution (polite and aggressive user), the answer is similar, and the difference is in the way of presenting the solution by the customer support representative who gives the answer. The same goes for the polite and aggressive user who seeks a refund, with the only difference being that the calm user can be offered several other alternatives before the refund is made as a last resort. It is important to mention that all complaints were timely managed. As an indicator of the successfully managed complaints is that 80% of the complainers continued to use Grouper's services.

CONCLUSION

By examining 220 complaint data of expressed dissatisfaction of services/products addressed via e-mail to group buying site Grouper this paper aims to contribute to the understanding of customer complaint management as an important aspect in building profitable customer relationship. This result has implications for how e-businesses' customer service centers should manage customer complaints effectively. Specifically, this study suggests that e-businesses should give timely feedback responses in an accurate and kindly manner. All complaints were treated timely and equally and according to the customer's problem, a solution was offered in the form of an explanation, which is, remedying the problem, refunding of funds or a gratis product service which compensates dissatisfaction. The most common reason for customer dissatisfaction or 82% of the complaints were addressed to difficulty in obtaining the service and dissatisfaction with the quality of the service provided. This increases the responsibility and difficulty in managing complaints as the expectations of the customers are directed directly to the intermediary, which in turn depends on the companies whose services it promotes. The analysis resulted in categorization of 6 types of profiles of complainers that express dissatisfaction. Firstly based on language used and way of expression all complainers were divided in polite and aggressive. Additionally the complainers were categorized by the expected resolution in three

groups: asking for refund, asking for solution and didn't ask for something in return. Finally, the results of this study offer guideline for effective complaint management by suggesting appropriate answers to each type of complainer, meaning that with some of the profiles can be tried for different solution than required. Appropriate online complaint management facilitates repeat business and customer loyalty. 80% of the complainers continued to use Grouper' services. Efforts toward the effective resolution of customer problems serve as the basis for long-term successful customer relationship. The findings in this research contribute to complaint management literature and give recommendations for practitioners and academics.

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THE RIGHT TIMING FOR REACTIVATING “DORMANT” CUSTOMERS

Nina Angelovska¹

Abstract

In order to successfully manage the sales and marketing activities companies need to constantly monitor and analyse the activity of their customers. The goal of this study is to detect “dormant” customers and the right timing to undertake tailored marketing actions to reactivate them. To achieve this goal, an empirical investigation of customers’ activity is conducted by using the Customer Activity measures (Kumar and Reinartz 2012), and in addition a new measure is introduced to determine when a customer ceases to be a customer and the relationship with him ends, and when a customer becomes “currently inactive” before he reactivates again. Information about the status of the customer’s activity is obtained and the implementation of appropriate marketing actions is investigated. Information and results gained from this analysis can be a base for action and tools for rehabilitation of “currently inactive customers” are provided that can be used by e-shops and marketplaces. Each company, can use the Customer activity measures that are suitable, depending on the industry in which it operates, in order to create a comprehensive image of its customers’s activity, increase their activity and make appropriate marketing decisions.

Keywords: CRM strategy, customer-centric strategy, customer retention, lifetime duration, North Macedonia

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INTRODUCTION

New developments in e-commerce and m-commerce technologies along with the wide adoption of mobile devices and social media have enabled companies to enhance and personalize customers’ shopping experiences, their interaction with their brand anytime, anywhere and to gain insights about their customers. The issue of customer activity has gained popularity in the late 1990s and early 2000s, when the marketing field started devoting attention to customer relationship management (CRM). The analysis of customer activity is needed for decision making about the allocation of marketing resources to specific customers, evaluation of the existing CRM strategy that a company practices and for obtaining a comprehensive understanding of the company's customers. Modeling customer activity in non-contractual settings is challenging, as customer activity is unobserved, making forecasts for customer lifetime value and its components less straightforward than in contractual settings. There are various concepts and measures for evaluating customer activity. Some are based on simple observations, while others involve mathematical calculation techniques. Mitrevski and Hristoski (2014) promote a holistic approach, identifying customers as the most essential “subsystem” of e-commerce systems with a number of important but not so well-understood behavioral factors. The proposed taxonomy of customers (curious, focused, passionate, indecisive and picky), as well as the specification of operational profiles, are the basis for building predictive models, useful for evaluating a set of

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performance measures. Through a hierarchical composition of sub-models and discrete event simulation, the authors identify multiple variables in order to transform performance measures into business-oriented metrics: Buy-to-Visit quotient; Revenue Throughput and Potential Loss Throughput, as a cornerstone in the implementation of appropriate activities for capacity planning on the server side. Kumar and Reinartz (2012), on the other hand, divide measures for evaluating customer activity into two main groups: traditional and customer-focused measures. Traditional measures are market share and sales growth, which were developed when there was no customer data at the individual level. Customer-focused measures are divided into three subgroups: Customer Acquisition Metrics; Customer-Activity Metrics; and Customer-Based Value Metrics. The first set of measures is used to evaluate the activities that a company does to gain new customers: acquisition rate and cost of acquisition. This measure applies to an acquired buyer. Once a potential buyer is turned into a real buyer, the relationship building begins. The second set of measures for the analysis of customer activity allows creating a comprehensive picture of the customers of a company and includes the following five measures: Average Inter-Purchase Time, Retention rate, Survival rate, Lifetime Duration and Probability of activation. The third group of customer-based measures is measures to assess customer value and include: consumer basket size, category share and consumer basket share.

Many new variants of these “buy-till-your-die” models were developed in previous decades, building on the Pareto/NBD model (Schmittlein, Morrison and Colombo 1987), such as the BG/NBD model (Fader, Hardie and Lee 2005a). Such models provide probabilistic forecasts, like the number of future purchases, customer lifetime, or CLV as well as for the probability of making future value. While this probability is useful for customer base valuation (Fader, Hardie and Lee 2005b), the fact that it is a probability instead of a deterministic number makes it difficult to translate into a binary active/inactive decision usable in managerial decision-making. Therefore, the previous researches has suggested to 1) determine a cut-off value for P (Alive) to aid in the translation to a binary decision (Reinartz and Kumar, 2000; Wübben and Wangenheim, 2008) or 2) estimate a reactivation probability with an appropriate cut-off (Ma, Tan and Shu, 2015). However, Wübben and Wangenheim (2008) show that such cut-off approaches only capture aggregate behavior accurately, making them less suited for our intended goal of identifying individual inactive customers. Moreover, beyond determining which customers are inactive, it is also important to determine when they are inactive (Neslin et al., 2013). While cut-off- based models provide this information when customers’ probability is below the cut-off value, expensive continuous model updates are required to produce up-to date forecasts to detect the moment at which the cut-off value is reached. A different approach is thus required. Alternatives for accurately determining customer activity have been explored, aimed at modeling the time between purchases (inter purchase time, IPT). Platzer and Reutterer (2016) introduced the Pareto/GGG model, showing that including purchase timing using IPT provides additional information to improve the performance of stochastic purchase models. Using Bayesian estimation (Sarang, Kumar and Zhao, 2016) managed to infer customer’s latent budgetary constraint using only transaction information. Deployment of marketing actions in calendar time to activate customers has been issue of investigation (Ascarza and Hardie, 2013; Dew and Ansari, 2018; Korkmaz, Kuik and

Fok, 2013), specifically that of reactivation e-mails. Importantly, Ascarza' (2018) approach incorporates the idea that firms should launch such interventions at the point in time when the marketing action is most likely to be effective.

Monitoring and measuring customer activity is needed for actions that will activate inactive customers. Customer reactivation aims to stimulate customers who have reduced or ceased purchasing for some time to resume their purchases by sending them a mailing (Blömeke, Clement and Bijmolt, 2010; Pokornyyk, 2017). Since e-mail which has a short lead time is used in 90% of customer reactivation initiatives (McGee, 2016), swift and efficient scheduling is a requirement.

Companies should pay special attention to managing customer activity. The purpose of this paper is to show the importance of measuring customer activity in order to manage marketing activities to intervene the churn of the customers. To achieve the goal in this research we need to:

- 1) Examine which customers have become inactive;
- 2) When customer become inactive; and
- 3) Initiate reactivation of these customers with a reactivation e-mailing.

Kumar and Reinartz (2012) measures for customer activity are used for the first task. A new measure is as well introduced in the research, which shows the number of customers expressed as a percentage of the total number of customers from our selected group that is analyzed. The novelty of this measure that is added in the analysis indicates the importance of a company to determine when a customer ceases to be a customer and the relationship with him ends, and when a customer becomes "currently inactive" and then reactivates. Information and results gained from this analysis can be a base for action, and tools for reactivation of "currently inactive customers" are provided that can be used by e-shops and marketplaces.

The remainder of the article is organized as follows. Section 2 reviews the methodology and the dataset of variables used in this research. In Section 3 the empirical findings are presented, and the last section concludes the findings.

1. METHODOLOGY AND DATA

In daily operations, decision making and customer analysis, Grouper uses its own CRM which contains basic information for each registered user such as: personal data of the user; date of registration (when he first registered, i.e. created a user profile, which does not mean that he became a customer at the same time); number of purchases; total amount spent; number of logins; date of last login and location, i.e. IP address from where he logged in. This basic information is used to create a general picture of the user, when for example the customer care department gives him an appropriate answer to his request, question, etc. In any case, when deciding on offering a solution and compensation, Grouper has the same treatment for each customer, regardless of its history and value to the company. Additionally, Grouper management in its annual customer analysis does not include advanced customer segment level analysis, but includes group data for the current year (Grouper, 2015).

The analysis of the customers' activity in this research starts with a detailed analysis of selected segments according to the date of the first purchase of the users, i.e. the date when they first became buyers/customers and when the building of the relationship

with them began. There are various concepts and measures for evaluating customer activity. Kumar and Reinartz (2012), customer-focused measures, particularly the second set of measures; Customer-Activity Metrics are used in this research. These measures are chosen because they are the most appropriate for analysis of customer activity and creating overall picture of customer activity at the deal platform. Some of the measures are interdependent, while some can be calculated and viewed in isolation for different periods and groups of customers.

In addition, the methods for calculating the five measures that are used to measure the customer activity (Kumar and Reinartz, 2012) and the corresponding additions based on the shortcomings of some of the calculations that are the subject of this analysis are explained.

(1) Average Inter-Purchase Time (AIT)

Average time between purchases is a simple measure of how much time passes between a customer's purchases, expressed in days, weeks, months or years. It is calculated with the formula:

$$\text{AIT} = 1/\text{NPt} \quad (1)$$

Where

AIT is Average Inter-Purchase Time

NP is Number of purchases in a period t

(2) Retention Rate (Rrt) and Defection Rate (Rdt)

Retention and defection rate are interrelated and one can be inferred from the other, and, depending on the context, it is better to use one or the other metric. The retention rate in a given period t (Rrt) shows the average likelihood that the customer purchases in a given period (t), taking into account that the customer was active in the previous period (t-1) and also purchased from the company. The retention rate varies logically for different buyers, but takes into account the average retention rate of a particular homogeneous group, in our case the group consists of buyers who made their first purchase in the first quarter of 2014. There is usually no difference between the individual retention rate of a particular user in the group and the average rate of the group. The following formula is used to calculate the average retention rate of a group of customers:

$$\text{Rrt} = 100 * (\text{Nct}(t-1) / \text{TNC}(t-1)) \quad (2)$$

Where:

Rrt is retention rate

Nct(t-1) is Number of customers in cohort buying in (t) being customer in (t-1)

TNC(t-1) Total number of customers in cohort buying in (t-1).

The defection rate is the opposite of the retention rate and indicates the average likelihood that a customer defects from the company in a period (t), given that the customer was purchasing up to period (t-1). It is calculated simply as follows:

$$\text{Rdt}(\%) = 100 - \text{Rrt}(\%) \quad (3)$$

(3) Survival Rate (SRt)

The survival rate is closely related to the retention rate. The survival rate shows the buyers who "survived" (continued to be buyers) from the beginning of the observation of these buyers until a certain period (t). Just like the retention rate, it is calculated for a cohort group of customers that the website acquired within a specified period of time.

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Although retention rate and defection rate provide information for a given period, the SR_t gives a summary overview of how many customers survived between the start of the formation of a cohort and any point in time afterward. SR at time t is equal to the product of the retention rate at time t and the SR during the immediately preceding period (t-1). The survival rate is calculated by the following formula:

$$SR_t(\%) = 100 * R_{rt} * SR_{(t-1)} \quad (4)$$

In this case, the initial survival rate for the first observation period is equal to the retention rate for that period.

(4) Lifetime Duration

It is sometimes unclear how long a customer has been associated with a firm in a non-contractual setting, since there is no expiration date explicitly stated by the customer. In such situations, it is important to be able to predict the lifetime duration of a customer by observing buying patterns and other explanatory factors. Knowing for how long a customer remains a customer is a key ingredient in the calculation of the customer lifetime value—a key strategic metric. Furthermore, it has implications for churn management, customer replacement, and management of lifetime duration drivers. Predicting a buyer's lifespan is a challenge for online companies that lack "buyer bonding" because it is difficult to determine when a customer will cease to be a buyer.

This measure can be calculated in two ways. The first way is to assume that the retention rate is constant for each period and average lifetime duration will be:

$$LD = 1 / (1 - R_r) \quad (5)$$

But since the retention rate usually changes over time (e.g., through customer self-selection) such a calculation would be misleading. We need to weigh in the number of survived periods. For one cohort of customer the avg. lifetime duration is defined as:

$$LD = (\sum_{t=1}^T (t * \text{Number of retained customers in } t)) / N \quad (6)$$

Where:

N - cohort size

t - time period

T - time horizon

(t * Number of retained customers in t) represents the number of active customer periods for the cohort at time t

In our case, calculating the average lifetime duration of a customer gives us a clear picture of how long it takes Grouper to rebuild its customer base.

(5) P (Active)

This measure applies to an individual buyer and can be useful for estimating the probability that the customer will be active in a certain period of time. It is calculated by the simple formula (Schmittlein and Morrison, 1987):

$$P(\text{Active}) = \tau^n \quad (7)$$

Where:

n - the number of purchases in a given period

τ - time of the last purchase (expressed as a fraction of the observation period).

For the analysis of the measures for the customer activity that are calculated through the analysis of certain cohorts of customers (2, 3 and 4) we choose a group of customers who became customers in a certain period. The analysis period covers 4

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cohorts of customers we monitor in order to make a detailed analysis of each individual group and then make a comparison of the groups in order to see if there is a difference in measures between certain cohorts of customers. For the first 2 cohorts, we divide the fiscal year into 4 quarters and accordingly we group the buyers according to the date when they made their first purchase, i.e. when their relationship with the company began. The first group of buyers covers 24 months, i.e. from 1.1.2014. until 31.12.2015. For this period, we analyze the segment of customers who made their first purchase in the first quarter of 2014 and measure their activity in the next 7 periods, i.e. 7 quarters until December 2015. Then we do the same for the next group of customers who became buyers for the first time in the second quarter of 2014, and observe the period of 24 months, i.e. 7 quarters until March 2016. The analysis of the other 2 groups of customers is conducted annually and includes customers from 2011 and 2012, which we follow over the next years, until the end of 2015. We follow the buyers from 2011 in 4 periods yearly, and the buyers from 2012 in the next 3 periods (years) and until the end of 2015. Then we make a comparison in the average retention and survival rate and the average life expectancy of all analyzed cohorts, i.e. a comparison of the first two groups with each other, and a comparison of the second two groups that we analyze annually.

The other two measures that are calculated on an individual customer basis (1 and 5) are calculated for each buyer in the customer segment of the first analyzed group (customers acquired in the period from January to March 2014) who remained active until the last analyzed period (from October to December 2015) in order to demonstrate the importance of the company in monitoring customer activity for better decision making.

(6) New - Addition in the analysis of the retention rate in different periods

The retention rate is calculated by taking into account the buyers from the current period that made a purchase in the previous period, i.e. were active buyers. However, there are customers who may have paused for a while and continued to shop, which is a limitation of the measure. For example, a certain customer may not have been active for one analyzed period of 3 months, and then continued to make purchases and remained an active buyer until the last period of our analysis. If we take into account the periods of inactivity of the customers who are still active buyers for 2 years, we can get a picture of the customer purchase template on the group buying platform. Therefore, in our case we introduce another measure in the research, which shows the number of customers expressed as a percentage of the total number of customers from our selected group that we analyze. The number of active customers in the current analyzed period will be as much as the number of customers who are retained as customers who bought in each subsequent period, for the number of customers who paused for a certain period. The retention rate excludes the possibility for a buyer to pause with activity for a certain period and to continue again by calculating the rate taking into account the active customers from the current period that were obligatorily active in the previous analyzed period. The novelty of this measure that we add in our analysis indicates the importance of a company to determine when a customer ceases to be a customer and when the relationship with him ends and when a customer becomes "currently inactive" and then reactivates. Information and results gained from this

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analysis can be base for action, and we offer tools for reactivation of "currently inactive customers" that can be used in online sales sites.

3. ANALYSIS AND RESULTS

In the case of group buying sites, the first stage a user goes through before becoming a "customer" is to subscribe or register a user profile. In any case, the registration does not mean that the user is also a customer (buyer), i.e. he/she may never become a customer. The company's relationship building with the customer begins when a registered user makes his first purchase and becomes a "customer". In the case of Grouper, at the end of 2015, out of the total number of registered users, 48% were customers with whom the company is building a long-term relationship (Grouper, 2015). The active relationship with customers varies among different industries, and it is influenced by the different interactions that the customer has with the company, such as, for example, in our case: the experience of searching for the desired products on the website, the way information is presented, the purchase process and pre-purchase customer support, post-purchase customer support, complaints management, etc.

The purpose of measuring customer activity is to examine the status of customer activity for successful management of marketing interventions, to properly allocate resources, to assess the lifetime duration of the customer and its value, in order to make the right decisions. For example, a company with a short customer lifetime duration may conclude that it needs to frequently replenish and replace its customer base in order to generate revenue growth.

The customer activity of the Grouper is analyzed with the help of five measures: average time between purchases (1); retention rate (2); survival rate (3); lifetime duration (4); and probability of activating a buyer (5).

3.1. ANALYSIS OF RETENTION RATE, SURVIVAL RATE AND CUSTOMER LIFE TIME DURATION

The first analyzed group of customers are acquired customers who made their first purchase in the first quarter of 2014 (from 1.1 to 31.3.2014). The size of the selected group is 2589 buyers. We analyze the group of acquired customers in the next 7 periods, i.e. quarters, until the end of 2015 (Table 1).

The retention rate (Rr) for each period (t) is calculated using eq. (2) by dividing the number of active customers in period (t), who were active in the previous period (t-1), by the number of active customers in the previous period (t-1). For the first period, we calculate the retention rate by dividing the active customers in the first period, by the total number of acquired customers that we analyze (385/2589). For the first period, the retention rate is 14.87%, while for the following periods it increases, due to the large number of short-term buyers who leave in the initial periods, and the group of buyers in the following periods decreases.

Survival rate (SRr), shows the share of customers, from the initial number of customers analyzed, who survive, up to a certain period (t). In our case only 0.7% of the buyers remained active buyers until the end of period 7.

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Table 1. Retention rate analysis for customers acquired in the period January-March 2014

Period since acquisition	Number of active customers who were active in the previous period	Retention rate (Rr) (%)	Survival rate (SRr) (%)	Number of active periods of retained customers	Total active buyers	Number of reactivated customers	Reactivated buyer periods	Total periods of retained and reactivated customers
1	385	14,87	14,87	385	385	0	0	385
2	124	32,21	4,79	248	289	165	330	578
3	63	50,81	2,43	189	367	304	912	1101
4	45	71,43	1,74	180	422	377	1508	1688
5	30	66,67	1,16	150	289	259	1295	1445
6	21	70	0,81	126	311	290	1740	1866
7	18	85,71	0,7	126	338	320	2240	2366

Source: Grouper, Authors' calculations.

The average retention rate in our case for the 7 analyzed periods is 56%. We can calculate the lifetime duration of buyers through the average retention rate.

The average life time duration, according to the calculation with the average retention rate, is 6.81 months (2.27 periods * 3 months). Due to the fact that the retention rate is not constant and changes for each period, we calculate the lifetime duration of the buyer by adding a weight factor to the number of surviving periods. For example, at the end of period 1 we have 385 active customer periods (385 customers * 1 period), at the end of period 2 we have 248 active periods (124 customers * 2 periods) and so on. If we add all the active periods and divide them by the total number of analyzed acquired buyers, the average lifetime duration of the customer would be 0.54 periods (1404/2589) or 1.63 months. This tells us that the group buying site needs to update its customer base every 2 months.

The above calculations of the retention rate, survival rate and average lifetime duration of the customer do not take into account the possibility that a buyer is inactive for a period of time and then reactivates and continues to be a buyer. The calculation of the retention rate is based on the customers in the analyzed period (t) who were buyers in all previous periods, i.e. if the buyer is not active for one period, it is excluded from the calculations in the following periods. Therefore, our analysis takes into account the customers who were not active for certain periods, but who remained buyers in the following periods, in order to calculate the lifetime duration of the buyer by adding weight factors to the active periods of buyers in which including those buyers who reactivated after a certain break from buying. Column 6 shows the number of total active customers for each period, including those who were not active in the previous period. The number of reactivated customers (column 7) is obtained by subtracting the active customers in the period (t) who were active in the previous period (t-1) (column 2) from the total number of active customers in the period (t), (column 6). By adding the weight factor, we calculate the active periods of the reactivated customers in the same way as in the previous case (column 8). We then express the total number of active periods, by adding the active periods of retained customers and the active

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periods of reactivated customers (column 9). With the new modified calculation, the average lifetime duration of the buyer is 3.64 periods (9529 total active periods / 2589 acquired buyers in the analyzed period). The survival rate with the modified calculation in the last period, in this case, indicates that 13% of the initial number of buyers survived until the end of the seventh period, which is drastically different from the survival rate of 0.7%, which was obtained with the initial calculations.

The modified calculations point to the importance of reactivating customers who have been inactive for some time and open up a new field of research to identify "dormant" customers who may be currently inactive and who should not be considered customers who have left the company. At the same time, a big role in the calculations is played by the size of the selected time range, which should be carefully selected, depending on the frequency of purchases of the cut user.

The same analysis was performed for the second selected group of customers that Grouper acquired in the second quarter of 2014, in order to determine whether there are significant differences between the rates of the two selected groups (Table 2). The time frame for monitoring the second group is in the period from July 2014 to March 2016, i.e. 7 quarters. The number of customers in the second analyzed group is 1855 customers.

Table 2. Retention rate analysis for customers acquired in the period April-June 2014

Period since acquisition	Number of active customers who were active in the previous period	Retention rate (Rr) (%)	Survival rate (SRr) (%)	Number of active periods of retained customers	Total active buyers	Number of reactivated customers	Reactivated buyer periods	Total periods of retained and reactivated customers
1	309	16,66	16,66	309	309	0	0	309
2	123	39,81	6,63	246	309	186	372	618
3	62	50,41	3,34	186	329	267	801	987
4	39	62,9	2,1	156	256	217	868	1024
5	26	66,67	1,4	130	257	231	1155	1285
6	24	92,31	1,29	144	314	290	1740	1884
7	17	70,83	0,92	119	387	370	2590	2709

Source: Grouper, Authors' calculations.

The average customer retention rate for the second analyzed group is 57%. The survival rate in the last analyzed period is 0.92%. The average lifetime duration, according to the average retention rate, is 2.3 periods or 6.9 months (2.3 periods * 3 months), while adding the weight factor to the active periods is 0.7 periods, ie 2 months (0.7 periods * 2 months). With our modified calculation for the second group, we estimate the average lifetime duration at 4.75 periods, i.e. 14.25 months (8816 total active periods / 1855 acquired customers in the analyzed period). At the end of the analyzed period, 20.9% of the initial group of 1855 customers remained buyers, which is a big difference, compared to 0.92% of surviving customers, if we exclude those who were inactive for certain periods.

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By applying the same calculations to the second analyzed group from the analysis of the first group, we notice that the obtained indicators are almost the same for the two analyzed groups, which indicates that there is no difference between users acquired in the first quarter and second quarter of 2014 and the information obtained are considered appropriate for forecasting customer activity received in future periods of operation.

For a more detailed analysis, we include an analysis of 2 more groups of customers, that we analyse on an annual bases compared to the first 2 groups that were analysed in periods of quarters. Table 3 follows the group of customers who became customers for the first time in 2011, during the next 4 periods per year. The total number of analyzed buyers is 5491.

Table 3. Retention rate analysis for customers acquired in the period 2011

Period since acquisition	Number of active customers who were active in the previous period	Retention rate (Rr) (%)	Survival rate (SRr) (%)	Number of active periods of retained customers	Total active buyers	Number of reactivated customers	Reactivated buyer periods	Total periods of retained and reactivated customers
1	2927	2927	53,31	53,31	2927	0	0	2927
2	2389	1978	67,58	36,02	3956	411	822	4778
3	2110	1396	70,58	25,42	4188	714	2142	6330
4	2128	1133	81,16	20,63	4532	995	3980	8512

Source: Grouper, Authors' calculations.

The average customer retention rate from 2011 in the following years was 68.15%, while 20.63% of buyers survived until the end of 2015. According to the average retention rate, the average customer lifetime duration is 3.14 years, i.e. 2.84 years, according to the active periods of buyers.

Furthermore, the second group of customers that Grouper.mk gained in 2012 (Table 4 is larger and it amounts to 8455 customers. The average retention rate is 63.35%, and the retention rate at the end of 2015 is 22.98%. The average lifetime duration of the customer, according to the retention rate is similar to the previous group, which is logical at a similar average retention rate, which is 2.73 years. According to the number of active periods, the average lifetime duration is 1.8 years, which is a result of the shorter period of analyzed periods and a smaller number of periods of active customers.

Table 4. Retention rate analysis for customers acquired in the period 2012

Period since acquisition	Number of active customers who were active in the previous period	Retention rate (Rr) (%)	Survival rate (SRr) (%)	Number of active periods of retained customers	Total active buyers	Number of reactivated customers	Reactivated buyer periods	Total periods of retained and reactivated customers
1	3605	3605	42,69	42,69	3605	0	0	3605

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2	2898	2898	80,39	34,32	5796	0	0	5796
3	2890	1941	66,98	22,98	5823	949	2847	8670

Source: Grouper, Authors' calculations.

If we compare the two analyzed groups, we notice that in the first periods in the first two groups that we monitor on a quarterly basis the retention rate is between 15% and 16%, while in the second groups that we monitor annually is between 43% and 53%, i.e. the dropout rate in the first period is much higher among the analyzed groups on a quarterly basis. The choice of the length of group monitoring periods is of great importance, and depends on the type of industry and the frequency of purchases by customers. For example, if analyzes are done to a company that sells everyday products, which are often purchased within a month by the buyer, a monthly or weekly analysis will be more appropriate. Because in our case it is a site for group buying with discounts through daily deals, which offers different categories of products, analysis were made according to two periods (quarterly and annually). The retention rate does not indicate the intensity of the buyer's activity, so if one buyer makes one purchase per year, in the annual analysis he will be considered a retained buyer until the end of the analyzed period, while in the quarterly analysis will be considered only in the quarter when he was active and then considered to have left the company.

The average customer lifetime duration, when analyzed on a quarterly basis, indicates that if the company wants customers who are active at least every 3 months, it should replenish the customer base every 6 months, according to the calculation with an average retention rate, i.e. every 2 months, according to the calculation with active customer periods.

The comparison indicates the importance of choosing the period for customer analysis, which is determined depending on the purpose of the analysis, the type of industry and the frequency of purchases made by customers. The analysis of the average time between purchases and the probability of activity of a customer gives a more detailed picture of the pattern of purchases and the frequency of purchases by a customer, on an individual level, which we illustrate below.

3.2 ANALYSIS OF THE AVERAGE TIME BETWEEN PURCHASES AND THE PROBABILITY OF BUYER ACTIVITY

The assessment of the customer activity is of great importance for the company especially for determination in terms of when the customer is currently inactive, and will reactivate (continue to shop) and when the customer stopped buying and left the company. The challenge is even greater given that the company has a variety of tools that can influence the reactivation of currently inactive customers. For example, if a company deems a customer to be inactive for a period of time, it may encourage the customer to reactivate by sending a personalized email based on their previous activity and purchases.

Advanced technologies enable the building of a personalized relationship with customers, which was missing at the time of analysis made on the group buying site, Grouper. Through the example of several analyzed buyers, we illustrate the possible

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application of measures when making decisions on an individual basis for a particular customer.

The analysis of the average time between purchases and the probability of customer activity is done for each retained customer until the last period of analysis by our first selected group, i.e. customers who first became customers in the first quarter of 2014 and remained active until the end of 2015 year (Table 5). Because these measures are calculated at the customer level, our goal in selecting this group is to illustrate how the company can benefit from these measures and how it can make decisions to increase customer activity. Customers who have been active during the 7 analyzed periods, from the moment they become customers, are presumed to be the desired customers for the group buying site Grouper.

The analysis of retention rate, survival and average customer lifetime duration for the selected group does not take into account the intensity of activity or the number of purchases by customers. In Table 5 we first calculate the average time between purchases, by periods, i.e. for 8 quarters, which we analyze from January 2014 to December 2015. Then we calculate the average time between purchases, for each customer, taking into account the AIT for each individual period that we express in months, multiplied by the number of months, i.e., in our case 3 months. The average time between purchases for the selected group varies from 0.48 months to 2.13 months, i.e customer 16 on average makes a purchase every 15 days (0.48 months x 30 days), and buyer 10 every 2.13 months.

Table 5. Analysis of the average time between purchases for customers acquired in the period January-March, 2014, and remained active buyers until the end of 2015.

Buyer	Average time between purchases for each period (AIT)								Average AIT	Months between purchases
	1	2	3	4	5	6	7	8		
1	1,00	1,00	1,00	0,20	0,25	0,25	0,20	0,08	0,50	1,49
2	0,33	0,33	0,33	1,00	1,00	0,50	0,50	1,00	0,63	1,88
3	0,50	1,00	0,20	0,50	1,00	1,00	1,00	0,33	0,69	2,08
4	1,00	0,33	0,33	1,00	0,50	0,33	0,50	1,00	0,63	1,88
5	0,25	0,20	1,00	0,14	0,13	0,25	0,17	0,20	0,29	0,88
6	0,07	0,14	0,25	0,50	1,00	0,50	1,00	0,20	0,46	1,37
7	0,08	0,07	0,17	0,25	0,25	0,50	0,50	1,00	0,35	1,05
8	0,33	0,25	0,50	0,14	0,20	0,13	0,33	0,20	0,26	0,78
9	0,50	0,33	1,00	1,00	0,33	1,00	1,00	0,07	0,65	1,96
10	0,17	1,00	1,00	0,50	0,50	1,00	1,00	0,50	0,71	2,13
11	1,00	1,00	0,50	0,25	0,14	1,00	0,25	0,33	0,56	1,68
12	0,50	0,50	0,33	0,50	1,00	1,00	1,00	0,50	0,67	2,00
13	1,00	0,25	0,33	0,33	0,50	1,00	0,10	1,00	0,56	1,69
14	1,00	0,33	0,33	1,00	0,50	1,00	1,00	0,10	0,66	1,98
15	0,33	0,13	0,25	0,50	0,17	0,25	0,50	0,50	0,33	0,98
16	0,11	0,25	0,20	0,11	0,08	0,08	0,25	0,20	0,16	0,48
17	0,20	1,00	0,17	0,50	0,20	0,20	0,25	0,11	0,33	0,99
18	1,00	0,33	0,33	0,33	0,20	0,14	0,11	0,50	0,37	1,11

Source: Grouper, Authors' calculations.

The group buying site may use this information at the customer level for a variety of purposes, for example: If more than one day has elapsed between the average

purchases since the last purchase, it may send a personalized e-mail to this customer in order to remind him and encourage buying. Furthermore, it can introduce reward points for buyers who have less time between purchases, as a reward for regular purchases.

In addition to the average time between purchases, the probability of a customer's activity P (Active) is a measure that calculates the probability of the buyer being active, i.e. making a purchase in a certain period (t), based on his previous activity in the past period and his shopping template. For the same group of buyers we calculate the probability of buyer activity in the 9th period, i.e. in the first quarter of 2016 (Fig.1). Probability is calculated by taking into account the total number of purchases per customer, for the observed period (n), and the time elapsed since the last purchase (τ), expressed as part of the observation period. In our case, we calculate the probability for the customer to be active in the 9th period, i.e. the first quarter of 2016, if we know that he was active in the previous 8 quarters.

$$\tau=8/9=0,888$$

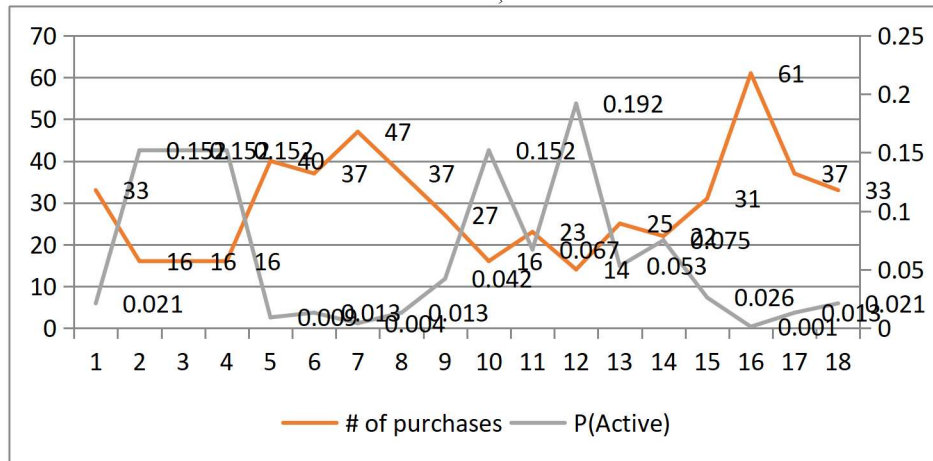


Figure 1. Analysis of the probability of customer activity in the period January-March 2016 for buyers that were acquired in the period January-March 2014 and remained active buyers until the end of 2015.

Source: Grouper, Authors' calculations

We can notice that the probability of activating a customer is higher for buyers who made a smaller number of purchases in the analyzed period (buyer 2, 3, 4 and 12). This is due to the assumption that the customer's buying pattern is constant in each period, i.e. the buyer does not change the buying habit. In our case, since this is a group buying site that constantly offers a variety of products, services and travel deals, this assumption is a limitation of the measure. For example, if we take into account the seasonal consumption, for example in summer and winter for annual trips or for certain campaign activities that can be practiced by the site of group discounts by placing different deals in different periods, we consider this measure to be too simplified to be able to find application in such a site, e-marketplace or company that offers different services and products in different periods.

CONCLUSION

The research analyzes customer activity by measuring the retention rate, survival rate and average customer lifetime duration of four groups of customers acquired in different periods from the group buying site Grouper. In the analysis of the first two groups of customers, acquired in the first two quarters of 2014, the average retention rate is 56% and 57%, respectively, while in the second two groups acquired in 2011 and 2012, it is 63% and 68%, respectively. The retention rate is lower in the initial periods because a large number of buyers leave in the first periods and increase during the following periods. The average survival rate, in the last analyzed period, for the first two groups is 0.7%, ie 0.9%, while for the second two groups it is 21% and 23%, which shows that many customers are active at least once a year, while a small number are active at least once a quarter. The average lifetime duration of the customer, calculated according to the average retention rate, is seven months for the first two groups of buyers and 3.14, i.e. 2.7 years for the second two groups of buyers. According to the number of active periods of the buyers, the average lifetime duration of the customer is 1.63, i.e. two months for the first two groups and 3.84, i.e. 1.8 years for the second two groups of buyers. Since Grouper.mk sells various products and services at discounts that can be used more often by customers, i.e. at least several times during the year, a more appropriate analysis is the analysis conducted on a quarterly basis, which indicates that the company should make additions to the customer base, that is, to gain new customers every two months. Additional analysis at the customer level was conducted on eighteen customers who remained active customers until the last observation period of the first analyzed group of customers acquired in the first quarter of 2014. By measuring the average time between purchases, a company can increase sales and customer activity, for example by sending personalized emails to customers who have not made a purchase in a certain period, depending on the level of average time between purchases. The probability of customer activity is not considered an appropriate indicator in the case of Grouper, which offers a variety of products and services at different times, due to the assumption that each customer's purchase pattern remains unchanged over time. Each company, depending on the industry in which it operates, can use those measures of customer activity that are suitable in order to create a comprehensive image of customers, increase their activity and make appropriate marketing decisions.

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**WHERE ARE IS MACEDONIAN EDUCATION AND THE PANDEMIC
COVID -19**

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Rashela Mizrahi**

Abstract

The education system on a global scale is one of the most important segments in any developed society in the world. Without a doubt, Covid-19 made our way of life a whole new frontier. Analyzing the series of relevant research, studies and reports for our country, this paper integrates the educational and social component and its impact on students in Macedonia and provides a theoretical overview of Macedonian education including the social aspect and the Covid-19 pandemic.

The change requires a new pedagogical organization of the subjects in the school, new knowledge and skills with a constructivist approach to the problems.

The education system should be ready for all children. Children in schools need to be safe and protected. The impact of the crisis is disproportionate, it affects the education system and the risk for the most marginalized population is huge, and the institutions are the ones that should pay great attention to the situation in our country. Global inequalities in access to education may, widen and the global learning crisis will hamper progress towards the goal of sustainable development, calling for universal access to quality education.

Keywords: educational component, social component, Covid-19 pandemic

JEL classification: I00

INTRODUCTION

According to the regular economic report for the Western Balkans published in the spring of 2020, the countries of the Western Balkans², like most other countries in the world, were forced to impose severe restrictions on economic life to cope with the COVID-19 pandemic.

Loss of learning will lead to loss of skills, and the skills that people have related to their productivity. Although children are not the face of this pandemic, they could be among its biggest victims, as children's lives are still changing in profound ways. All

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² Natasha, Rovo and others. *Economic and Social Impact of COVID-19 - Determining Conditions* - Regular Economic Report for the Western Balkans No. 17. (Washington: World Bank Group, 2020), 3-4.

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children, of all ages and in all countries, are affected, especially by socioeconomic influences and it is a universal crisis and for some children, the impact will be lifelong.

In addition, the harmful effects of this pandemic will not be evenly distributed by equally, they are expected to be the most harmful to children in the poorest countries¹. 188 countries have introduced school closures, affecting more than 1.5 billion children and young people. The potential losses that can occur in the learning of today's young generation and in the development of their human capital are difficult to see. More than two-thirds of countries has introduced a national distance learning platform, but among low-income countries the share is only 30 percent.

Prior to this crisis, almost a third of the world's young people were already digitally excluded. This year, 900 million children (out of 1.5 billion worldwide²) from preschool to high school returned to school between August and October. According to UNESCO figures, however, only half of them 433 million in 155 countries will return to classrooms at this stage. One billion students have faced either school closures or uncertainty, and according to UNESCO, the most vulnerable populations, especially girls, are particularly at risk.

1. BEGINNING OF THE SCHOOL YEAR 2020/2021 IN MACEDONIA - COMPARED TO EUROPE

In most countries in Europe, the 2020/2021³ school year begins in early September. Despite some differences, countries across Europe show many similarities in terms of the structure of the school year. In 13 countries / regions⁴, it generally starts in August. The countries where the school starts the earliest are Denmark and Finland. In Germany, although there is an official start date of August 1, in reality, schools in different states start from August 3 to September 14, but due to the pandemic, some schools are still facing re-closure. This year, in 13 European countries / regions, the school year starts on 1 September. In some countries / regions, the start date is usually around mid-September: this is the case in Southern Europe (for example, Albania⁵, Greece, Italy, Portugal and Spain), but also in Bulgaria and Luxembourg.

In Malta, children return to school in late September; in Macedonia and Montenegro on October 1 instead of September 1 (due to Covid-19). In Austria,

¹ UNICEF Data Center. *COVID-19 and children*. accessed October 1, 2020. <https://data.unicef.org/covid-19-and-children/>.

² UNESCO, *As the new academic year begins, UNESCO warns that only one third of students will return to school*. Accessed 31 August 2020. <https://en.unesco.org/news/new-academic-year-begins-unesco-warns-only-one-third-students-will-return-school>.

³ European Commission, Executive Agency for Education, Audiovisual and Culture. *The organization of school time in Europe, primary and general secondary education 2020/21 Eurydice - Facts and figures*. Accessed September 30, 2020. https://eacea.ec.europa.eu/national-policies/eurydice/sites/eurydice/files/school_calendar_2020_21_0.pdf.

⁴ *ibid*, 6.

⁵ Another postponement of the start of the school year in Albania from November 1, 2020.

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Germany, Spain, Italy, the Netherlands and Switzerland, the beginning and end of the school year vary considerably by region. This year due to Covid-19, some countries have adapted and for example in Turkey, the school year started online on August 31 and with physical presence on September 21, 2020. The most common range of school-days is between 170 and 190 across Europe.

The number of school-days varies between 165 days in primary education in Albania, Malta and Romania and 200 days in Denmark and Italy. In about half of the countries / regions, it is between 170 and 180 days; in 17 countries / regions, the number varies between 181 and 190 days. In principle, the number of school-days is the same in primary and secondary education, but there are a few exceptions: in France and Albania (both in secondary education), Greece (in secondary education, school-days and exams are included), Romania and In Serbia, for example, the number of school-days is higher in secondary education than in primary education. On the other hand (there are fewer school-days in secondary education than in primary education) in Ireland, Cyprus and Bosnia and Herzegovina. In countries where the number of school-days varies according to the grade within a certain level, it is often the last grade that has the lowest number of schools.

Starting from October 1, 2020, the teaching in the schools in Macedonia started with the application of a combined model of teaching (teaching with physical presence¹ and online teaching²) and a platform for distance learning has been developed. The effects of the realization of this school year will be subject to analysis in some future research in the next period.

2. RELEVANT RESEARCH FOR MACEDONIA – EDUCATION REVIEW

According to a study on Macedonia by UNICEF, USAID and Finance Think³, the main allegations are that the pandemic caused by the global spread of the Covid-19

corona virus has harmed the social, educational and health well-being of children, because the most vulnerable being the hardest hit. Children are directly affected, through the closure of schools, the closure of extracurricular activities and childcare

¹ Commission for reviewing the requests submitted by the founder of the school for organizing classes with physical presence. *Report on the work of the Commission for the period from 25.09.2020 to 29.09.2020 with proposed conclusions for teaching with physical presence in the schools in the Republic of North Macedonia*. Skopje, 2020. accessed on October 1, 2020. https://vlada.mk/sites/default/files/img/izvestaj_za_vlada_7_29092020.pdf.

² *National distance learning platform*. Skopje: Ministry of Education and Science, 2020. accessed on September 30, 2020. <https://schools.mk/>.

³ Marjan, Petreski and others. *Key Findings on the Social and Economic Effects of COVID-19 on Children in North Macedonia - Quick Analysis and Suggestions for and policy proposals*. Accessed September 5, 2020. <https://www.unicef.org/northmacedonia/media/6826/file/Highlights%20EN.pdf>

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facilities, social distancing and isolation, which places a burden on their educational, cognitive and emotional development, with the risk of increasing levels of anxiety and stress. Children are also indirectly affected, by reducing household incomes, which reduces their material and social well-being and impairs access to social and health care.

The study also states that Covid-19 has increased child poverty in Macedonia¹. It is very likely that the pandemic pushed an additional 16,000 children below the poverty line. This equates to an increase in the child poverty rate from the current 29.3 per cent to 33.3 per cent, a rate not seen in the country since the Income and Living Conditions Survey (2010). The projected growth is stronger than that observed during the Global Financial Crisis 2009/10. The effect of increasing poverty as a consequence of Covid-19 is strongest in children living in households with 3 or more children and where adult family members have a low level of education, with no significant difference in gender and age of children. The poorest children may suffer more from Covid-19 as a result of the combined effects of multiple risks and disadvantages, such as insufficient internet access and poor housing conditions, which can be particularly important for children's learning progress during closure and non-work of schools. Such weaknesses are especially visible in children from the Roma population.

In addition, it is stated that the poorest children are likely to suffer more from the effects of Covid-19 given the increasing prevalence of several disadvantages, such as malnutrition and stunted growth, low involvement in preschool forms of child care and upbringing, and difficulties in acquiring basic learning skills, limited access to sanitation and clean drinking water and exposure to polluting fuels for cooking and heating the households in which they live². The study and analysis of domestic violence found that domestic violence increased during Covid-19, with children accounting for almost 10 percent of all victims. Thereby, cases of peer violence were reported among foster children in the forms of foster care in the social protection system.

They probably suffered increased peer violence during Covid-19. As a result of restrictions and restrictions on movement, the violation of the right of children to see the parent with whom they do not live has increased. Budget programs related to children have been cut in conditions of a slight increase in total government expenditures with the budget rebalance from May 2020³. In particular, some development programs, such as inclusive education, have faced serious reductions that further exacerbate children's vulnerabilities and the capacity of institutions (especially preschools and schools) to adapt to the protracted crisis and the potential new wave of pandemics.

¹ *ibid*,2-4.

² *ibid*,4.

³ Government of the Republic of North Macedonia. *Decree with legal force for amending and supplementing the budget of the Republic of North Macedonia for 2020 during the state of emergency*. Accessed June 10, 2020.

https://finance.gov.mk/files/Uredba_za_dopolnuvanje_na_budget2020.pdf

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The country's education system has shifted to distance learning¹. However, the implementation of this process was in some parts left to the schools and teachers themselves, without unifying the tools and methods used, which created unequal learning opportunities for children.

Learning disabilities may be greatest for children from poor households, Roma children and children with special needs. They faced insufficient access to education, lack of quality parental support and school support, despite the insufficient resources of many schools in the areas where most of these children live². Teaching staff are not adequately prepared for distance / digital learning despite selective and individual efforts that have created rapid benefits. According to the opinion sent by the Deputy Ombudsman in August 2020 to the Ministry of Education and Science, although teachers should use ICT in the teaching and learning process and in the classroom, the pandemic revealed that ICT skills of teachers related to planning, implementation of learning distance and assessment are insufficient for the introduction of distance learning and because of that the importance of rapid investment in such skills of the teaching staff is extremely important³.

The mobilization of human resources through the education system was noticeable with the main goal of helping the children's learning process. The most notable examples include the creation of the TV classroom and the Eduino platform aimed at enhancing the learning of children in preschool and primary education. Efforts continued to form working groups to develop a digital learning strategy⁴.

According to the regular economic report for the Western Balkans No. 17, published in the spring of 2020, in the section Economic and Social Impact of Covid-19, the education note states that there will continue to be local interruptions during the next school year with delayed and partial opening of schools. Education system will need to continue to respond to disruption while preventing and minimizing learning losses and protecting equality and inclusion. Achieving all this effectively requires the fulfillment of several preconditions such as: access and connectivity of ICT;

¹ *National web platform for education*. Skopje: SyNRG Software & IT Solutions, 2020. accessed on September 15, 2020. <http://www.eduino.gov.mk/>.

² Vaska, Bajramova. *Opinion from the Ombudsman to the Ministry of Education and Science*. accessed on August 7, 2020.

<https://www.radiomof.mk/naroden-pravobranitel-do-mon-da-se-ostvarat-uslovi-za-digitalizacijana-nastavata-no-dostapna-za-site-uchenici/>.

³ Marjan, Petreski and others. *Key Findings on the Social and Economic Effects of COVID-19 on Children in North Macedonia - Quick Analysis and Policy Proposals*. Accessed September 5, 2020. <https://www.unicef.org/northmacedonia/media/6826/file/Highlights%20EN.pdf>.

⁴ *ibid*, 3.

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availability of quality content online; distance and online teacher training; support for parents for distance learning and online learning and ample teaching time¹.

Students in the Western Balkans have less access to high-speed internet than their EU peers, and regional data show a clear challenge to equality. On average, in the Western Balkans, about 60 percent of households have fast enough internet to meet the online learning requirements defined in this analysis as 10 mbps or higher. However, it should be noted that 10 mbps is lower than the standards accepted in the US (25 mbps) and the EU (30 mbps). Using these higher conditions, most households in the region are not equipped with high speed internet.

Among primary school students in the Western Balkans, owning a television set is widespread (98%) which is encouraging, as mass broadcasting is the preferred mode of teaching for primary school students. The data is based on recent reports from national regulators of electronic communications - internet speed, compared to 48 per cent in Macedonia and 64% in Serbia. There are also a large number of students in the Western Balkans, around 22%, who say they have little or no internet access at home, compared to just 11 per cent in the EU27. It is even more significant that although students in the highest quintile according to economic, social and cultural status (ESCS)

have almost universal internet access (including 100 % of these students in BiH, Macedonia, Montenegro and Serbia, which is not the case with their peers in the lowest quintile, and the differences can be as high as 50%), points (Albania)².

Maintaining effective distance and online learning, especially in the months leading up to the pandemic, will also depend on whether households have information resources available for educational purposes. PISA 2018 data, although limited to high school students, provide an assessment of households' readiness for online education. On average, one in ten student households in the Western Balkans does not own a computer; in Albania it is almost a third more, 28%. Possessing information resources is very different from using them for education. Although an average of 86% of students said they had access to a computer they could use for school work, the percentage was likely to be lower in conditions of limited mobility when there was competition for the use of those resources (for example, the parents work at home, education of siblings). Apart from the limited connectivity, the availability and quality of digital content is also at stake. Although there is little information about the countries, the PISA 2018 results show that such content and the online support organization are quite limited. It is also evident that most students are not enrolled in a school that offers an effective online learning platform. The sudden transition to online

¹ Natasha, Rovo and others. *Economic and Social Impact of COVID-19 - Determining Conditions (Education Note)* - Regular Economic Report for the Western Balkans No. 17. Accessed 10 June 2020.

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/590751590682058272/the-economic-and-social-impact-of-covid-19-education>, 5.

² *ibid*, 6.

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distance learning during the pandemic has forced schools to grasp the next best alternative such as recorded lessons and the distribution of e-learning materials via e-mail. It is not clear whether these materials were designed for use in online distance learning or should have been improvised¹.

Parents who are also teachers during the pandemic may not have the ability or time to help students. This is especially true for younger students, students with lower grades and those with special needs. Even in the best of circumstances, many parents are reluctant to cope with distance learning and homework, especially those unfamiliar with technology, have limited education and resources, have more children to support, and have to make decisions about how to cope with the insufficient number of IT devices. For example, the share of adults with basic or better digital skills ranges from 24 percent in Bosnia and Herzegovina to 32 percent in Macedonia 46 percent in Serbia, compared to 56 percent in the EU27 and over 70 percent in countries such as Germany, Denmark and the Netherlands².

Before the global pandemic broke out, education systems in the Western Balkans were already facing serious challenges. To varying degrees, they do not deliver the skills needed in the job market. A review of PISA 2018 results by country shows that on average 53 percent of students do not acquire the basic skills to function effectively in a modern workforce, compared to 23 percent in OECD countries. Over 78 percent of 15-year-olds in Kosovo and over 50 percent in Albania, Macedonia and Montenegro are functionally illiterate (they score below Level 2 in PISA). Even in Serbia, the country with the best results in the Western Balkans, 38 percent of students are functionally illiterate. There are also persistent inequalities in learning outcomes to term, location and income group. Failure to develop basic cognitive skills undermines the ability to acquire higher-order skills for success in a rapidly changing knowledge economy³.

Because they are an emergency response, distance learning measures may not be as effective as classroom instruction, especially if they have to last a long time. Schooling increases earnings, especially when it comes to quality that is usually measured by test

¹ *ibid*, 7.

² Eurostat data. Total digital skills are measured by an EU survey of the use of ICT in households and by individuals. This is based on a composite indicator derived from selected activities performed by individuals aged 16 to 74 on the Internet in four specific areas: information, communication, problem solving and content creation.

³ Level 2 is a basic, level of development at which students begin to demonstrate competencies that will enable them to participate effectively later in life as students, workers or citizens. OECD 2017.

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scores. Using the results after reading from PISA 2018, the potential loss of what has been learned can be estimated¹.

Measures aimed at limiting the corona virus pandemic, such as the temporary closure of educational institutions, have resulted in disruptions to the education system and process, both in Macedonia and around the world. On March 10, 2020, the Macedonian Government announced a decision² to temporarily close all educational institutions (kindergartens, primary and secondary schools, as well as universities and all other extracurricular institutes of education). According to UNICEF monitoring, as of June 25, closures were conducted across the country, affecting a total of 359,623 students³.

During the summer, the institutions responsible for implementing education policy (primarily the Ministry of Education and Science) had to determine the approach to be taken for the new school year. However, such efforts will be limited by the ongoing spread of the pandemic, as well as by the existing structural and technical capacity of the relevant institutions. The combination of these processes makes the country unprepared to adequately respond to the challenging new reality imposed by Covid - 19⁴.

The OECD Report on the "Education System in Macedonia" from 2019 revealed that the level of learning in the country is among the lowest in Europe and the Western Balkans. This reflects the systemic challenges of low financing, volatile governance and limited capacity. Despite some improvements, young people in Macedonia continue to drop out of school with the lowest learning outcomes in Europe and the Western Balkans. There are still large differences in education outcomes between different ethnic groups. While the poverty rate has declined in recent decades, poor educational performance has limited the employment and livelihood opportunities of

¹ Natasha, Rovo and others. *Economic and Social Impact of COVID-19 - Determining Conditions (Education Note)* - Regular Economic Report for the Western Balkans No. 17. Accessed 10 June 2020.

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/590751590682058272/the-economic-and-social-impact-of-covid-19-education>, 10.

² *Minutes from the Fifteenth Session of the Government of the Republic of North Macedonia held on March 10, 2020*, 8.

³ UNICEF Data Center. *COVID-19 and children*. Accessed October 1, 2020. <https://data.unicef.org/covid-19-and-children/>.

⁴ Adela, Gjorgjioska. *Covid 19: Disruptions and improvised solutions in a fractured education system, social briefing for Macedonia*. Accessed September 12, 2020. https://china-cee.eu/wp-content/uploads/2020/07/2020s06_North-Macedonia.pdf.

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many individuals and hampered national development¹. Furthermore, the OECD locates one of the main reasons for the inefficiency of the system to lie in the way teachers and principals are appointed in education often reflecting political affiliations rather than the competence and experience demonstrated. Finally, the OECD notes that the strategic documents do not set specific targets for the education sector, in particular there is a lack of targets for raising learning outcomes, despite the country's low performance in international student assessments².

The closure of schools will deepen the already great inequality in learning. The achievement gap between the poorest and richest students, which is already in the range of 1.5 years of schooling in Albania, BiH and Kosovo (66 PISA points) to over 2 years in Macedonia (90 PISA points) it will increase even more, as students from poorer environments will use less distance learning modalities.

An analysis of the Organization for Economic Co-operation and Development (OECD) survey of 15-year-old high school students in 2018 shows that, despite a slight improvement over the 2015 study, they still lag far behind their peers in developed countries. In reading and mathematics, high school students are ranked 67th out of 77 countries, while in scientific disciplines they are slightly better - 63rd³. In this context, it is worrying that in one-third of the countries and economies that participated in PISA 2018, more than one in two students said that intelligence is something for them that they can not change. In the Dominican Republic, Indonesia, Kosovo, Macedonia, Panama, and the Philippines, at least 60% of students agreed or disagreed with that statement. Those students are unlikely to make the investments they need to succeed in school and in life⁴. Computer-based tests were used in most countries (and in Macedonia, students still used pen and test paper), with assessments lasting a total of two hours⁵. At the same time, it was emphasized that Macedonia⁶ did not participate in the assessment of the global level of competence.

¹ OECD, Results of PISA 2018 (Volume I): What students know and can do, PISA. Accessed September 3, 2020.
http://iave.pt/images/FicheirosPDF/Estudos_Internacionais/PISA/resultados2018/PISA18_relatorio_Internacional.pdf.

² *ibid.*

³ OECD, *Results of PISA 2018 (Volume I): What students know and can do, PISA*. Accessed September 3, 2020.
http://iave.pt/images/FicheirosPDF/Estudos_Internacionais/PISA/resultados2018/PISA18_relatorio_Internacional.pdf.

⁴ *ibid.*, 9.

⁵ *ibid.*

⁶ *ibid.*

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According to the regular economic report for the Western Balkans No. 17, published in the spring of 2020 on the Economic and Social Impact of Covid-19 in the section Poverty and Welfare of Households¹, it is stated that the combined effects of lower incomes and lower remittances as a result of Covid-19 are likely will increase poverty to pre-2017 and even pre-2015 levels depending on the duration of the crisis.

3. CONCLUDING REMARKS

When schools reopen, it is important to carefully consider the policies and experiences of countries that have already reopened. In addition, it is necessary to provide accelerated learning programs to compensate for the lost learning of students, especially those who are at risk of falling behind, as well as to provide adequate funding to support new needs for knowledge recovery, especially for students in a worse position. It is necessary to have a strategic plan for the future school and to have a consistent plan.

Policy makers need to create a framework for each level of education - primary, secondary and tertiary and focus equally on the implementation of online education, the required methodologies and the desired results of practice. It is necessary to adapt all planned activities by subjects and areas, in accordance with the annual work program and to adapt them to teaching in conditions of distance learning. Strengthening and improving the IT skills and competencies of the teaching staff is crucial, as well as the professional service, through additional training for online work and timely and continuous assistance and support of the teaching staff by professionals who will be available in the basic and high schools. However, Covid-19 is an opportunity to build and redesign education for the future.

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¹ Natasha, Rovo and others. *Economic and social impact of COVID-19 - determining the conditions (note on poverty and well-being of households)* - regular economic report for the Western Balkans number 17. accessed 15 July 2020. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/236311590680555002/the-economic-and-social-impact-of-covid-19-poverty-and-household-welfare>

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<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/590751590682058272/the-economic-and-social-impact-of-covid-19-education>.

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**COVID - 19 AND PROVIDING QUALITY TEACHER EDUCATION: KEY
TO BUILD A RESILIENT MACEDONIAN EDUCATION SYSTEM**

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Abstract

Today, educational services are constantly evolving and changing, and thus the definition of quality education should be developed and changed, which includes quality learning and quality teaching. Investing in quality teacher education is key to building a more resilient education system after the Covid-19 pandemic. In addition, better teacher preparation for class, including innovation and problem solving, is needed to manage complex contingencies. It is also necessary to invest in continuous professional work, on-the-job development and training in order to empower teachers, as well as to ensure that working teachers are involved in systemic education reform so that everyone has the knowledge and skills needed to ensure that no one is left behind.

In this paper the emphasis is on the fact that quality education has a key role for teachers in shaping the values of future generations. Analyzing the relevant research on digital competencies of teachers during the Covid - 19 pandemic, it is necessary to conclude that they have a huge impact to ensure that the next generation is ready to become a proactive agent for change in our society and therefore the competent institutions must invest in quality education.

Keywords: quality education, teachers, digital competencies, Covid 19

JEL classification: A2; I21; I250; I260

INTRODUCTION

For the economy, digital technologies are a major driver of growth, productivity, competitiveness and innovative capacity. For the job market, digital technologies are a challenge for existing jobs, especially those that involve routine tasks and the opportunity to create new ones, mainly related to the so-called digital economy, by designing jobs where people increasingly interact with digital tools.

The main factor in the pedagogical use of digital technologies is the competence of the teacher. In addition to the digital competencies needed for everyday life, teachers need specific digital competencies to enable them to use technology effectively in the classroom and for their broader responsibilities in schools.

In Macedonia, in the forefront during the coronary crisis, in addition to health professionals, are teachers who need to help students navigate the world of distance learning, all too often without sufficient guidance, training, support and resources. The current pandemic has an impact on the capacity of teachers to provide quality teaching

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and improve student learning outcomes. The UNESCO Institute for Statistics estimates that the world will need to recruit and train around 69 million teachers¹ by 2030. One of the indicators is to significantly increase the supply of qualified teachers by 2030, including through international cooperation for teacher training in developing countries, especially the least developed countries and small island developing countries.

As teachers prepare to use digital tools in our country, they need to consider ways they may need to adapt to suit their learning and learning environment, national and local cultural norms, and make them accessible to as many different types of students as possible.

1. CHALLENGES OF TEACHERS FOR THE NEW SCHOOL YEAR 2020/2021 IN MACEDONIA

In Macedonia², the competent institutions in September 2020 are still testing the national distance learning platform³ and are struggling to keep the system stable.

Teacher education should be one of the priorities in the agendas of education policy makers in Europe and around the world. This stems from the importance that teachers have, as a key factor in realizing the potentials of students and their development into responsible citizens who will actively participate in the advancement of life in their environment. In realizing this complex and responsible social role, the teaching profession today faces many challenges. At European level, they are recorded in several documents within the strategic framework for European cooperation in education and training⁴. The education of teachers for primary education in Macedonia is regulated by several legal acts which, directly or indirectly, refer to certain aspects of the continuity of the preparation and professional development of teachers⁵.

Teachers today are expected to take on other responsibilities, some of which they are unprepared for, as well as translate their traditional teaching content into online content and support students in distance learning. The special report from the conducted research on the situation with the realization of the right to education of

¹UNESCO Institute for Statistics, accessed 5 September 2020.

https://uis.unesco.org/sites/default/files/documents/guide-to-measuring-information-andcommunication-technologies-ict-in-education-en_0.pdf - (2019).

²Balkaninsight. accessed September 29, 2020. <https://balkaninsight.com/2020/09/29/montenegro-north-macedonia-launch-school-year-amid-covid-19-worries/>.

³ National distance learning platform. Skopje: Ministry of Education and Science, 2020. accessed on September 30, 2020. <https://schools.mk/>.

⁴ European Commission, Survey of Schools: *ICT in Education Benchmarking Access, Use and Attitudes to Technology in Europe's schools*. 2013. accessed 10 September 2020. <https://ec.europa.eu/digital-singlemarket/sites/digital-agenda/files/KK-31-13-401-EN-N.pdf>.

⁵ Suzana, Miovska and others. *Teacher education in primary education in the Republic of Macedonia: conditions and perspectives*. Skopje: Foundation Open Society - Macedonia, 2018. accessed 10 August 2020. https://fosm.mk/wp-content/uploads/publications/Istrazivanje%20na%20nastavnice_web.pdf.

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children with special educational needs in primary schools in the Republic of N. Macedonia published in March by the Ombudsman states that for successful implementation of the Law on Primary Education, especially from of inclusive education, it is necessary to further train¹ and improve the professional competencies of the entire educational staff to work with students with disabilities, by providing additional training, education and workshops that would be realized continuously, and which would be through the prism of the rights of children and persons with disability by experts in the field as well as providing accessible and accessible school facilities, as well as accessible and accessible school environments for students with disabilities, and in that direction, in cooperation with the local government to take measures for greater information and education of parents and students with acceptance of students with disabilities.

With the WHO declaring the Covid - pandemic and the ensuing quarantine in many countries, one of the hardest hit sectors was education. As a consequence of the crisis, in the past period, the quality of education received by students in primary education has inevitably declined, but not for all students equally. The existing economic inequalities, which were an obstacle even before the crisis, have become even more acute and have further contributed to the difference in the quality of education. Unfortunately, there are still schools in Macedonia where internet access is inadequate and ICT infrastructure is in poor condition or it is not there at all. This situation, as well as the very poor economic situation of the families, has led to a certain number of students² not being able to attend classes online at all.

The report published in September 2020 by the Metamorphosis Foundation states that although in the past there were positive examples of private companies appearing as donors of ICT equipment in certain schools, investing in upgrading the ICT infrastructure of schools should not indulge in this way of equipping the classrooms. An obstacle in this process is the lack of a guide and teaching staff and management with appropriate ICT knowledge needed in the procurement of the necessary hardware and software³. The establishment of a minimum ICT standard for primary schools, in wider consultation with the IT community, will enable the removal of this obstacle. Namely, in the research, 41% of the teachers think that they were not ready for the realization of online teaching at the moment when the schools were closed. On the other hand, 58.3% think they were ready for such a step. When asked about the need for additional training for better online teaching, focused on the technical aspect, 50%

¹ Ixhet, Memeti. *Special report from the conducted research on the situation with the realization of the right to education of children with special educational needs in the primary schools in the Republic of North Macedonia* (Skopje: Ombudsman, 2020), 15.

² *Concept for distance education*. (Skopje: Ministry of Education and Science, 2020). According to the Concept for Distance Education, the latest data provided during the COVID-19 crisis show that around 30,000 students (from vulnerable categories) do not have an IT device at home.

³ *Situations and Challenges of Implementing Online Teaching in Primary Schools*, Research Report. (Skopje: Metamorphosis Foundation, 2020), 36.

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of the teaching staff completely agree that training in the use of specific software (tools) would be very useful.

The main problem that arises before the start of the new school year 2020/21, viewed from a purely technological point of view, is the equipment with technical aids (primarily laptops and computers) to maintain the mandatory online teaching. According to the data from the same survey, almost half of the participants, 44.5%, reported that they use their own or personal laptop at school for business purposes.

The crisis triggered by the Covid-19 virus inevitably had its implications for secondary education in Macedonia, especially in the way of teaching. Instead of regular classes, almost the entire last quarter of the school year 2019/2020 took place through the so-called distance learning. But to what extent does this model of education comply with the right to education defined in the United Nations¹ Universal Declaration of Human Rights, the principles of quality and inclusive education, and the legal provision for free secondary education for every student?

Disruption of education stemming from the Covid-19 pandemic will cause a loss of skills that could result in a 1.5%² drop in global economic output for the rest of this century, according to the Organization for Economic Co-operation and Development.

The study, *Challenges of Implementing Distance Learning in Covid-19 Time in Secondary Education*, published by the Konrad Adenauer Foundation³, states that the only training organized by the competent institutions mentioned was the training organized by Microsoft to use the Microsoft platform. Teams (Microsoft Teams) but, although some of the teachers were familiar with this training or participated directly in it, most of the teachers were not aware at all that this type of training was organized, and some of the teachers acquired their skills using additional education opportunities through non-formal education.

According to the European Commission Report on Macedonia⁴ published on October 6, 2020 the country is moderately prepared in the area of Education. The introduction of measures from the comprehensive 2018-2025 Education Strategy is progressing slowly. The recommendations of the 2019 report were only partially addressed and therefore, remain valid. In the coming year (2021), the country should in particular: implement the new strategic framework for education, particularly the targets for preschool education; increase support for teacher training and teacher professional development and ensure an effective assessment process; improve access to quality education for all, in particular preschool enrolment, children with disabilities and children from Roma communities. Also, additional efforts are needed to address

¹ *Universal Declaration of Human Rights*. Article 26, accessed 12 September 2020. https://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf.

² Reuters, accessed October 3, 2020. <https://www.reuters.com/article/us-health-coronavirus-education-impact-idUSKBN25Z1BC>.

³ Ivan, Jovanov. Ilija, Stankovski. *Challenges of implementing distance learning in the time of Covid-19 in secondary education*. 2020, Skopje: Konrad Adenauer Foundation, 17.

⁴ European Commission. accessed 6 October 2020. https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/north_macedonia_report_2020.pdf.

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the mismatch between skills required by the labour market and education and training outcomes.

2. RELEVANT RESEARCH ON TEACHERS' DIGITAL COMPETENCIES

Digital competence is one of the eight key competencies and refers to the safe and critical use of the full range of digital technologies for information, communication and basic problem solving in all aspects of life. It is necessary for learning, work and active participation in society, and for school education, as important as the understanding of competence itself, is to know how to help in its development.

According to UNESCO¹, teachers need access to relevant, quality professional development and support in times of crisis. In an effort to secure teacher support at this time, UNESCO has amassed a wealth of resources² for teachers to create their own digital content and the UNESCO International Capacity Building Institute has opened its virtual teacher campus. At the same time, it is emphasized that, unfortunately, even in more stable contexts with adequate infrastructure and connectivity, many teachers lack even the most basic ICT skills. In general, there is a global need to build an understanding of e-readiness for educators and schools and to modernize it teacher education through the curriculum and pedagogical innovation to meet the needs of a post-industrial knowledge-based global society.

In the Macedonian education system it is important to support the well-being of teachers, social-emotional competencies and resilience before, during and after the crisis. New research on teachers in crisis contexts emphasizes the importance of building socio-emotional competencies and resilience of teachers³. Those who have developed their own psychosocial skills and who have access to learning sessions with in-house counseling services are better equipped to provide psychosocial support to their students and help them in the future, these socio-emotional skills need to be better integrated and to support teachers.

The conclusions stated after the survey conducted by Reactor⁴ stated that almost 77% of the teachers in the research sample in Macedonia could not get in touch with students during certain periods during distance learning and most teachers require training in the use of educational technology. Most teachers stated that they needed training and additional support for distance learning, noting the following priorities: access to digital educational materials (62 percent), IT equipment (58 percent) and digital textbooks (56 percent) and training for that how to use digital platforms to

¹ UNESCO, *UNESCO Education Response to COVID-19* (notes 2.2. For the education sector). 2020, 3. accessed 10 September 2020. <https://unesdoc.unesco.org/ark:/48223/pf0000373338>.

² UNESCO, accessed 5 September 2020.

<https://en.unesco.org/covid19/educationresponse/solutions>.

³ UNESCO, *Support for Teachers and Education Staff in Times of Crisis*. 2020, 5.

⁴ Reactor. 2020. *Experiences and attitudes for distance learning - initial findings from research conducted with schools with principals, teachers and parents*. Skopje: Reactor - Research in action.

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conduct classes online (58 percent) and digital platforms to support student assessment (54 percent).

The Inter-Agency Network for Emergency Education¹ has developed minimum education standards that have been developed based on the experiences of thousands of education stakeholders working around the world that offer valuable guidance on how to respond to education during and after the crisis.

The INEE Minimum Standards Manual² contains 19 standards, each with accompanying key activities and guidance notes. The handbook aims to improve the quality of educational preparedness, response and renewal, increase access to safe and relevant learning opportunities, and ensure accountability in the provision of these services. The manual in the INEE Minimum Standards Manual is designed for use in a series of crisis response situations, including disasters caused by natural hazards and conflicts, slow and rapid situations and emergencies in rural and urban areas. In particular, minimum standards³ provide guidance for teachers.

Quality education is education that is accessible, accessible, acceptable and adaptable. The skills needed to be an effective teacher are expansive and complex. Expectations for school leaders have also surpassed their traditional role as administrators, and now include team leadership, mentoring, networking, and effective communication with parents and other stakeholders. But the "professionalism" of teachers and principals varies in its forms across countries and contexts and can be influenced by the policies and behavior of teachers and school leaders themselves.

A UNESCO synthesized report entitled Supporting Teachers in Maintaining Continuity of Learning during School Closing states that ensuring the well-being of teachers⁴ in maintaining morale should be part of an overall support effort. Faced with a shortage of qualified and trained candidates for decades in many countries, it is important that teachers should not be discouraged from leaving the profession. Deciding on high-stakes learning assessments is an urgent challenge.

The results of the research Challenges of the implementation of distance learning in the time of Covid-19 in secondary education showed indications that the education system is not fully prepared to implement the concept of distance learning, and the capacity of teachers and school administration is very low for distance learning education. At the same time, it is pointed out that the implementation of distance learning has shown a lack of skills and coordination between institutions, schools and students and that teachers do not have the technical resources to conduct classes

¹ INEE 2020, accessed 12 September 2020. <https://inee.org/>.

² INEE for Minimum Standards and Network Tools c / o UNICEF - Education Section, *Minimum standards for education: preparedness, response, recovery* (New York. 2010). accessed 12 August 2020. https://inee.org/system/files/resources/INEE_Minimum_Standards_Handbook_2010%28HSP%29_EN.pdf.

³ *ibid*,12.

⁴ UNESCO, *COVID-19 response to education - Webinar: Supporting teachers in maintaining continuity of learning during school closures*. 2020, accessed april 5, 2020. <https://unesdoc.unesco.org/ark:/48223/pf0000373338>.

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through distance learning. Research recommendations focus on promoting the use of digital tools in the classroom.

Teacher digital skills training¹ is crucial in this context where the new is normally increasingly involving the use of technological tools and where pandemic uncertainty may require a return to distance learning options at any time.

Strengthened ongoing support for teachers² and parents is needed to help children stay engaged in school.

All Western Balkan countries recognize the importance of digital skills³, although they have taken different approaches to building these skills among teachers. Serbia, for example, has a specific digital skills curriculum for teachers and tests their ability to use digital technologies to assess students. In Montenegro and Macedonia, digital teacher skills are part of the general criteria for teacher competencies, while this is not the case in Albania and Bosnia and Herzegovina.

According to the new report from World Bank Group in the section - Modernizing the basic education system to provide a strong foundation, it is pointed out that countries around the world have made significant progress in improving basic literacy over the past few decades. Indicators of basic education outcomes are relatively good in most countries in Europe and Central Asia. Some countries still show persistent deficiencies, however, particularly on the quality dimension. As the figures in learning-adjusted years of schooling show, subregions where improvements in the quality of basic education are particularly necessary include Central Asia (Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan); the South Caucasus (especially Azerbaijan and Georgia); the Western Balkans (especially Albania, Bosnia and Herzegovina, Kosovo, Montenegro, and the Republic of N. Macedonia⁴); and Bulgaria, Moldova, and Romania.

Also, in the section - Improving the relevance, sustainability, and quality of postsecondary education, it is pointed out that tertiary education attainment and quality in Europe and Central Asia are high by global standards. In some former SSR republics, attainment is high but quality is average; but in some countries in the Western Balkans and Central Asia, attainment and quality are low and improving postsecondary education is critical in some countries in the Western Balkans (including Macedonia⁵).

¹ Rogers, Halsey, Shwetlena, Sabarwal. *The Covid-19 pandemic: shocks to education and policy responses*. Washington: World Bank Group. 2020, 30.

² Rovo, Natasha and others. *Economic and Social Impact of COVID-19 - Determining Conditions (Education Note) - Regular Economic Report for the Western Balkans Issue 17*. Washington: World Bank Group, 2020. Accessed 10 June 2020. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/590751590682058272/the-economic-and-social-impact-of-covid-19-education,14>.

³ Ania, Bourgeois, Peter, Birch and Olga, Davydovskaia, Eurydice, 2019. *Digital Education at School in Europe*, Luxembourg: Publications Office of the European Union, 7.

⁴ World Bank ECA economic update fall 2020. *COVID-19 and Human Capital*, Washington: The World Bank Group.2020, 74.accessed 7 October 2020. <https://openknowledge.worldbank.org/bitstream/handle/10986/34518/9781464816437.pdf?sequence=4&isAllowed=y>.

⁵ *ibid*, 78.

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3. CONCLUDING REMARKS

Digital technologies have revolutionized our society, and their spread is affecting all aspects of life. The education system is no less convenient, not only because technology can influence the way education is done, but also because education has a role to play with preparing young people for a technology-driven world.

Quality education contributes directly to the social, economic and political stability of society. Well-designed education with the reform that needs to be started is necessary to ensure the protection of the education system. It is necessary to invest in upgrading the skills of teachers in their digital competencies and continuous technical support of schools and teaching staff for successful implementation of online teaching.

At the same time, it is necessary to conduct a detailed and structured evaluation of the distance learning process in the past period, in order to improve it in the future and adjust the curricula that would suit this teaching model and would guarantee an efficient educational process for each subject in particular, taking into account the thematic units being processed, the situation of teachers and students, as well as the technical possibilities for implementation of those teaching materials and introduction of mandatory digital skills training for every newly employed teacher in schools.

During the crisis and beyond, it is vital to find ways to maintain and nurture teachers' professional networks, as well as teacher-student relationships, in order to ensure distance learning success as a measure of standing in front of schools be ready to reopen. Furthermore, it will be important for all stakeholders, including teachers and principals, to come together to think, research and systematically assess what interventions have worked and why, where gaps remain, and how they can be addressed to support a more inclusive and equitable education system that is sustainable and responds to future challenges and provides quality education for all.

The Macedonian education system will need to continue to respond to the cessation of what is lost, while preventing and minimizing learning losses and protecting equality and inclusion. Achieving all this effectively requires meeting a number of prerequisites such as: ICT access and connectivity, availability of quality content online, distance learning teachers and online.

Finally, in order to build a better, post-Covid system, more attention will need to be paid to the financing of education needed to strengthen the Macedonian education system because our education system needs support to prevent a lost generation of students in a timely manner.

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THE IMPORTANCE OF RETAINING TEACHERS IN 2020

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Abstract

Recruiting and retaining high-quality teachers is essential for the student learning across the world. Investments in instruction, especially high-quality teachers, appear to leverage the largest marginal gains in student performance. In this paper it is pointed that in all countries in the world, competent institutions - Governments in cooperation with the Ministries of education and science, the Ministries of finance should institute policies that ensure that schools serving the students with the highest need are protected as much as possible from the effects of layoffs.

Effective teachers are irreplaceable in helping students succeed. They facilitate two-way teaching and learning processes, helping students learn content through real time responses to questions, making learning fun, shaping students' attitudes, exemplifying empathy, modeling teamwork and respect, and building student resilience in several ways. Successful teachers work with school management teams and parents to ensure consistent support for students as they transition through school. The sudden closure of schools during Covid-19 has left many teachers across several countries, uncertain about their role, unable to use technology effectively to communicate and teach, and unprepared for the classroom challenges when schools reopen. The pandemic has brought the need to bridge digital divides into sharp focus, with countries and schools adept at using such technologies facing fewer challenges in meeting learning goals. There can be little doubt that high-quality education is a social experience, requiring routine human interface. Successful teachers are irreplaceable in this task and will remain so in the foreseeable future, but they need to be supported in multiple ways to be effective in unpredictable circumstances.

Key words: teachers, job security, retaining, crisis contexts

JEL classification: I00

INTRODUCTION

Across the world, millions of teachers, education support staff and learners³ are returning to classrooms as schools reopen after closures due to the COVID-19 crisis.

Teachers are at the heart of the learning process, and the new challenges will require them to be even more responsive to student needs. Support encompasses attention both to the needs of teachers and to the needs of their students. Support means

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³European Commission, Executive Agency for Education, Audiovisual and Culture. *The organization of school time in Europe, primary and general secondary education 2020/21 Eurydice - Facts and figures*. accessed September 20, 2020. https://eacea.ec.europa.eu/national-policies/eurydice/sites/eurydice/files/school_calendar_2020_21_0.pdf.

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protecting the income and health of teachers as they reenter schools, building on the measures that have already begun during closures. But it also should include equipping them with the skills they need to help students recover the learning they have lost during the shutdowns.

Fostering teacher resilience will be essential for recovery. Given this, some areas require attention during the coping and managing continuity phases for teachers to remain effective like protect teacher jobs and salaries. Teacher professional development strategies should focus on three areas: resilience, recovery and reform. Equip teachers to build resilience by ensuring their own and their students' psychosocial wellbeing and hygiene. Teachers will need support as they manage core issues of psychosocial wellbeing and hygiene.

Training to identify and support at-risk students because the risk of dropouts and difficult home situations will rise, teachers need to be able to identify the students who most need support. This includes support for those facing risks to their physical and mental health. Depending on the system's resources, the support may not have to come from the teacher herself. But the teacher will be the first line of defense. Training on digital skills, this will be key in a context where the new normal will increasingly involve the use of technological tools and where the uncertainty of the pandemic might require returning to remote learning options at any moment.

All these skills are essential, not just to get learning on track again, but also to narrow learning gap that will have widened during the school closures. If teachers feel they must simply return to the curriculum without the tools to adjust their pedagogy to students' needs, the most disadvantaged students those who lacked good access to remote learning and family education support will be hurt the most. They will have fallen farthest behind during the period away from school, and if instruction just picks up where it left off, they will lag further and may eventually drop out. Because these demands come on top of the many challenges that system already face, preparation for teachers needs to begin now.

1. SUPPORTING TEACHERS IN CRISIS CONTEXTS

From the beginning of the crisis¹, teachers have been vital to ensure learning continues through distance learning, where feasible, and that learners' well-being is considered. With the return to schools, teachers, school leaders and education support staff will play key roles in creating safe learning spaces, curricula and assessment, and supporting marginalized learners.

Systems should begin preparing teachers now to deal with these new challenges. In a system where the emergency remote-learning system will not occupy teachers fulltime and they are not deployed for other community needs, there should be time available to provide them with practical professional development in these areas. Remote learning solutions deployed during the coping phase can be improved and scaled up for rapid upskilling of large number of teachers in subsequent phases of the response.

¹ Education International, "COVID-19 and Education: How Education Unions are Responding, Survey Report", available at https://issuu.com/educationinternational/docs/2020_covid19_survey_report_eng_final.

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A key lesson learned during the pandemic is the important role teachers play in ensuring that learning continues. As schools reopen, a lot will depend on teachers to ensure that children will be able to continue their education in a safe and healthy environment; and make up for knowledge and skills that may have been lost. Moreover, technology does not just change methods of teaching and learning, it can also elevate the role of teachers from imparting received knowledge towards working as co-creators of knowledge, as coaches, as mentors and as evaluators. As a teacher, knowing the facts will not only protect yourself but also your students. Teachers have a critical role to play in ensuring students understand the precautions they should take to protect themselves and others from Covid-19, and it is important you lead by example in the classroom. Handwashing is one of easiest, more cost efficient and effective way of combating the spread of germs and keeping students and staff healthy. Covid-19 has therefore significantly added to the workload of teachers who, at the best of times, face a number of challenges. In response to the crisis, the International Task Force on Teachers for Education 2030¹ released a “Call for Action on Teachers” which, among other things, advocates for teacher participation in short, medium, and long-term planning and policymaking as we move forward. Teachers also had to adapt to new pedagogical concepts and modes of delivery of teaching, for which they may not have been trained.

The Covid-19 crisis has highlighted that both initial and in-service teacher education are in need of reform to better train teachers in new methods of education delivery. Teachers’ physical health was put at risk when required to provide face-to-face education for the children of essential workers and vulnerable children. Adding to the fear of being exposed to the virus was a fear of losing salaries and benefits, all while coping with increased workloads and family responsibilities. This is especially true of female teachers who had to continue teaching and bore a disproportionate share of family responsibilities.

In the key teacher-related finding in survey - A snapshot of Covid-19² it is pointed out that many teachers are required to provide distance education and e-learning without the necessary tools, preparation and support. Teachers and their unions expressed need for greater collaboration and sharing of professional knowledge and tools. Teachers, education support personnel and their unions are not consulted when governments make decisions on methodologies and tools/platforms to use. In countries where teachers continue to teach virtually/through distance education they report increased workload and concerns about ICT security issues . Teachers need psychosocial support to cope with the situation, and training to be able to support traumatized students and colleagues. Many contract teachers, supply teachers, teachers in private schools and education support personnel have either not been paid or laid off.

¹ International Task Force on Teachers for Education 2030, “*COVID-19: A global Crisis for Teaching and Learning*”, available at <https://teachertaskforce.org/knowledge-hub/covid-19-global-crisis-teaching-and-learning>.

² INEE, 2020. accessed 2 October 2020. <https://inee.org/system/files/resources/COVID-19%20Webinar%20Series%20-%20Webinar%205.pdf>.

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The UN and the education community have developed guidance¹ to help countries through the timing, conditions, and processes for reopening education institutions.

Job security² and timely, adequate compensation help to ensure teacher motivation and retention during times of crisis. Education system that pay teachers well and on schedule are better able to recruit and retain qualified teachers, who report higher rates of job satisfaction and morale. In crisis contexts, paying teachers in full and on time is therefore crucial to ensuring that teachers are motivated to continue their important work, particularly as many of them are educating other people's children, even if it involves putting their own wellbeing at risk. Special consideration will also have to be made to determine how best to retain female teachers, as teaching is frequently a female profession, particularly at lower levels of the education system, and the continued engagement of female teachers is critical to ensuring girls return to school. Not all countries are able to mobilise the necessary financial resources during crisis, especially as teacher salaries tend to make up the lion's share of educational expenditure. While teacher salaries are typically not included as part of development aid, it may prove necessary to advocate for international assistance to support teacher compensation and job security, as has been provided through the World Bank Group to support health professionals during the current crisis.

As the school closures became inevitable, UNICEF in Macedonia³ contacted the Ministry of Education and Science with two workable solutions, the TV-Classroom and the E-Classroom. The TV-Classroom is a collaboration between the Ministry, the Bureau for the Development of Education, UNICEF, children's television producers OXO and national broadcaster Macedonian Radio and Television, and provides programmes for younger children. The digital library of the Step by Step Foundation⁴ is on the list of recommended available national on-line educational resources with the 30 titles of picture books in audio and PDF format in Macedonian, Albanian, Turkish and Bosnian language, 5 picture books in Roma language and 20 titles of picture book in sign language.

In Macedonia, when the new school year 2020/2021 officially started, a working meeting was held in the Ministry of Education and Science between the leadership of

¹ UNESCO, UNICEF, WFP, World Bank, *“Framework for reopening schools”*, 2020, available at <https://unesdoc.unesco.org/ark:/48223/pf0000373348> and *“Reopening schools: How to get education back on track after COVID-19”*, 2020, available at <http://www.iiep.unesco.org/en/reopening-schools-how-get-education-back-track-after-covid-19-13424>. See also Global Education Cluster, *“Safe back to school: a practitioner's guide”*, 2020, available at <https://educationcluster.app.box.com/v/Safeback2schoolGuide>.

² UNESCO, *UNESCO Education Response to COVID-19* (notes 2.2. For the education sector). 2020, 3. accessed 5 September 2020. <https://unesdoc.unesco.org/ark:/48223/pf0000373338>.

³Angela, Hawke. 2020, *Keeping education on track in North Macedonia during the COVID-19 pandemic. (article)* accessed 3 September 2020. <https://www.unicef.org/eca/stories/keeping-education-track-north-macedonia-during-covid-19-pandemic>

⁴ The Foundation for Educational and Cultural Initiatives "Step by Step" – Macedonia, accessed 10 October 2020. <https://www.stepbystep.org.mk/en/biblioteka>.

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SONK¹ and the Minister of Education and Science. At the working meeting, apart from discussing the beginning of the school year with all the challenges and shortcomings, in conditions of a pandemic, they also discussed the Requests submitted by SONK to the Minister of Education and Science, who refer to certain issues in all spheres of education, as follows: regarding the issue or more precisely the problem of division of classes, according to the protocols for work in primary education and the division of students, where classes are conducted with physical presence, which will increase the workload of teachers, it was agreed that each municipality make an analysis and find a solution with employment of teachers for urgent and urgent matters or to make compensation in accordance with the Law on Labor Relations and the General Collective Agreement for the public sector of the Republic of Macedonia. Also, regarding the Requests submitted by SONK, which incorporate all the burning issues in all spheres of education, an agreement was generally reached to form working groups and to start negotiations on all open issues of the requests. As one of the most urgent and priority issues, on which both parties agreed, was the start of negotiations for the preparation of a collective agreement for higher education and science and it was agreed, as soon as possible, to form a working group and start drafting of the collective agreement, in which, as a basis for calculation of wages would be the minimum wage at the state level.

In the article, *North Macedonia's education in a pandemic: What can we learn?*², it is pointed that urgent modernizing of curricula and their harmonizing with labour market needs as an answer for the new demands after COVID-19. The changes should start with modernizing and digitalizing educational programmes. With the objective of increasing chances of finding a job, curricula should be revisited and harmonized with labour market needs. In addition, it is concluded that the schools must strengthen their technical capacities, and the government must provide the schools with equipment needed for teaching process. Regular staff training will keep the teachers up to date with modern trends in the profession.

Preventing a learning crisis from becoming a generational catastrophe requires urgent action from all. Education is not only a fundamental human right. It is an enabling right with direct impact on the realization of all other human rights. It is a global common good and a primary driver of progress across all 17 Sustainable Development Goals³ as a bedrock of just, equal, inclusive peaceful societies. When education systems collapse, peace, prosperous and productive societies cannot be sustained.

In addition, it will be vital to find ways to sustain and nurture teachers' professional networks, as well as the relationships between teachers and learners, their families and

¹SONK, <http://sonk.org.mk/?lang=MK&print=print>.

²Nita, Starova. 2020. North Macedonia's education in a pandemic: What can we learn?, accessed 2 May 2020. <https://www.fes-connect.org/trending/north-macedonias-education-in-a-pandemic-what-can-we-learn/>.

³The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

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communities. Further, it will be important for all stakeholders, including teachers and principals, to come together to reflect on, research, and systematically evaluate what interventions have worked and why, and where gaps remain, and how these can be addressed, to support more inclusive and equitable education systems that are resilient and responsive to future challenges and provide quality education for all.

2. SALARIES FOR BEGINNING TEACHERS VARY GREATLY ACROSS EUROPEAN COUNTRIES

Covid-19 has had varying impacts on the employment and salaries. Recent data suggest that only a minority of countries did not pay statutory teachers¹. There are significant differences between European countries in the statutory salaries for teachers entering the profession. Teachers' knowledge and skills, their commitment to the job, and the quality of school leadership, are all essential factors in achieving high quality educational outcomes. It is therefore important that those employed to teach and to lead schools be the best qualified, most talented and most able to meet the new demands placed on the profession².

In 2018/2019³ in six EU countries (Bulgaria, Latvia, Hungary, Poland, Romania and Slovakia), the statutory salary of beginning teachers is below EUR 9 000 per year. These six countries have the lowest GDP per capita in the EU. Similarly low salary levels can be found in Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Turkey. In Spain, Italy, Luxembourg, Hungary and the Netherlands, statutory starting salaries are higher for secondary teachers than for pre-primary and primary teachers. In Germany, Finland, Sweden, Albania, Bosnia and Herzegovina, Switzerland, Liechtenstein, Macedonia and Norway, the starting salary increases with the education level. In Italy, all teachers must have a master's degree to enter the profession, but statutory starting salaries are higher for secondary teachers. In Iceland and Macedonia also, there are small salary differences between education levels, although the minimum qualification is the same for all teachers (ISCED 7 in Iceland and ISCED 6 in Macedonia).

Modest salary increase over a long time span in a third group of countries, teachers need a significant length of service to achieve modest salary increases. Starting salaries can increase by around 50 % after 35 years' service in Italy, and after 40 years' service in Slovakia and Macedonia. A similar length of service is necessary in Spain and Montenegro for a 42 % and 30 % increase respectively. In Czechia, Germany and Sweden, starting salaries can increase by up to 32 % over time. In Croatia, the total

¹ UNESCO/ILO, "Supporting teachers in back-to-school efforts: guidance for policy-makers", available at <https://unesdoc.unesco.org/ark:/48223/pf0000373479>.

² Council of the European Union, 2014. *Conclusions on effective teacher education. Education, Youth, Culture and Sport Council meeting*, Brussels, 20 May 2014. European Commission, 2013. Supporting teacher competence development for better learning outcomes, available at http://ec.europa.eu/education/policy/school/doc/teachercomp_en.pdf.

³ European Commission/EACEA/Eurydice, 2020. *Teachers' and School Heads' Salaries and Allowances in Europe – 2018/19. Eurydice Facts and Figures*. Luxembourg: Publications Office of the European Union. https://eacea.ec.europa.eu/national-policies/eurydice/sites/eurydice/files/teacher_salaries_2018_19.pdf.

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percentage increase is below 20 % but teachers can be promoted to higher career levels with higher salaries after 5 (teacher mentor), 10 (teacher advisor) and 15 years (excellent teacher advisor). In another nine education systems, there were pay rises for teachers as the result of collective bargaining. The increase was between 2 % and 6 % in Sweden (depending on the education level and number of years in service), between 4 % and 5 % in Malta, between 3 % and 6 % in Iceland (more than 7 % for pre-primary teachers), and 5 % in Macedonia. In the Netherlands, Finland, Slovenia and Norway, the increase was around 2 %.

Non-payment of teacher salaries not only poses a problem for individual, family, and community well-being, but also hinders the delivery of quality education. In the short term, many teachers may need to turn to alternative sources of income and will be unable to support pupils in distance learning. In the long term, schools may face teacher shortages due to attrition. The crisis has been a reminder of the essential role of teachers and that government and other key partners have an ongoing duty of care to education personnel.

In UN Policy Brief: *Education during COVID-19 and beyond from august 2020*¹, it is pointed that, education ministries should strengthen dialogue with ministries of finance in a systematic and sustained way to maintain and, where possible, increase the share of the national budget for education (in particular when internal reallocation is feasible). As well, it is pointed that support for the teaching profession is essential and the teachers and communities will be better prepared and supported if equitable and inclusive learning, in and beyond classrooms, is to be guaranteed. Technology alone cannot guarantee good learning outcomes². More important than training teachers in ICT skills, is ensuring that they have the assessment and pedagogical skills to meet students at their level and to implement the accelerated curricula and differentiated learning strategies likely to emerge in the return to school.

CONCLUDING REMARKS

Safeguard students and educators' health, safety and well-being, including physical and mental health before, during and after closures – psychosocial support essential. Governments and partners should engage with educators, through their unions, in coming up with relevant, effective and proportionate measures to respond to COVID-19 in education and ensure a full post-crisis recovery. Governments should ensure full funding and recovery of education systems and return to schooling when it is safe to do so. ICTs cannot replace teachers; neither can virtual learning replace schooling. Also, governments should ensure the protection of teachers and education support personnel's employment, terms and working conditions.

No teacher or education support staff should be dismissed or denied their salary as a result of Covid-19. Educators and their unions are frontline workers and doing the best

¹ UN Policy Brief: Education during COVID-19 and beyond from august 2020, https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf.

² ibid, 23.

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to support their students during the twin crises of COVID-19 and education. They deserve every government and every partner's support to help every child, youth and adult enjoy the right to free quality public education during and after the pandemic.

Social dialogue with teachers, staff and their representative organizations is essential in developing and implementing safety and health measures and all other school-related pandemic policies.

Digital solutions need relevant content, adequate instructional models, effective teaching practices, and a supportive learning environment. Teacher development and professionalization are key to ensure they are sufficiently qualified, remunerated, and prepared. Governments could also strengthen system of support for teachers, facilitators, and parents/caregivers in the successful and safe use of technology for learning.

It is vital that teachers and school support staff receive adequate professional training and preparation to facilitate the back-to-school effort. This should take into account health and sanitation protocols and guidelines, the requirements for teaching and learning in reconfigured schools and classrooms, the challenges of reduced classroom sizes and instructional time, and the demands on teachers who conduct both face-to-face and remote instruction. Education system need to ensure adequate qualified staff are mobilized, scheduling is updated and teachers' rights and working conditions are protected during back-to-school efforts. Considerations should include: recruiting additional teachers; staggered or part-time schedules; teachers' own family obligations and personal risk factors; and the capacity to ensure minimum hours of instructional time during the school day. It is important that the timing for the reopening of schools be guided by the best interest of the whole school population, preparedness of the education system and overall public health considerations. Students' and teachers' return will need to be decided based on an assessment of the measured benefits and risks and informed by cross-sectoral and context-specific evidence for education, public health, social and economic factors.

Remuneration is a key element in making teaching a more attractive profession. Along with other factors such as working conditions, career prospects, professional development opportunities and recognition, remuneration plays an important role in drawing people into the profession and in ensuring that serving teachers feel valued and sufficiently motivated to provide high quality teaching. Policies that affect the earnings and career prospects of those employed in the education sector should therefore be an integral part of comprehensive strategies to improve the attractiveness of the teaching profession, both for serving teachers and for potential candidates.

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**HOW TO BUILD ROBUST ON-LINE JOB INTERVIEW RESISTANT TO
HEALTH-RISK GENERATED CRISES**

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Abstract

Recent development of the harsh economic impact of the propagation of the COVID-19 (Karabag, 2020) raised several crucial questions of improving human resource management methods in order to secure efficient uninterrupted activities in the times of existing severe risks. Thus, Hamouche (2020) showed that it is harmful for the mental health of the employees, and hence methods for protecting of the employees are to be adopted.

Particularly important for maintaining the speed of development of the company in such periods is to secure recruitment of staff indispensable for all operations of the company. Therefore, the creation of an interview system avoiding the physical obstacles present in health-risk crises is indispensable for keeping the attained company progress level.

Particular attention is to be paid to the millennial generation (Novkovska and Serafimovic, 2018) which is expected to be the main target for recruitment processes in the future. Often are stressed great expectations devoted to their involvement in the employment (Alsop, 2008).

In the present work we describe an approach of building on-line based job interview system capable to resist to sudden shocks such as health or security crises. The system has simultaneously to be entirely functional under normal conditions and to be satisfactory effective in crisis periods, without particular ad-hoc adjustments. The highest attention is devoted to the millennial generation as one of the principal users of the system and a stream of the workforce having strong capacity of coping with the challenges imposed by the use of novel technologies.

Keywords: HR Technology, HR Innovation, Employee Engagement

JEL classification: M51, O15, O33

INTRODUCTION

Recent development of the harsh economic impact of the propagation of the COVID-19 (Karabag, 2020) raised several crucial questions of improving human resource management methods in order to secure efficient uninterrupted activities in the times of existing severe risks. Thus, Hamouche (2020) showed that it is harmful for the mental health of the employees, and hence methods for protecting of the employees are to be adopted.

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obstacles present in health-risk crises is indispensable for keeping the attained company progress level.

Particular attention is to be paid to the millennial generation (Novkowska and Serafimovic, 2018; Bucoveţchi et al., 2019) which is expected to be the main target for recruitment processes in the future. Often are stressed great expectations devoted to their involvement in the employment (Alsop, 2008).

The basic dynamics of the e-recruitment processes and the tools of e-recruitment, along with their advantages and disadvantages are discussed in detail in (Baykal, 2020).

In the present work we describe an approach of building on-line based job interview system capable to resist to sudden shocks such as health or security crises. The system has simultaneously to be entirely functional under normal conditions and to be satisfactory effective in crisis periods, without particular ad-hoc adjustments. The highest attention is devoted to the millennial generation as one of the principal users of the system and a stream of the workforce having strong capacity of coping with the challenges imposed by the use of novel technologies.

1. INTEREST AND CURRENT STATUS OF THE KNOWLEDGE ON THE ONLINE RECRUITMENTS

The rapidly growing interest for the issue of online interviews is illustrated with three results for scientific papers published in recent years is displayed in Figure 1, as indentified from the database Science Direct (<https://www.sciencedirect.com/>). Number od articles containing the term “Online recruitment” along with the number of articles containing the term “Online interview” for the period 1997-2020 is presented.

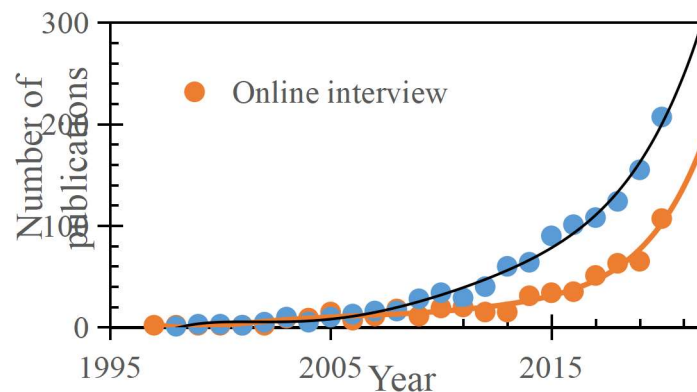


Figure 1. Number of articles in Science Direct containing the term “Online recruitment” and number of articles containing the term “Online interview” for the period 1997-2020 with the corresponding trends.

Source: Author’s results from the Science Direct database search

It is clearly seen that in the last five years the number of publications rapidly grows. This indicates both the increased interest for studying the mentioned issues

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simultaneously with broader practice of the use of online interviews. It is expected in the next years the importance of the use of ICT in recruitment to increase dramatically, thus changing the approach to the selection process as a whole.

Some specific important aspects of the online recruitments and especially those connected to the online interview are discussed further in this section.

1.1. PARTICULAR EXAMPLE FROM PORTUGAL

In order to describe the current status with online recruitments, selected results of studies are presented below. Interesting and illustrative study for the specific case of Portugal (Brandão et al., 2019) is taken as an example. Advantages and disadvantages of online recruitment have been discussed. Between the advantages important place take the reduction of the costs and increase of the effectiveness. From the applicant side, possibility to update the CV when submitting to employers portals. Responses to the candidates are also accelerated while using online recruitment systems. However, the easy access to their application procedure results in difficulties connected to the very large number of applicants, which requires additional efforts. Many steps of the recruitment procedure when it is conducted online exclude the personal contact with the candidate, which can decrease the efficiency of the selection process compared to the cases of traditional procedures.

In the considered work (Brandão et al., 2019), one of the main goals was identification of candidates using online job search possibilities. An exploratory study on online applicants was done in order to reach this goal. Second, an attempt to understand the assumptions of behavior related to online recruitments is made. A study based on questionnaire covering the above listed aspects has been done. It has been found that the majority of the candidates using online recruitment possibilities are looking for a job for a first time. This indicates that they are millennials and that they are using the online system because they are well familiar with ICT. However, they do not obtain any feedback in many cases (38 %). This indicates that the employers are not ready for the increasing presence of the millennials on the labour market and need to develop their systems in order to be able to respond timely on their applications.

1.2. THE ROLE OF SOCIAL MEDIA

Large flow of information between the job seekers and candidates is provided by the use of social media. Therefore, their importance for online recruitment is rather high. The issue was studied by numerous researchers from different viewpoints (Ali et al., 2020; Carpentier et al., 2019; Hossain et al., 2020; Muduli and Trivedi, 2020; Salk et al., 2019; van der Worp et al., 2020; Zhu, (2019). Exhaustive review of the status of the issues connected to searching and acquiring the talented employees using social media has been presented by Hosain and Liu (2020). Below are listed significant findings reported in the studies:

In general, the companies do not use the social media as primary source, but as a supporting tool. Between different platforms, it is found that the LinkedIn, famous as a professional connection platform, plays the major role.

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It is identified that the online media assisted search for talented candidates plays an important role in attracting the passive job seekers. That way the companies obtain access to a large pool of workers that are not listed in the employment agencies offers of labour. Many of them are considered to be rather stable employees from which the companies can obtain very much.

Use of online media has also an advantage of avoiding the negligent hiring that often occurs while using conventional methods.

1.3. ANALYSIS OF RECORDED ONLINE INTERVIEWS AND CV OF CANDIDATES

Online interviews allow an additional feature related to the possibility to make automated analysis of the personality of the candidates using sophisticated tools. Thus, in (Rupasinghe et al., 2016) it was proposed to make analysis of vocal spectrum and facial cue in order to extract additional information on the personality of the candidates.

In (Chen et al., 2017)) a unified method for automated analyses of online interviews was proposed. Videos are first converted to pseudoword document and then analysed using text classification methods. Authors affirm that using such analysis important personality traits (such as openness, conscientiousness, extraversion, agreeableness, and emotional stability) can be identified. No significant information on personality was extracted from prosody and facial expressions. Possibly further studies can provide more detailed insight on these issues.

During the process of the application and interview the candidate demonstrate different abilities that are relevant for the job position they are applying for. This is connected to their skills using different tools in responding to the requirements during the selection process. Since this analysis is rather complex, particular systems are to be used in the massive data analysis obtained in the recruitment process in the phases of application and interviewing. Walek et al. (2020) proposed an expert system for selection of suitable job applicants.

An additional possibility connected to the use of sophisticated tools is to analyse CV of the candidates. Thus, in (Arora and Arora, 2020) an automated system for analysis of CV for the candidates allowing to predict significant aspects of their personalities has been proposed. Such systems can be further developed and used regularly in analyses supporting the online recruitment processes.

1.4. ON THE USE OF ARTIFICIAL INTELLIGENCE IN ONLINE RECRUITMENT

Application of modern sophisticated ICT tools in recruitment involves also the use of artificial intelligence (Abdul et al., Aljuaid and Abbod, 2020; 2020; Nawaz, 2019; Pillai and Sivathanu, 2020).

The main role of artificial intelligence in the election processes consists in identification of best choices in the advanced phases of the selection process. It is found that the use of artificial intelligence in recruitment provides cost effectiveness. It is expected in near future various systems to be developed and implemented in the new standard recruitment processes.

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2. BASIS OF A STABLE RECRUITMENT SYSTEM ASSISTED BY ONLINE TOOLS

Online interviews received particular interest as an effective tool for recruitment of employees using numerous advantages of the ICT. As discussed above, online interviews can be analysed using specific sophisticated tools, so as to obtain several characteristics of the personality of the candidates applying to the position. That way massive information can be processed and many errors due to neglecting during the personal interviews can be avoided. The most important aspect of these possibilities is that the tools which are used can be further developed and the knowledge acquired during the application of the online tools further iteratively used in improvement of the analysis systems. Such a permanent evolutionary approach can contribute to raising of the interview analysis process to exceptionally higher level, compared to recruitment processes using conventional interviews.

While conceiving future recruitment systems, resistant to health-risk generated crises, the role of the online interview is to be exhaustively determined, so as to respect its particular role for the entire recruitment process.

All above proposed tools require use of rapidly growing massive storage and specific software, requiring not only particular skills for their use, but also regular maintenance that needs numerous professional staff. Such a requirement is going to limit the possibilities of use of the latest ICT tools inside the companies of small and medium size.

Use of third party massive data storage and analysis tools can be proposed as the solution for adopting effective solutions for companies of any size. In Figure 2 a recruitment process flowchart proposed by the authors in this work based on the analysis presented above is shown. Regular access to social media is proposed for attracting the candidates (solid arrow), including also the possibility to contact directly some candidates based on previous knowledge of their profiles.

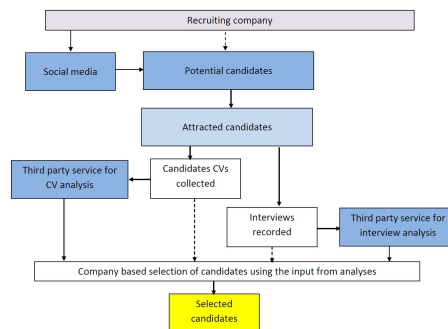


Figure 2. Recruitment process flowchart. Broken lines are for optional access.
Source: Author's concept

Two third party services are proposed to be involved: one for CV analysis and another one for the interview analysis. CV analysis optionally can be done in the recruiting company, since it need moderate resources and requires position specific treatment.

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CONCLUSIONS

Online recruitment processes are rapidly developing in the recent years. Many new sophisticated ICT tools are used for the attraction and selection of the candidates. As the share of the milenials on the supply side of the labour markete increases, the effectiveness of online recruitment increases also.

Additional motivation for implementation of recruitment systems involving online interviews is the stability against sudden shocks such as are massive shealth-cryses.

The possibility for the small and medium companies to use such a system requires significant resources both in storage space, software and maintainnace capability. Involvement of third party services is identified as a working solution for building a stable recruitment process system for companies of any size. It is expected that the approach will lead to creation of robust interviews systems resistant to sudden shocks, particularly health-generated cryses, and hence providing effective and cost efficient process under various circumstances without need for adaptation to particular situations.

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**THE LEADERSHIP IN ORGANIZING MODERN TEACHING WITH
FUNCTION OF CREATING QUALITY STAFF AND MOTIVATION FOR
USING DIGITAL TOOLS FOR STUDYING**

**Marijana Radevska¹
Biljana Stojkovska²**

Abstract

The paper will be action research conducted in the function of proving the leadership in organizing modern teaching with the function of creating quality staff and motivation for using digital tools for studying.

In conditions if modern working schools the digital tools are being used more.

Especially with the crisis situation created by the Covid-19 pandemic that emphasized even more. The teachers without knowing how to use the digital tools can't teach in the schools. That's why it's required that kind of work that's of crucial need. The leaders of the educational organizations of course are people which lead in that path, they encourage and motivate the others for the use of the modern tools in the teaching.

The conducted research will be a case study in an educational institution. As responders are used teachers from a school. The paper will prove the assumption for the connection of leadership in organizing modern teaching of quality teaching staff and motivation for using digital tools for studying.

Key words: leadership, digital tools, management, studying from distance, electronic learning, motivation

JEL classification: L00

INTRODUCTION

In these times of contemporary operation of schools, digital tools are increasingly in use. Especially with the crisis situation created by the Covid 19 pandemic, this is even more emphasized. Teachers simply cannot teach in schools without knowing how to use digital tools. That is why the necessity for this kind of work is crucial. The managers of educational organizations certainly are the people who pave the way, encourage others and motivate them to apply modern tools in teaching.

The paper discusses leadership as the driving force of the learning organization. Furthermore, it discusses the circumstances of the learning organization and the essential features of e-learning education. Then it sees through the knowledge management as an organizational force that draws from the management of intellectual capital. At the end of this paper there is an overview of the forms and tools for e-learning.

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1. LEADERSHIP AND KNOWLEDGE MANAGEMENT

Leadership is a dynamic process of group work where the individual in a certain period and in a certain organizational context influences the other members of the group to voluntarily commit to achieving the goals or tasks of the group.

Leadership as a dynamic process is influenced by the changing demands of the task, the group itself or the individual members. Leadership is not limited to one person. Usually the appointed leader (manager) formally takes care of the group, but he does not have to be the group leader in practice. Leadership is exercised and is influenced by a specific set of circumstances that create the organizational context. This context is important in determining the degree of power a leader possesses. The main role of the leader is to influence the group of voluntary commitment in achieving the goals of the group. Leadership is not an individual, but a collective activity guided by a shared vision. In our case it is the school principal.

The knowledge era brings new changes that are seen in the rapid progress and development of science and technology, which in turn entails changes in society as well as in the market by creating new "rules of the game" to which organizations will have to respond. These changes are made in the last ten years and briefly consist of the following:¹

- Knowledge is a critical factor for the success of the organization. Competitive advantage is built by managing and connecting staff who possess specific knowledge and skills.

- The time for making decisions is significantly shortened. The dynamic environment and the changes that take place in it do not leave time for the organization to think long. Timely, quick reactions are needed to follow the current changes.

- Relationship between employees are becoming very complex. The new working conditions emphasize the importance of independence, communication and the ability to build and maintain good relationship with employees in the organization. Virtual organizations are common, which reduces the need for physical contact of employees.

- Information and communication technologies are increasingly embedded in interpersonal interactions and business transactions. People have become so addicted to technology that literacy is no longer a matter of reading and writing but of working on computers.

Influenced by technological and social changes, in times of knowledge there are also changes in consumer shopping habits. Consumers are well informed about products, and needs are complex and sophisticated. It is no longer a challenge for the organization how to meet the current needs of consumers, but how to anticipate future needs. This requires continuous investment in equipment - modern production

¹Slavkovic M. "Upravljanje znanjem I menadzrske kompetencije", str. 1,

[http:// markoslavkovic.com/uploads/media/Upravljanje_znanjem_i_menadzrske_kompetencije_01.pdf](http://markoslavkovic.com/uploads/media/Upravljanje_znanjem_i_menadzrske_kompetencije_01.pdf)
(19.12.2012)

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technology, as well as education and training of employees to be able to meet the changing demands of the market. The needs of consumers, which under the influence of the mentioned conditions became variable, shortened the life cycle of the products, but also imposed new higher quality standards that organizations will have to adhere to during the production process.

In the knowledge era, the focus of the organization is on the most appropriate use of resources. As explained in the previous chapter, resources and capabilities that are unique, rare, and value-creating bring a competitive advantage to the organization. It is thought that adequate resources are needed to produce competitive products and services. Knowledge is listed as a key resource in the organization. If the organization has knowledge it will be able to produce and offer competitive products and services in the market.

2. E-LEARNING SYSTEM

E-learning systems are a great tool for any type of primary and secondary education as they offer different advantages over traditional learning methods: remote access to material, variety of materials, monitoring of learning progress, quick and easy modification of materials, customization to students, various forms of testing and joint communication, cooperation and improvement of the learning process.¹

E-learning systems are not intended only for educational institutions where learning is the basic activity, e-learning is necessary for every type of business activity. Wherever there is a need for training of new staff, for the improvement of knowledge, for short trainings or joint storage of knowledge, such systems become necessary.

If e-learning is well planned, it can be tailored to the needs of the individual and thus provide individual learning (this cannot be done with the help of print media, and it will be very difficult for lecturers to achieve this). Also, the student can set his own pace of work (if the materials are always available) and can focus on what is most important to the student (depending on previous knowledge, certain parts of the material can be bypassed). One of the biggest advantages, as we have already mentioned, is of course the ubiquitous information, the instructions from the teachers free from the constraints of time and space. We can now attend classes at school, at home or in the office. E-learning as an approach promotes self-discipline and requires students to take greater responsibility for their own learning. Teaching activities can range from detailed structured tasks to "open" projects where students are free to develop their own problem-solving style. The material provided in electronic form is much easier to search, which enables faster and more efficient learning. Sometimes the curricula is not suitable for teaching via computer, but such cases are rare. Another feature specific to e-learning is accessibility if it is realized through the Internet, it is available to anyone anytime and almost anywhere, unlike, lectures that must be in a certain place and time and require students to be online. Because of this feature, e-learning can be used for effective distance learning.

¹Nadrjlanski, Učenje u elektronskom okruženju – e Learning neka konceptualna pitanja, 2-4.

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E-learning should be approached with great caution, because many students by their very nature need a well-designed teaching structure. The aim is to develop self-motivated students, motivated for knowledge and research, but of course help should be offered whenever needed.

3. EDUCATION IN THE COVID 19 PANDEMIC

September has the same meaning for the students, and that is the beginning of the school year. But the beginning of the 2020 school year has seriously changed its usual course due to the Covid 19 pandemic. Instead of going to school, students must prepare for the application of preventive measures imposed by the coronavirus.

But some students did not return to school at all because their parents decided it was safer for them to study at home. Few doubt the necessity of returning young people to the educational process. European countries have given priority to the opening of schools after a period of historic pause due to the pandemic.

The right to health and the right to education are at the same time important for the younger generations and their parents. The safe opening of schools and its priority has become debatable.

In any case, children are directly affected by the closure of schools, and it directly affects the new social and educational development. It is also inevitably linked to children's emotional development.

The crisis has also affected poverty in families, which of course also affects children.

The education system in the country had to immediately switch to distance learning. The implementation of this process was mostly left to the schools and the teachers themselves, but still with the help of the Ministry of education.

Learning disabilities are most prevalent among students from poor families, Roma children and children with special needs. They faced insufficient access to education, lack of quality parental support and school support, despite the insufficient resources of many schools in the areas where most of these children live.

The teaching staff was not properly prepared for distance / digital learning despite the selective and individual efforts that created rapid benefits. There was still a teaching staff that was not prepared to use ICT in teaching. It was therefore urgently necessary to train these teachers. The principals of the schools also had an important role. Based on their leadership and organizational skills, they had to motivate the staff for quick adaptation to the crisis situation that arose.

The problems with the students from the lower grades who do not know how to use ICT on their own or do not possess any in their homes should not be left out. Even those who had one or two devices, however, felt the lack of devices since the same devices were used by their parents to do their work from home.

As an opportunity to overcome that problem, the national television started broadcasting classes on daily bases, and for that purpose teachers from all over the country joined in preparing the lessons.

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The damage students suffer can not yet be calculated, but after the end of the pandemic, and maybe decades later the lack of education that in this period is inflicted on the upbringing and education of students will be felt.

4. RESEARCH FLOW AND SAMPLE

The research was conducted in the primary school "Goce Delchev" in Bitola with 53 teachers participating. All respondents were interviewed with an anonymous closed-ended questionnaire. The survey was conducted electronically in October 2020.

For the first statement from the questionnaire: *The pandemic with covid 19 virus did not catch our school unprepared for work*, 37 respondents or 74% chose YES, 13 respondents or 26% chose PARTIALLY, and 0 respondents or 0% chose NO. Visually it is presented by chart no. 1.

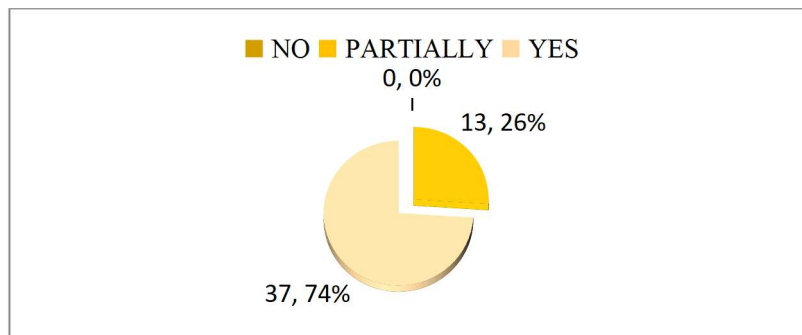


Figure 1. The pandemic with covid 19 virus did not catch our school unprepared for work

For the second statement from the questionnaire: *The school used digital tools in teaching before the pandemic with covid19 virus*, 42 respondents or 84% chose YES, 8 respondents or 16% chose PARTIALLY, 0 respondents or 0% chose NO. Visually it is presented by chart no. 2.

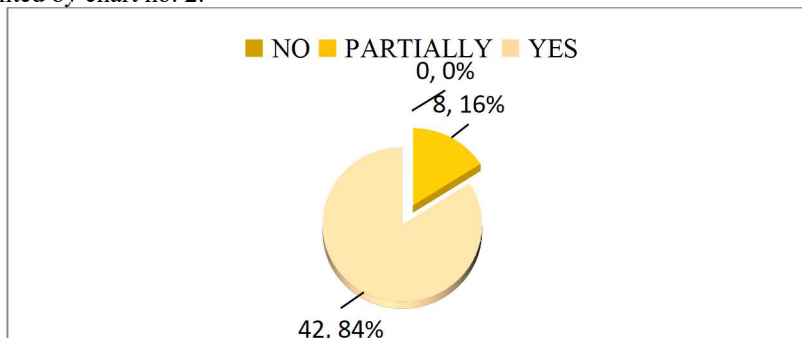


Figure 2. The school used digital tools in teaching before the pandemic with covid 19 virus

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For the third question from the questionnaire: *The school used digital tools in the work of the school administration even before the pandemic with Covid 19 virus*, 39 respondents or 78%, chose YES, 11 respondents or 22% PARTIALLY and 0 respondents or 0% chose NO. Visually it is represented by chart no. 3.

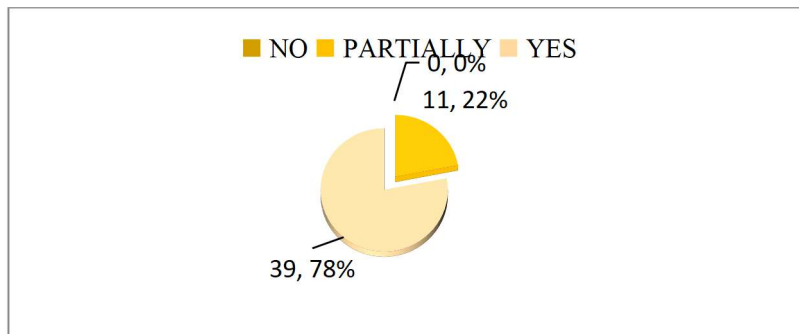


Figure 3. The school used digital tools in the work of the school administration even before the pandemic with Covid 19 virus

For the fourth statement from the questionnaire: *Our school is more advanced in using digital tools at work than the others in the municipality*, 38 respondents or 76% chose YES, 12 respondents or 24% chose PARTIALLY, and 0 respondents or 0% NO. Visually it is represented by chart no.4.

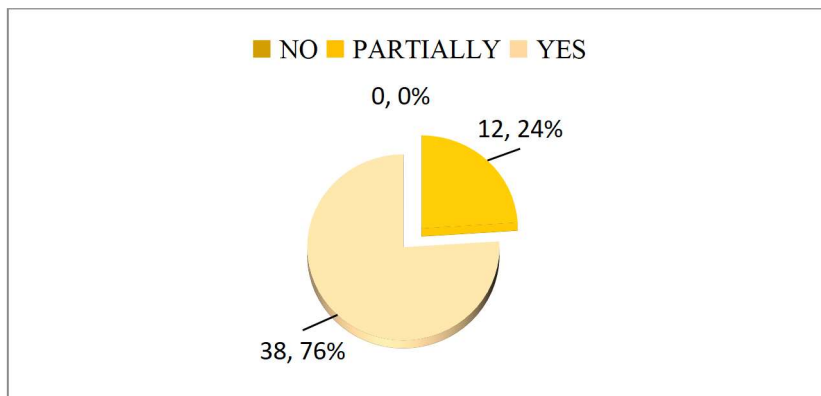


Figure 4. Our school is more advanced in using digital tools at work than the others in the municipality.

To the fifth statement from the questionnaire: *The principal strives for the school to be a leader in the environment*, 44 respondents or 88% chose YES, 6 respondents or 12% with PARTIALLY and 0 respondents or 0% - NO. Visually it is represented by chart no. 5.

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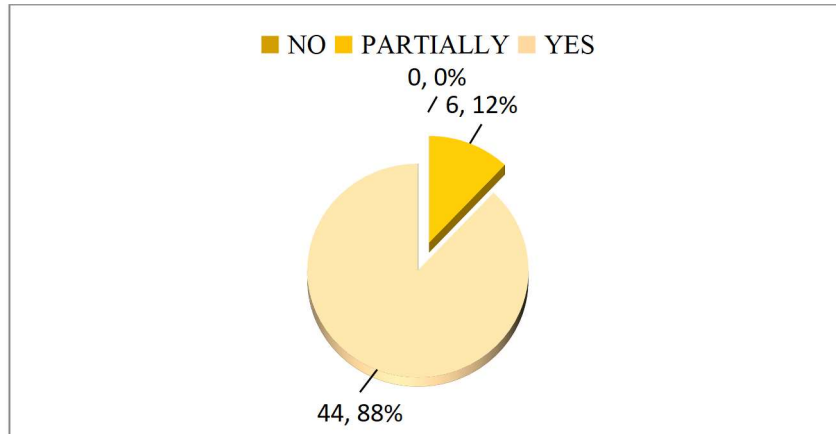


Figure 5. The principal strives for the school to be a leader in the environment

For the sixth statement from the questionnaire: *Teachers strive for the school to be a leader in the surrounding*, 42 respondents or 84% chose YES, 8 respondents or 16% chose PARTIALLY, and 0 respondents or 0% - NO. Visually it is represented by Chart no. 6.

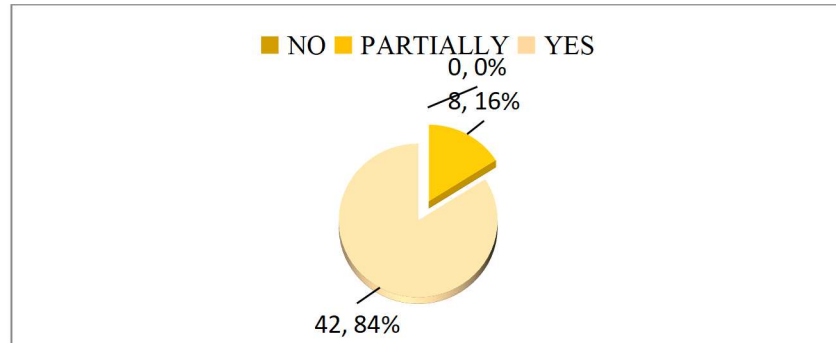


Figure 6. Teachers strive for the school to be a leader in the surrounding

To the seventh statement from the questionnaire: *I am certain that our school is the leader in the region in use of digital tools at work*, 40 respondents or 80% said YES, 10 respondents or 20% said PARTIALLY, and 0 respondents or 0% said NO. Visually it is presented by chart no. 7.

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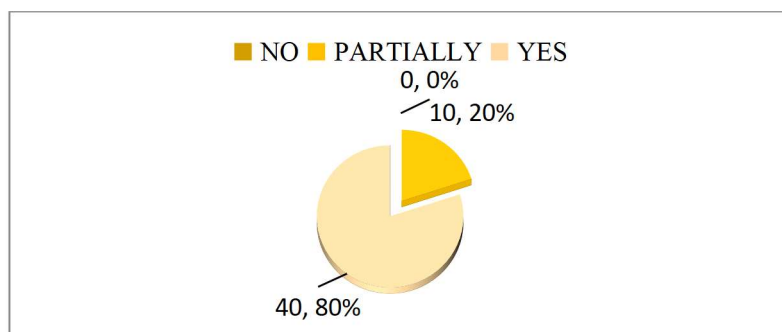


Figure 7. I am certain that our school is the leader in the region in use of digital tools at work

The research conducted in this paper aimed to prove the connection of leadership in the organization of modern digital teaching with the creation of quality teaching staff and motivated teachers to use digital learning tools.

From the research it can be concluded that the principal of the researched school managed to raise the school to the level of a leader in the region in use of distance learning in terms of school curriculum fulfillment.

CONCLUSION

Since the beginning of the crisis, teachers have had essential role in ensuring that the learning process continues through distance learning, where feasible, and that student well-being is considered. By returning to schools, teachers, school administrators and education support staff will play key roles in creating safe learning environment, curricula and the assessment and support of marginalized students.

Currently, systems need to start preparing teachers in order to meet these new challenges. In a system where the distance learning will not occupy full-time teachers and they are not deployed for other community needs, there should be time to provide them with practical professional development in these areas. Distance learning solutions deployed during the coping phase can be improved and augmented to quickly upgrade a number of teachers in subsequent response phases.

A key lesson learned during the pandemic is the importance of the role of the teachers in ensuring that the learning process continues. As schools reopen, much will depend on teachers to ensure that children can continue their education in a safe and healthy environment; and make up for lost knowledge and skills. In addition, technology not only changes teaching and learning methods, it can also elevate the role of teachers from imparting knowledge to work as co-creators of knowledge, as coaches, mentors and assessors. As a teacher, acknowledging the facts will not only protect yourself but also your students. Teachers need to play a key role in ensuring that students understand the precautions they need to take to protect themselves and others from Covid-19, and it is important to set an example in the classroom.

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**NEW ORGANIZATIONAL CULTURE IN COVID ERA – ARE INSTITUTIONS
PREPARED?**

Marija Apostolova Nikolovska¹
Renata Stoilkovska
Marija Stoilkovska Bozinoska

Abstract

The key to a successful institution is to have a culture based on a strongly held and widely shared set of beliefs that are supported by strategy and structure. When an institution has a strong culture, three things happen: employees know how top management wants them to respond to any situation, employees believe that the expected response is the proper one and employees know that they will be rewarded for demonstrating the institution's values. This paper investigate how resilient organizational cultures actually are. The paper covers and analyze definitions of organizational culture and safety culture and gives new definition for the new situation. Also, the paper instigate many questions - Do organizational cultures actually change when there is a wide scale societal jolt or do they remain stubbornly similar? Which components of a culture are transformed and which are kept? And what is the difference between highly institutionalized organizations with very well established cultures and those with younger or more brittle cultures? Can you transport a culture out of a physical space such as an office and into the immaterial world of virtual working? Does the move online lead to a rise or decline of much of the empty symbolic rituals of corporate life? When people are physically separated from each other, how is it possible to build up and maintain a collective culture? Next question worth exploring is whether there will be some overarching transformations in organizational culture.

Key words: global crisis, organizational culture, workers

JEL Classification: M12, M14

INTRODUCTION

In this global crisis, managers, workers and colleagues need to trust each other. Working from home cannot be effective without it. Employers they need to build mutual trust and establish shared responsibility with workers through open and transparent discussions of expectations and results. COVID-19 and the large scale social and economic shock has already profoundly transformed organizational cultures. The underlying values and assumptions of many organizations seem to have shifted from exploration and creativity towards safety and resilience. This profound change represents a major challenge for managers (Kniffin et al., 2020). They are asking themselves how they can build a company culture when everyone is working from home (Howard-Greenville, 2020). But it also represents a significant opportunity for researchers to investigate how such a large scale transition in society unsettles

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organisational culture and how those cultures might adapt. Research on macro-level cultures suggests that following economic shocks, societal level cultures tend to become more conservative (Winkler, 2020). Organizational culture reflects aspects of organizational life that are not visible, yet have enormous impact on both employees and organizations they impact every aspect of organizational functioning. It reflects a shared understanding of how things are done in an organization as well as how things should be done. It serves as a coordinating mechanism that promotes individual employee efforts toward organizational goals when it is a positive and strong culture, but can be a liability if it is too weak or too strong.

1. ORGANIZATIONAL CULTURE IN „CRISIS” AND NEED FOR NEW DEFINITION

There are many definitions of organizational culture in the professional literature and many authors define this term. In the Business Dictionary the definition is that - organizational culture includes an organization's expectations, experiences, philosophy, as well as the values that guide member behavior, and is expressed in member self-image, inner workings, interactions with the outside world, and future expectations. Culture is based on shared attitudes, beliefs, customs, and written and unwritten rules that have been developed over time and are considered valid (The Business Dictionary, 2017).

Needle pointed that culture also includes the organization's vision, values, norms, systems, symbols, language, assumptions, beliefs, and habits (Needle, 2004). Simply stated, organizational culture is “the way things are done around here” (Deal & Kennedy, 2000). While the above definitions of culture express how the construct plays out in the workplace, other definitions stress employee behavioral components, and how organizational culture directly influences the behaviors of employees within an organization. According to this set of definitions, organizational culture is a set of shared assumptions that guide what happens in organizations by defining appropriate behavior for various situations (Ravasi & Schultz, 2006). On the other hand, organizational culture affects the way people and groups interact with each other, with clients, and with stakeholders. Also, organizational culture may influence how much employees identify with their organization (Schrodt, 2002). Michael Watkins pointed that “Culture is the organization's immune system”. Culture is a form of protection that has evolved from situational pressures. It prevents “wrong thinking” and “wrong people” from entering the organization in the first place. Robbie Katanga points out that culture is how organizations ‘do things’. Culture is consistent, observable patterns of behavior in organizations. Bruce Perron points out that organizational culture defines a jointly shared description of an organization from within.

Today in this global crisis, organizational culture must to functions much like the human immune system in preventing viruses and bacteria from taking hold and damaging the body. The problem, of course, is that organizational immune systems also can attack agents of needed change and this has important implications for onboarding and integrating people into organizations. There is reality need for new definition for organizational culture in the institutions and the real definition in this

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situation is that an organization is a living culture that can adapt to the reality as fast as possible.

2. REALITY - THE DIGITAL WORKPLACE, REMOTE ORGANIZATIONAL CULTURE AND NEW HIRES

Working from a distance and working at home are not new phenomena, but the relevance of measuring them has increased, not least due to the coronavirus (COVID-19) pandemic¹. One of the responses to the pandemic has been a massive increase in the number of people working from home. This change might have a longer-term impact on a number of different aspects, including how people organize their work and where the work is performed. Institutions around the world are adapting to the new normal and maintaining the continuity. Institutions must try their best to accommodate their employees by their new policies on work from home and safety. With IT technology they must function through digital tools to ensure smooth functioning of the workflows. Along with that, the institutions are also in the next period must hiring new employees. This global crisis it will be test for their organizational culture since new hires are trying to fit into the new normal without having a prior understanding of the culture. Organizational culture is the personality of a institution. When employees do not have the physical experience of the culture, it is difficult for them to mold into it. Every organization has its own culture, and therefore, understanding the values and approaches of a new working environment can leave people confused and eventually unproductive. Leaders in all institution should answer to the questions: What do they want employees to say about institution, during and after this crisis? What actions will they remember? What stories will they tell? The output from this exercise provides an aspirational vision for culture that leaders can use to energize and enlist the broader institution.

Remote work can be performed in a variety of possible locations, all of which can be viewed as an alternative to the location where the work could typically be expected to be carried out, taking into account the profession and the status in employment². Remote working has its perks like flexibility and freedom, but how far it can work for both the employers and employees is the question that we all need to ask. The digital workplace cannot compensate for the cultural challenges if not taken care of by the employers and the employees jointly. Adapting to the new digital workplace and being productive for the moment would not help much in the long run unless the intricacies of the situation are well understood. Sector for human resources in institutions has a vital role in perpetuating a strong culture, starting with recruiting and selecting applicants who will share the organization's beliefs and thrive in that culture. This sector need to develop orientation, training and performance management programs

¹ ILO, 2020. COVID-19: Guidance for labour statistics data collection - Defining and measuring remote work, telework, work at home and home-based work, Geneva: ILO.

² Eurofound and ILO (International Labour Office). Working Anytime, Anywhere: The Effects on the World of Work, Publications Office of the European Union, Luxembourg, and the International Labour Office, Geneva. available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_544138.pdf.

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that outline and reinforce the organization's core values and ensures that appropriate rewards and recognition go to employees who truly embody the values. The ILO analysis¹ shows that while not all occupations can be done at home, many could approximately one in six at the global level and just over one in four in advanced countries but that the potential to do so requires, at a minimum, that countries make the necessary investments in improving telecommunications infrastructure.

Staff training and development are important to ensure that workers are equipped with the knowledge and skills needed to keep up with the latest information and technologies.

In response to the development of COVID-19, the University of Florida and UF Health² are partnering together to create a safe work environment for new employees. Guided by the world-class physicians and epidemiologists at UF Health, the university's new hire process is designed to enable all of us to continue our work together as safely as possible. As part of the hiring process, all new hires will be required to complete a brief screening questionnaire. New hires are encouraged to opt for a COVID-19 testing, which will be at no cost.

The onboarding practices for new employees need to be reviewed to align them to the organization's vision and goals while ensuring a seamless remote joining experience. The entire "employee journey" will have to be planned as the HR gets ready for the new challenges that come along with a distributed virtual atmosphere. This could mean the modification of recruitment practices, rewards and recognition policies, engagement initiatives, exit processes, and everything in between.

In the future employers could consider providing expanded support to parents and caregivers at this time. Also, employers may be able to provide flexibility, including changing the measures on productivity by focusing on outcomes delivered rather than on working time. In parallel, employers may also use collaborative online tools, such as shared calendars and public status to facilitate teamwork and boost productivity.

Changing organizational culture is not an easy undertaking. Employees often resist change and can rally against a new culture. Thus, it is the duty of leaders to convince their employees of the benefits of change and show through collective experience with new behaviors that the new culture is the best way to operate to yield success.

3. „NEW“ ORGANIZATIONAL CULTURE – ARE INSTITUTIONS PREPARED?

Some institutions may have previous experience working from home or already have contingency plans for work from home. However, many institutions are likely to implement work from home for the first time and should urgently adopt rules for work from home for the whole institution. First, there is the question of risk management.

¹ ILO, 2020. *Policy Brief - Working from Home: Estimating the worldwide potential*. Geneva: ILO.

² University of Florida, 2020. Accessed on 12 October 2020. <https://hr.ufl.edu/manager-resources/recruitment-staffing/hiring-center/new-hire-and-covid-19-screening/>.

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How should institutions deal with risk management and be prepared for similar situations that may happen in the future. Institutions need to ensure business continuity in a dynamic environment, which involves ongoing trusted communication both within the institution and with external partners. Second, there is the issue of virtual communication. Virtual communication in organizations is employed on whole different levels of volume and intensity. Virtual communication carries not only technological challenges, but also interpersonal and interpretational challenges. Third is organizational culture. As many employees are working remotely from home, and there are forecasts that it will be an increasing trend in the following years, institutions will have to redefine or adjust their culture. Some of the related questions might be: how to maintain a safe community for the employees? What are the characteristics of remote leadership? How to promote creativity and critical thinking in a disparate and distributed team? How to advance organizational knowledge sharing?

In Macedonia, as well as in other countries around the world due to the pandemic, the employees of the institutions started working from home. The Government of the Republic of N. Macedonia at its session held on March 19, 2020, reviewed and adopted the Minutes of the Fourth Meeting of the General Coordination Crisis Staff¹ to ensure full coordination regarding the prevention of introduction and spread of Coronavirus COVID-19. At the 23rd session of the Government was adopted the conclusion which recommends to all employers in the Republic of Northern Macedonia, i.e. each manager of the institution, depending on the type of work and opportunities, to organize the work and manner of work of employees, through work from home, without disturbing the regular and normal functioning of the institution.

The Business Confederation of Macedonia in cooperation with the Bureau of Employers' Activities of the International Labor Organization has developed a handbook to provide practical guidance to member companies that have implemented "work at home" protocols for their employees in 2020 as an alternative temporary solution during the crisis caused by COVID-19. This handbook² provides business recommendations, including the tasks and responsibilities of employers and workers, considerations and challenges, methods for addressing and addressing those challenges. The manual also contains a template that should enable companies to develop a work plan from home. The newly opened website³ by the macedonian government provides tips and recommendations for moving the work office to your home. The ultimate goal of human resource departments is to strive to create a culture that is inclusive of those working remotely. At its session on October 20, 2020, the macedonian government

¹23rd session Government of the Republic of N. Macedonia, accessed on 10 october 2020. <https://vlada.mk/node/20608>.

² Business Confederation of Macedonia, ILO, 2020. Manual for employers for work from home in response to the COVID-19 pandemic. Skopje: Business Confederation of Macedonia.

³Government of Republic of N. Macedonia accessed on 15 october 2020 <https://koronavirus.gov.mk/pocetna/zashtita/online>.

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giving the recommendation¹ of the entire state and public administration, municipalities and courts, in accordance with the principle of work and work process, to organize the work in shifts or online from home or reduced with a system of rotations depending on the characteristics of the working process of the institutions.

In addition, a joint survey was launched by the Organisation of Employers of Macedonia (OEM) and Business Confederation of Macedonia (BCM) with support from the International Labour Organization (ILO) and in collaboration with the European Bank for Reconstruction and Development (EBRD) and the aim was to collect evidence on the effects of the pandemic on enterprises' operations and viability, as well as to identify relevant support measures that would be most beneficial for enterprises to overcome the crisis. In the report - The impact of the COVID-19 pandemic on enterprises in N. Macedonia², it is pointed that in Macedonia, the COVID-19 crisis has severely affected an overwhelming 82 per cent of surveyed enterprises, which reported significant financial losses and temporary suspension of business operations. About 43 per cent of surveyed enterprises experienced a sharp decline in revenues by more than 50 per cent and 11 percent reported a complete shutdown of their operations. To alleviate the consequences of the pandemic and maintain the workforce, all surveyed enterprises adjusted their business operations. The most widely applied adjustments included the reduction of working hours (69 per cent), providing paid annual leave to employees (43 per cent), changes in work organisation (28 per cent) and access arrangements for customers and/or suppliers (28 per cent), and implementation of innovative solutions (for instance, e-commerce). In spite of all measures taken to preserve the workforce, some 9 per cent of surveyed enterprises had to lay off employees. Also, the survey pointed out that while government support schemes were timely, the eligibility criteria for applying for such support need to be more transparent and inclusive. Enterprises need further government support schemes aligned with their specific needs, including access to liquidity and wage subsidies.

Employers in the institutions need to seek the cooperation, ideas and commitment of workers in finding ways to best address and overcome this challenge and at the same time ensuring continuity in the work and preservation of the jobs. Workers may have limited resources to work from home, or perhaps their home is less optimal work environment than the workplace (for example, located near noisy construction site or factory or workers living in a multi-generational household or in a small apartment, so the conditions are not suitable for working from home). Therefore, employers need understand and assess the constraints faced by employees and address them accordingly adjust expectations, responsibilities and tasks.

These are challenging and uncertain times for everyone. And a strong and resilient organizational culture can help one navigate through this crisis. There is no pandemic-

¹ Government of Republic of N. Macedonia, accessed on 21 October 2020. <https://vlada.mk/node/22871>.

² ILO, 2020. Macedonia 2025 - The impact of the COVID-19 pandemic on enterprises in North Macedonia. Organization of Employers of Macedonia, Business Confederation of Macedonia.

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proof model. But this is an opportunity for leadership to introspect and take steps that can hold them in good stead for the future.

CONCLUSION

In the next steps in the institutions must to create a culture vision. Companies with a strong organizational culture will be best positioned to rally employees and motivate them to meet the challenges of this crisis, and beyond. Leaders must to learn from organizational behavior during COVID-19. A strong culture is a common denominator among the most successful institutions. All have consensus at the top regarding cultural priorities, and those values focus not on individuals but on the organization and its goals. Leaders in successful institutions live their cultures every day.

In this crisis context organizational culture in the institutions must to be more flexible and dynamic. Likewise, this highlights the idea that a stable “destination” may never — indeed should never — be reached. The culture of the organization should always be learning and developing.

These perspectives provide the kind of holistic, nuanced view of organizational culture that is needed by leaders in order to truly understand their institution and to have any hope of changing them for the better. The new organizational culture is challenge, as workforces continue to work from home, at least part-time, on a mass scale, many of the variables that make up corporate culture are not within the control of institutions in the same way and to the same degree as they used to be. Consequently, it’s important for leaders to focus on how COVID-19 is impacting working experiences and what they can do to continue to ensure a positive organizational culture for their staff.

To prepare for this potential cultural shift on a large scale, institutions should develop clear policies as well as invest in technology and training at all levels of the corporate hierarchy to ensure productivity and effective working practices are maintained. The restrictions surrounding the COVID-19 pandemic have quickly shifted the goal posts for institutions that take their organizational culture seriously. By adapting to change now, institutions could not only deliver more positive working experiences today, but also be better equipped for tomorrow’s future world of work.

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CHANGES IN INNOVATIVENESS AFTER COVID-19 PANDEMIC

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Ahmet Selim Karakose

Abstract

COVID-19 pandemic continues to produce substantial effects in various spheres of life in the world. This process is expected to change the attitude and behavior of the society especially by forcing to adopt some technologies, digital means that have not been used before, to keep the social distance and not to enter public areas. The aim of this study is to analyze the changes in innovativeness of people after COVID-19. In the literature, the first studies on the diffusion of innovations were made by the French sociologist Gabriel Tarde in the early 1900s that presented the S-Curve, which shows the change in the number of people who adopt innovation over time. According to the diffusion S-curve, a very small part of the society adopts innovations primarily, and then increasingly accepted by a large number of people over time. In 1962, Rogers introduced the "Diffusion of Innovations" model, which explained the adoption process of innovations and defined innovativeness as measured by the time at which an individual adopts innovation(s), Innovators, early adopters, early majority, late majority, laggards. In this study, to measure the innovativeness of participants, the Innovativeness Scale which was developed by H. Thomas Hurt and others in 1977 was used. The developed questionnaire was distributed via social media and in total data were obtained from 425 participants. The findings of the study revealed that there is a dramatic decrease in the percentage of laggards and there is also a significant increase in innovators, similar changes were seen in other categories as well. The results indicate a significant shift in the border-lines of categories on the normal distribution of innovativeness scores.

Keywords: COVID-19, diffusion of innovations, innovativeness, S-curve.

JEL classification: O32; M19; L22

INTRODUCTION

After globalization and the changes created in competition, innovation has become one of the most important tools providing competitive advantage. The most important criterion that makes this tool successful is that consumers adopt these innovations. For this reason, businesses need to know the process of adopting innovations by their target audiences and the factors affecting this process. One of these factors is undoubtedly the innovativeness level of the consumers. For this reason "Customer innovativeness" has been the subject of many studies, especially because of its important role in the adoption, diffusion of innovations and consumer behavior.

In 2020, COVID-19 pandemic produced substantial effects in all spheres of the life especially on the structures of societies and individual characteristics. The Covid-19 pandemic continues to have significant effects in various living areas of the world. In

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this process, it is expected to change the attitude and behavior of the society, especially by forcing most of us to adopt certain technologies and digital tools that we have not used before, to maintain social distance and not to enter public spaces. We think that there has been a change in innovativeness of people after Covid-19. Identifying such changes will enable businesses to take appropriate action. The aim of this study is to analyze the changes in innovativeness of people after Covid-19. In our study, to measure the innovativeness of participants, we prepare a survey basing on the Innovativeness Scale which developed by Hurt, Joseph & Cook in 1977.

Our article explains the methodology and data used after the literature review on innovation and scale, includes the analysis of those contacted, and the summary and interpretation of the study results.

1. LITERATURE REVIEW

Innovativeness, was explained on the basis of willingness and tendency (Braak 2001; Hurt, Joseph & Cook, 1977; Hirschman 1980) and reaction or adaption (Rogers, 2003; Goldsmith ve Foxall 2003) to innovations, to what is new. Also innovativeness was evaluated on three aspects as a personality trait, ("innate innovativeness", II), as interest-specific personality approaches ("domain-specific innovativeness", DSI), and as actualized behavior ("innovative behavior" IB) (Bartels & Reinder, 2011; Goldsmith & Foxall, 2003).

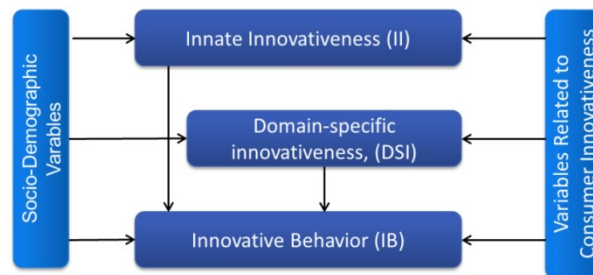


Figure 1. Consumer Innovativeness Model
Source: Akdoğan & Karaarslan (2013)

The process by which "an innovation is communicated through certain channels over time among the members of a social system" is defined as diffusion. The first studies on the diffusion of innovations were made by the French sociologist Gabriel Tarde in the early 1900s. Tarde, who uses the concept of "imitation" to explain the adoption of innovation, tried to reveal the reasons for the spread of the innovations in his book 'The Laws of Imitation' (Rogers 2003). Tarde (1903), presented in his study the S-Curve, which shows the change in the number of people who adopt innovation over time.

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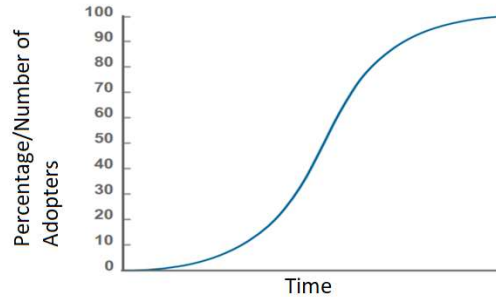


Figure 2. Diffusion S-Curve
Source: Rogers (2003)

According to the S-curve, where time is specified on the horizontal axis and the number / ratio of imitators (adopters) on the vertical axis. This is a cumulative curve on which its height represents the total percentage/number of people who have adopted at that time. Primarily, a very small part of the society adopts innovations and then increasingly accepted by a large number of people over time and finally the adoption rate decreases. Later on many researches were held about diffusion in different scientific disciplines like anthropology, early sociology, rural sociology, education, medical sociology, communication, marketing, geography, and general sociology.

Beal and Bohlen (1956) indicated that people do not adopt new ideas at the same time, but on the same complex process steps as Awareness, Interest, Evaluation, Trial and Adoption. And by comparing the characteristics of the adopters they categorized the people in 5 groups as; Innovators, Early Adapters, Early Majority, Majority, Non-Adapters.

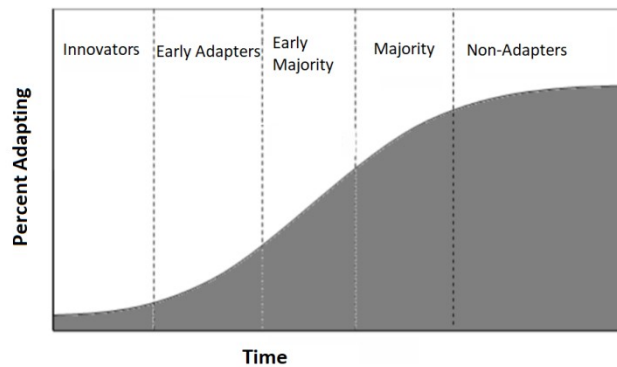


Figure 3. Adaption Curve & Time Categories
Source: Beal and Bohlen (1956)

In 1962, Rogers introduced the "Diffusion of Innovations" model, which explains the adoption process of innovations. He defined the innovativeness, as measured by the time at which an individual adopts innovation(s) and adopter distributions closely approach normality. He used the several characteristics of normal frequency

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distribution in classifying adopters and partitioned innovativeness variable into five adopter categories by laying off standard deviation (sd) from the average time of adoption as Innovators, Early Adopters, Early Majority, Late Majority, Laggards (Rogers 2003).

- **Innovators:** They are very eager to try new ideas. This interest leads them out of a local circle of peer networks and into more cosmopolite social relationships.
- **Early Adopters:** They are more integrated part of the local social system. They have the greatest degree of opinion leadership. Potential adopters look to them for advice and information
- **Early Majority:** They interact frequently with their peers, but seldom hold leadership positions. Their unique position between the early and late to adopt makes them an important link.
- **Late Majority:** They adopt new ideas just after the average member of a social system. Adoption may be both an economic necessity and the answer to increasing network pressures.
- **Laggards:** They possess almost no opinion leadership. They are the most localite in their outlook of all adopter categories; many are near isolates in social networks.

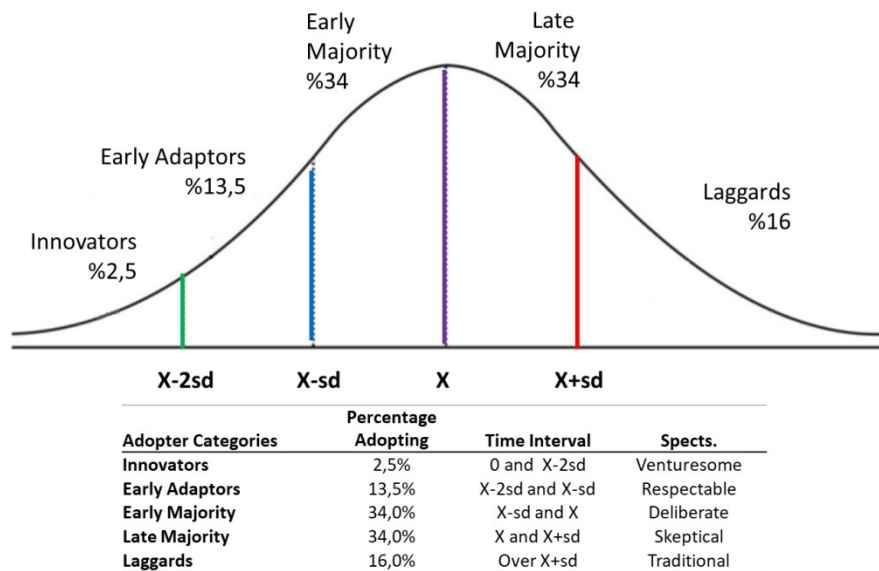


Figure 4. Innovativeness Categories
Source: Rogers (2003)

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Rogers (2003) used the mean (x) and the standard deviation (sd), to divide a normal adopter distribution into categories.

- Standard deviations include the first 2.5 percent of the individuals to adopt an innovation—the innovators.
- The next 13.5 percent to adopt the new idea are included in the area between the mean minus one standard deviation and the mean minus two standard deviations; they are labeled early adopters.
- The next 34 percent of the adopters, called early majority, are included in the area between the mean date of adoption and minus one standard deviation.
- Between the mean and one standard deviation to the right of the mean are located the next 34 percent to adopt the new idea, the late majority.
- The last 16 percent are called laggards

The same 5 group categorization was used by others like Parasuraman & Colby (2001) in their study about Technology Readiness Index (TRI) with category names as Explorers, Pioneers, Skeptics, Paranoids and Laggards.

The diffusion of innovations and innovativeness concepts have been and remain an important topic in marketing management and consumer behavior because of the importance of new products and innovations on the competitive advantage and survival of companies. As consumers make their individual adoption decisions, these aggregate to produce the timing and pattern of diffusion. Thus, adoption is an individual or micro decision process, while diffusion is a social or macro process.

Diffusion and success of innovations depends on knowing the target audience that has the potential to use it and correctly identifying the needs to be answered. Innovative customers are more important in terms of marketing discipline than other consumers because they are fond of innovations, adopt innovations more quickly and easily, and introduce innovations to those around them. Innovators directly affect the success and diffusion of new products and are important in determining the target audience in marketing activities and determining the activities to be carried out (Dobre, Dragomir ve Preda 2009) . For this reason, measuring consumer innovativeness has gained importance and has been the subject of many studies.

In our study, to measure the innovativeness of participants, we used the Innovativeness Scale (IS) which was developed by Hurt, Joseph & Cookin 1977. It is a self-report measure tool. In the development of scale, 53 items were prepared reflecting the characteristics of the five innovativeness categories. It was applied to 231 university students in the first stage and 431 teachers in the second stage. After statistical and psychometric analyzes 20 items with a factor load greater than .50 were left in the scale. It has been tested by many researchers on different samples, its validity and reliability have been accepted. It has been tested by Kılıçer and Odabaşı in 2010 and adapted to Turkish (Kılıçer ve Odabaşı 2010).

In the study of the Turkish adapted scale, that validity and reliability analysis were carried out on 343 undergraduate students. The scale was yielded four valid factors as resistance to change, intellectual leadership, openness to Experience and taking risk.

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Adapted scales' internal reliability co-efficient was 0.82 and test-retest reliability co-efficient was 0.87. Kılıçer and Odabaşı (2010) confirmed that the adapted scale is suitable for Turkish academic studies and we used the adapted scale in our study.

In the Table 1, here you can see the percentages of innovativeness categories in these studies, supporting the results of Rogers (2003) studies.

Table 1. Change in the Distribution of Innovativeness

InnovativenessCategories	1995		1977	2009
	Rogers		Hurt, Joseph &Cook	Kılıçer & Odabaşı
	Time Interval	%		
Innovators,	Btw. 0 & t-2 α	2,5%	1,5%	2,9%
EarlyAdopters,	Btw. t-2 α & t- α	13,5%	13,5%	13,4%
EarlyMajority,	Btw. t- α & t	34,0%	34,9%	32,1%
LateMajority,	Btw. t& t+ α	34,0%	34,9%	39,7%
Laggards	Over t+ α	16,0%	15,6%	12,0%

Source: (Kılıçer ve Odabaşı 2010)

2. METHODOLOGY AND DATA

In our study we developed our questionnaire basing on Innovativeness Scale (Hurt et.al, 1977), plus demographic questions for on a web-based application (www.surveymonkey.com) and shared it on social media like LinkedIn, Facebook, Whatsapp. The questionnaire was completed by 425 participants.

In our questionnaire, we use Likert 5 and calculate the innovativeness score with 3 steps as defined by Hurt and others (1977)

- Step 1: Add the scores for items 4, 6, 7, 10, 13, 15, 17, and 20.
- Step 2: Add the scores for items 1, 2, 3, 5, 8, 9, 11, 12, 14, 16, 18, and 19.
- Step 3: Complete the following formula:

$$\text{Innovativeness Score} = 42 + \text{Total score for Step 2} - \text{Total score for Step 1.}$$

After calculating the scores, we categorized the each participants according to the score intervals of categories as below

- >80 Innovators.
- 69-80 Early Adopters.
- 57-68 Early Majority.
- 46-56 Late Majority.
- 46< Laggards

3. ANALYSIS AND RESULTS

The questionnaire was completed by 425 Turkish participants over 20 years old in September/October 2020 after Covid-19 pandemic.

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In our study, SPSS Version 22.0 program was used for data analysis. We found the mean and standard deviation of scores as below which are very close to the values found in the study of KılıçerveOdabaşı (2010)*

Mean (X) = **66.43** 66.86 *
 Standard deviation (Ss)= **10.23** 8.94 *

It is found that scales' internal reliability co-efficient was 0.858 and showing the characteristic of normal distribution with Shapiro-Wilk test. In Appendix 2, you can find more details about normality.

Table 2. Reliability and Normality Statistics

		Reliability Statistics
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,858	,865	20
		Test of Normality
Statistic	Shapiro-Wilk df	Sig.
,994	425	,095

In Table 3 we present the number and percentage of participants in each innovativeness categories obtained from our survey basing on demographic categories, gender, age, education, income and occupational status.

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Table 3. Distribution of Innovativeness Categories by Demographic Data

CATEGORY	INNOVATORS	EARLY ADOPTERS	EARLY MAJORITY	LATE MAJORITY	LAGGARDS	TOTAL
Total	40	142	178	59	6	425
GENDER						
Male	27	86	109	35	2	259
	68%	61%	61%	59%	33%	61%
Female	13	56	69	24	4	166
	33%	39%	39%	41%	67%	39%
AGE						
20-29	4	10	20	11		45
	10%	7%	11%	19%	0%	11%
30-39	6	33	43	14	3	99
	15%	23%	24%	24%	50%	23%
40-49	19	65	86	24	3	197
	48%	46%	48%	41%	50%	46%
50-59	10	25	19	5		59
	25%	18%	11%	8%	0%	14%
OVER 60	1	9	10	5		25
	3%	6%	6%	8%	0%	6%
EDUCATION						
Primamry & Secondary	5	11	16	10	1	43
	13%	8%	9%	17%	17%	10%
Associate Degree & Undergraduate	26	77	111	33	2	249
	65%	54%	62%	56%	33%	59%
Master & PhD	9	54	51	16	3	133
	23%	38%	29%	27%	50%	31%
INCOME						
Under 5.000 TL	8	30	52	24		114
	20%	21%	29%	41%	0%	27%
5.001 TL - 10.000 TL	14	53	75	18	5	165
	35%	37%	42%	31%	83%	39%
10.001 TL - 15.000 TL	6	24	27	9	1	67
	15%	17%	15%	15%	17%	16%
15.001 TL - 20.000 TL	4	13	11	4		32
	10%	9%	6%	7%	0%	8%
Over 20.000 TL	8	17	9	3		37
	20%	12%	5%	5%	0%	9%
Not Declared		5	4	1		10
	0%	4%	2%	2%	0%	2%
OCCUPATIONAL STATUS						
Employed in private sector	23	74	93	27	2	219
	58%	52%	52%	46%	33%	52%
Employed in government institutions	5	23	35	10	2	75
	13%	16%	20%	17%	33%	18%
Self-Employed	10	25	22	7	1	65
	25%	18%	12%	12%	17%	15%
Unemployed & Retired	1	16	21	8	1	47
	3%	11%	12%	14%	17%	11%
Student	1	4	7	7		19
	3%	3%	4%	12%	0%	4%

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To see the change in innovativeness of people after Covid-19 pandemic, in Table 4, a comparison is prepared by using the results of our study, with scaled development of Hurt et al. (1977), and Turkish adoption of Innovativeness Scale by Kılıçer & Odabaşı (2009) basing on Rogers' findings.

Table 4. Comparison of Innovativeness Categories Percentages

Categories	1962 Rogers' Innovativeness Categories	1977 Hurt, Joseph & Cook (Scale Development)	2009 Kılıçer & Odabaşı (Adopting Scale)	2020 Current Research	Percentage Difference
Innovators (INV)	2,5%	1,5%	2,9%	9,4%	+7%
Early Adopters (EA)	13,5%	13,5%	13,4%	33,4%	+20%
Early Majority (EM)	34,0%	34,9%	32,1%	41,9%	+7%
Late Majority (LM)	34,0%	34,9%	39,7%	13,9%	-20%
Laggards (LG)	16,0%	15,6%	12,0%	1,4%	-14%

Here we conceptualized the shifts in the border-lines of categories on the normal distribution of innovativeness scores, comparing with the Rogers' Innovation Diffusion Model.

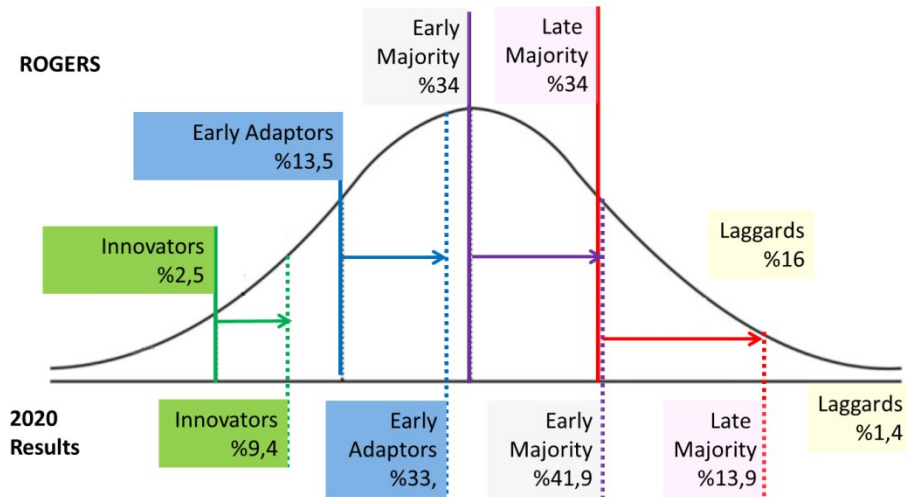


Figure 5. Shifts in Innovativeness Categories %

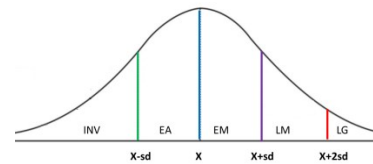
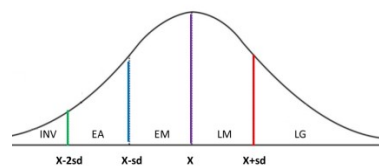
When we use the mean and standard deviation relation as Rogers did, to divide a normal adopter distribution into categories. we saw that if there is a small change in score interval of innovators, we see the same relation basing on the mean and standard deviation of scores is found. When we changed the score limit of innovators from 80 to

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76, we see that the percentage of categories areshowing a division of normal adopter distribution into categories as seen in Table 5.

Table 5. Comparison of Innovativeness Categories Percentages with Manipulating the Score Intervals

	INNOVATIVENESS CATEGORIES	ROGERS' MODEL WITH INNOVATIVENESS SCALE			REVIZED DIFFUSION MODEL WITH IS & UPDATED SCORE INTERVALS		
		Time Interval	Score Interval	Percentage Adopting	Score Interval on Normal Dist.	Score Interval	Percentage Adopting
1	Innovators.	Btw. 0 & $t-2\alpha$	>80	2,50%	Btw. 0 & $X-\alpha$	>76	15,8%
2	Early Adopters.	Btw. $t-2\alpha$ & $t-\alpha$	69-80	13,50%	Btw. $X-\alpha$ & t	69-76	34,1%
3	Early Majority.	Btw. $t-\alpha$ & t	57-68	34,00%	Btw. X & $X+\alpha$	57-68	34,8%
4	Late Majority.	Btw. t & $t+\alpha$	46-56	34,00%	Btw. $X+\alpha$ & $X+2\alpha$	46-56	13,9%
5	Laggards	Over $t+\alpha$	46>	16,00%	Over $X+2\alpha$	46>	1,4%



In this study we didn't have the chance for checking the innovativeness of these participants according to this possible manipulation, but in future studies, it can be tested.

CONCLUSION

In 2020, COVID-19 pandemic produced substantial effects in all spheres of the life especially on the structures of societies and individual characteristics. The Covid-19 pandemic continues to have significant effects in various living areas of the world. In this process, it is expected to change the attitude and behavior of the society, especially by forcing most of us to adopt certain technologies and digital tools that we have not used before, to maintain social distance, reduce social interactions with others and not to enter public areas. The increase in e-commerce, e-learning, home-office practices, self-service technologies are supporting these changes.

To understand the possible effects on innovativeness of people after Covid-19, we compared the past studies about innovativeness with updated research on innovativeness in Turkey. Our findings show a dramatic decrease in the percentage of laggards and there has been a significant increase in innovators, similar change was seen in other categories also. This shows a significant shift in the border-lines of categories on the normal distribution of innovativeness scores. This change in innovativeness can be interpreted by one or more effect(s) below

- The result of social lockdown because of Covid-19 andreaction to sustain.

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- The possible effects of rapid technological developments, digitalization and new developments in Industry 4.0, artificial intelligence etc.
- The possible changes in scoring of innovativeness scale by the time, meaning that the score intervals defined in 1977 may have been changed.
- The findings of Rogers' diffusion of innovation model can not be generalizable

In future studies the possible reasons listed above can be tested to explain and confirm this change in innovativeness.

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**ACHIEVING THE CUSTOMIZED “RIGHTS” OF LOGISTICS BY
ADOPTING NOVEL TECHNOLOGIES**

Seyhan Teoman¹

Abstract

The Council of Supply Chain Management Professionals defines logistics as “the part of supply chain management that plans, implements, and controls the efficient, effective forward, and reverse flow and storage of goods, services, and related information between the point of origin and point of consumption to meet customer's requirements”. This definition of logistics emphasized the importance of providing logistics services in an efficient, timely and reliable manner for a high level of customer satisfaction. From the early 2000s, with the rapid expansion and increasing complexity of supply chains, the logistics literature has frequently referred "the seven rights of logistics (7Rs)" that linked logistics to the key strategic objectives of cost competitiveness, quality, flexibility, and agility. The “7Rs” are described as to deliver the “right product”, in the “right quantity”, in the “right conditions”, at the “right place”, at the “right time” for the “right customer” and at the “right cost (price)”. Considering this strong paradigm as a guide, logistics managers sought to determine the 7Rs of logistics for a given market, product or customer segment, and to identify and implement the most effective strategies to achieve them. The “7Rs” provides a generic solution for achieving efficiency, effectiveness and higher level of customer satisfaction in logistics services. However, within the last decade, customers' demand for customized products and services has increased dramatically. Today, it is possible almost for any customer to demand any product in any quantity to be delivered anytime, anywhere and in any conditions. In other words, the generic 7Rs of logistics tends to differ for almost every individual customer, thus it's time to focus on the "customized rights of logistics". This new paradigm forces logistics managers to explore and to experience new methods and tools to transform business processes to be faster, more flexible and more customer-oriented than ever before. In this regard, technological developments offer many opportunities. The aim of this paper is to explore the benefit of adopting novel technologies in business processes to achieve the customized rights of logistics. Our research findings show that the adoption of technologies such as augmented reality, 3D printing, autonomous vehicles, drones, internet of things, big data analytics, robotics and blockchain in logistics processes significantly leverages the ability of logistics service providers to offer customized solutions for their customers.

Keywords: Customized logistics services, Novel technologies in logistics, the seven rights of logistics.

JEL classification: M11; O33

INTRODUCTION

Business logistics is the art of adding value to products by providing a place and time utility. “Place utility” refers to the value provided by having products available *where* they are needed by customers. “Time utility” refers to the value provided by having

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products available *when* they are needed by customers (Coyle and Bardi, 1976). The important is that the place and time value added to the products by logistics services are in compliance with customer requirements. This is the main concern of logistics management. Council of Supply Chain Management Professionals defines logistics management as “the part of supply chain management that plans, implements, and controls the efficient, effective forward, and reverse flow and storage of goods, services, and related information between the point of origin and point of consumption to meet customer requirements” (Mentzer, Min, and Bobbitt, 2004). This definition of logistics management highlights the importance of providing logistics services in an efficient, timely, and reliable manner for a high level of customer satisfaction. The logistics literature often refers to the "seven rights (7Rs)" that must be achieved simultaneously for a high level of customer satisfaction. The 7Rs are to deliver the “right product”, in the “right quantity”, in the “right quality”, at the “right place”, at the “right time” for the “right customer” and at the “right cost” (Swamidass, 2000; Rushton, Croucher, Baker, 2017). The 7Rs links business logistics to the key strategic objectives of cost competitiveness, quality, flexibility, and agility. Considering this paradigm as a guide, logistics managers seek to determine the 7Rs of logistics for their target market, product or customer segment, and to identify and implement the most effective strategies to achieve them.

Within the last two decades, digitalization, mobility and "always connected" lifestyle have drastically changed consumer behavior and requirements. Because of the wealth of information available through Internet customers continue to become more demanding and selective. Furthermore, where a customer perceives little technical difference between competing offerings, the need is for the creation of differential advantages through added value, and a prime source can be customer service. Therefore, logistics must differentiate the product and/or service offerings to fulfill unique customer requirements. The focus of today’s customer-driven market place is on creating value through personalized and customized offerings, not only of products, but also of services, targeted to individual customers rather than “one size fits all” products and services. Besides, today’s customers are very aware, attached, and knowledgeable about how to best use the latest digital technologies. Hence, the direction of technological focus is shifting from serving companies towards serving individuals (Büyükoğuzkan and Göçer, 2018).

As a result, for logistics providers, achieving the generic 7Rs to provide a place and time utility may not be sufficient fully to satisfy customers. Instead, it is necessary to focus on the “customized 7Rs” of logistics. Table 1 presents the definitions of the generic 7Rs and our new definitions evolved into customized 7Rs.

It is clear that this new paradigm has led to a further challenge for logistics service providers. They have to explore and to experience new methods and tools to transform logistics processes to be faster, more flexible and more customer-oriented than ever before. We consider six key abilities that logistics processes have to embrace to achieve the customized 7Rs. They are:

- *Speed* – the ability to react quickly to demand and deliver orders quickly

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- *Flexibility* – the ability to recognize and respond to a customer’s changing needs
- *Scalability* – the ability to quickly add or remove resources to allow the better matching of resources to workload
- *Proactivity* – taking actions prior to the occurrence of issues or requirements
- *Visibility* – real-time traceability of in-transit product information by all service stakeholders, such as the location, condition and inventory level.
- *Sustainability* – efficient use of scarce energy resources, and eco-friendly practices to reduce negative impacts on the environment and society.

This study discusses the benefits of adopting new technologies in logistics services to achieve the customized 7Rs of logistics by developing the aforementioned capabilities in business processes.

Previous studies on logistics performance have focused on the generic 7Rs. We believe that this study, which evaluates logistics service performance through the customized 7Rs of logistics, is the first and contributes to the logistics literature.

The rest of the paper is structured as follows. Section 1 presents our literature review on novel technologies and implications for the logistics industry, research findings are given in Section 2, and the conclusion in the last section.

Table 1. Definitions of the generic and customized 7Rs of logistics

The 7Rs of Logistics	Definition of the Generic 7Rs	Definition of the Customized 7Rs
Right CUSTOMER	Providing services meeting the requirements of a specific market or region	Providing services meeting the requirements of any customer regardless market or region.
Right PRODUCT	Product-specific service design with appropriate equipment and resources	Being capable to service for any kind of product (in any size, weight, or nature)
Right PLACE	Delivery of the customer order at the destination predefined by the customer	Delivery of the customer order at any location desired by the customer, even it is not a predefined destination
Right TIME	Delivery of the customer order at the scheduled time or time-window	Delivery of the customer order at anytime or time-window preferred by the customer
Right QUANTITY	Delivery of the customer order in	Being able to deliver the

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	<p>an amount that will reduce delivery costs and not cause excess stock and stock shortage</p>	<p>customer orders at once in any amount required.</p>
Right QUALITY	<p>Delivery of the customer order in safe and good conditions.</p>	<p>Delivery of the customer order in the condition that meets product-specific quality standards, as well as in customer-specific conditions</p>
Right COST (PRICE)	<p>Delivery of the customer order at the lowest possible cost</p>	<p>Delivery of the customer order at the price that the customer is agreed to pay provided that the above six are met</p>

1. LITERATURE REVIEW ON NOVEL TECHNOLOGIES AND IMPLICATIONS FOR LOGISTICS

In this section we present a literature review on facilitating role of emerging technologies on customization of logistics services. The literature on emerging technologies that we examine within the scope of this study is fairly new. While most studies focus on a specific technology, some studies examine the impact of all novel technologies effective on logistics (e.g., DHL Logistics Trend Radar Report, 2020). Each paragraph below presents a brief description of the technology into consideration, followed by recent literature on its implications on logistics services.

The Internet of Things (IoT) refers to a network system where the everyday objects that feature an IP address for internet connectivity can exchange and share data, and so communication occurs between these objects and other network devices and systems. IoT intelligently identifies, locates, tracks, monitors and manages all items connected to the Internet, through information sensing devices. IoT aims to connect any “Thing” independent of place, time and motion (Wei and Lv, 2019). Liu S., Zhang, Liu Y., Wang L., and Wang V. (2019) propose a real-time information-driven dynamic optimization method for vehicle routing and logistics tasks, through using IoT technology. The study shows that IoT-enabled methods contribute to improved efficiency of logistics and the utilization rates of vehicles, avoid errors in loading/unloading tasks, reduced logistics cost, and achieving sustainable logistics services. Chen J., Xu, Chen H., Zhao, and Xue (2020) analyze the significance of using IoT to optimize the food cold chain logistics distribution route. The results verify the effectiveness of the cold chain logistics vehicle routing optimization method based on

the IoT and improve the efficiency of distribution services. Through an extensive literature survey, Ben-Daya, Hassini and Bahroun (2019) state that improvements brought by IoT to the logistics functions are as follows: (1) product identification through RFID informs the system about the *right goods*, (2) tracing allows the detection of when items are lost and guarantees the *right quantities*, (3) location tracking guarantees the *right place* aspect, (4) monitoring the product state ensures the *right quality*, and (5) this information provides the necessary visibility that allows responsiveness to unforeseen events and taking action at the *right time* and the optimization of the whole process. Wei and Lv (2019) apply the IoT to cold chain logistics of agricultural products, using RFID, GPS, and GIS technologies to ensure real-time dynamic monitoring of the temperature and humidity of agricultural products in transit and their fast and efficient distribution. By leveraging the IoT applications logistics providers can dramatically improve the following areas: (1) end-to-end visibility – complete visibility facilitates more effective, timely decisions and reduces delays through quicker detection of issues, (2) warehouse and yard management – with IoT-enabled mobile devices designed to track inventory data, equipment and vehicles, enterprises can give their physical assets a digital voice, and (3) fleet management – with mobile scanners, computers and RFID systems alone, enterprises can gain visibility into their assets and better streamline operations to keep their fleet moving (Tadejko, 2015).

Cloud Computing (CC) is a virtualized IT resource that allows businesses to access software applications, other manipulative data services, and data storage and processing power over the Internet. CC delivers a network of virtual services so that users can access them from anywhere in the world on subscription at competitive costs. Compared with the traditional IT solutions, CC offers clear superior advantages such as dynamically scalable IT capabilities which allow users to increase and decrease their demand and usage as and when required and, most importantly, the zero initial fixed cost investment requirement for its usage (Subramanian, Nachiappan, Abdulrahman Muhammad D., and Zhou Xiaolai, 2014). According to the DHL Logistics Trend Radar 2020 report, the main opportunities provided by CC for logistics are; (1) New commercial opportunities enabled by seamless integration within an ecosystem of third-party vendors, web shops, e-commerce platforms and logistics marketplaces, (2) Expanded service offerings with better pricing transparency for customers, (3) Scalable automation processes, lowering cost and increasing business agility, and (4) CC allows carriers and third-party logistics providers to integrate and scale software services using centralized cloud-based platforms, replacing existing electronic data interchange (EDI) solutions.

Unmanned Aerial Vehicle (UAV), commonly known as **Drone**, could be simply defined as “an aircraft operating or designed to operate autonomously or to be piloted remotely without a pilot on board” (EU, 2019). UAVs have many use areas in internal and external logistics. UAVs delivery applications are very wide and include package deliveries to remote rural regions and first- and last-mile deliveries in urban and suburban areas as well as express deliveries of, for example, medical supplies, especially of vaccines and blood or customized parts to assembly lines (Perboli and Rosano, 2019). Drone delivery services enable e-retailers to cost-effectively offer

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unprecedented delivery speed and customized delivery lead times using dedicated aerial vehicles for individual orders (Perera, Dawande, Janakiraman, and Mookerjee, 2020). According to Olivares, Cordova, Sepúlveda, and Derpich (2015), the use of drones in a manufacturing plant to transport materials and semi-finished products in a 3D space at the stage of assembly and/or customization of products will lead to a higher level of efficiency, effectiveness, and productivity. The use of drones in warehouse operations, in particular picking and auditing, allows carrying out repetitive and dangerous tasks without almost any human intervention or supervision (Mészáros, Bona, and Bertalan, 2018). UAVs are commonly used outdoors for the inspection of logistic or industrial facilities like bridges, railways, ports, pipelines, or building facades (Máthé, Buşoniu, Barabás, and Iuga, 2016). Maersk (Drone Blog News - Maersk, 2016) is sponsoring the adoption of drones for the active monitoring of the logistic activities performed in ports. The main goal of the project is to ensure a higher control and safety level on the handling operations, which will be performed following the strict regulations.

Self-driving (Autonomous) Vehicle is defined as a vehicle that is capable of sensing its environment and navigating without direct action of human such as steering, accelerating, or braking. Presently the technology is so advanced that vehicles may transport things on chosen routes without the activity of drivers (Wieczorek, 2017). Autonomous vehicles use in logistics are often split into four different categories: (1) Automated Guided Vehicles (AGVs) for indoor facility operations, (2) Automated Guided Transport (AGT) systems for outdoor facility operations, (3) Self Driving Road Transport Vehicles for long-haul trucking, and (4) the Last-Mile Delivery Robots (Flämig, 2016). From long-haul trucking to last-mile rovers, self-driving vehicles will upgrade logistics by unlocking new levels of safety, efficiency, and quality (Küchelhaus, 2014). The opportunities are; faster, more efficient transport thanks to optimized routing, greater lane density, and 24/7 operation, better road safety and operational productivity as human errors are eliminated, and reduced greenhouse gas emissions and overall environmental impact due to more efficient fuel consumption (DHL's Logistics Trend Radar, 2020).

3D Printing, also known as **Additive Manufacturing**, is a technology used for making three dimensional solid objects up in layers from a digital file without the need for a mold or cutting tool (Kubáč and Kodym, 2017). Encouraged by opportunities for greater customization, less waste, and more localized manufacturing and delivery, 3D printing technology may lead to fundamental changes in operations and logistics strategies. Instead of mass production of a limited variety of products concentrated in a small number of factories, geographically distributed low volume production of highly customized products becomes increasingly attractive (Olsen and Tomlin, 2020). Advances in 3D Printing technology allow more product types to be made closer to the consumer which turns to reduced transportation costs, customs duties, and the product security that accompanies long-distance transportation. 3D Printing increases the agility of supply chains and change the supply chain cost equation reducing inventory and transportation costs (Bhasin and Bodla, 2014).

The Blockchain technology is based on a method by which previously unknown parties can jointly generate and maintain practically any database on a fully distributed

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basis where transaction correctness and completeness is validated using a consensus of independent verifiers. Features of this technology increase confidence through transparency within any transaction of data, goods, and financial resources (Pournader, Shi, Seuring, and Koh, 2020). Blockchain technology can easily provide secure business operations in logistics. Results of a survey conducted by DHL shows that 50% of 1300 senior executives considered blockchain in their top 5 strategic priorities. Higher levels of transparency between disparate supply chain parties, and product traceability throughout production and the supply chain are the primary use cases for blockchain-adopting industry giants across multiple industry sectors. For example, Walmart aims at improving last-mile deliveries through coordinating delivery drones using the blockchain. It can drive process optimization and better visibility for customers, operators, and authorities (DHL Logistics Trend Radar, 2020). Another potential benefit gain from blockchain adoption is the automation of commercial processes through blockchain-based smart contracts that have streamlined service and payment transactions while reducing errors in the back office. In the logistics sector, blockchain technology could dramatically reduce time delays, added costs and human errors. This technology can facilitate logistics tasks: it can be used to track purchase orders, order changes and freight documents, and it can help in information sharing about manufacturing process and delivery (Tijan, Aksentijevic, Ivanic, and Jardas, 2019).

Augmented Reality (AR) technology is defined as the expansion of physical reality by adding layers of computer-generated information to the real environment. AR could augment the environment in real world with additional and valuable virtual information (such as text, video, sound, etc.), so that human senses and abilities can be enriched (Wang W., Wang F., Song, Su, 2020). AR can be used in many human-operated areas of logistics such as goods receipt, storing, picking, shipping and inventory., where handling errors could be considerably diminished with additional provided information. AR can give logistics providers quick access to anticipatory information anytime and anywhere. This is vital for the prospective and exact planning and operation of tasks such as delivery and load optimization and is critical to providing higher levels of customer service. In warehouse operations, AR has the potential to significantly reduce cost by improving the picking process (Stoltz, Giannikas, McFarlane, Strachan, Um, and Srinivasan, 2017). AR applications support and reduce the cost of warehouse redesign and planning. AR has the potential to further optimize freight transportation in areas such as completeness checks, international trade, driver navigation, and freight loading. Another important field of application for AR is last-mile delivery services. AR devices for parcel handling, loading, and delivery processes improve parcel handling, avoid improper handling, and ensure load optimization Equipping staff with AR devices could also increase security and improve the quality of customer contact (Glockner, Jannek, Mahn, and Theis, 2014)

Advanced Robotics, compared with conventional robots, have a superior perception, integrability, adaptability, and mobility. These improvements permit faster setup, commissioning, and reconfiguration, as well as more efficient and stable operations (Küpper, Lorenz, Knizek, Kuhlmann, Maue, Lässig, and Buchner, 2019). A logistics robot is with one or more grippers to pick up and move items within a

logistics operation such as a warehouse, sorting center or last-mile. Logistics robots are diversifying and achieving proficiency that matches and exceeds human capabilities. Robotic e-commerce logistics automation is highly flexible for managing disparities among online orders. Multiple robots work collectively to bring different items of the same order and deliver them in a synchronized sequence to the pick station to reduce picking costs and increase accuracy and speed. (Huang, Chen, and Pan, 2015). Driven by rapid technological advancements and greater affordability, robotics solutions are entering the logistics workforce, supporting zero-defect processes and boosting productivity. Mobile or stationary, robots will adopt more roles in the supply chain, assisting workers with warehousing, transportation, and even last-mile delivery activities (DHL Logistics Trend Radar, 2020).

Big Data & Artificial Intelligence (AI). AI can be defined as human intelligence exhibited by machines; systems that approximate, mimic, replicate, automate, and eventually improve on human thinking. Throughout the past half-century a few key components of AI were established as essential: the ability to perceive, understand, learn, problem-solve, and reason (Gesing, Peterson, and Michelsen, 2018). AI can help the logistics industry to redefine today's behaviors and practices, taking operations from reactive to proactive, planning from forecast to prediction, processes from manual to autonomous, and services from standardized to personalized. AI will enable logistics companies to exploit the big data that supply chains generate on a daily basis (Wang, Gunasekaran, Ngai, and Papadopoulos, 2016). The predictive capabilities of AI are helping logistics operators proactively streamline operations, increase customer satisfaction through the personalization of services and reduce costs through highly efficient and effective processes. For example, AI helps logistics operators to overcome the challenges in complex last-mile operations like balancing delivery time windows, fuel consumption, travel distance, traffic patterns, load capacity, and ad hoc pickups while simultaneously communicating accurate arrival times and updates to customers. (Zheng, Zhang, and Song, 2020). As AI becomes more intelligent, predictive technology could take logistics players a step further into the territory of anticipatory delivery models. Instead of waiting for customers to order, AI will go beyond same-day or same-hour delivery, supplying goods to customers before they even realize what is needed.

2. FINDINGS

In this section, we present the findings obtained from the literature review. Our findings show that the adoption of all new and emerging technologies in business processes contributes to the development of logistics providers' capabilities to achieve the customized 7Rs of logistics.

The implications of adopted technologies on logistics capabilities are shown in Table 2.

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Table 2. Emerging technologies and implications for logistics

Technology	Implications on Logistics	Supporting Literature
Internet of Things (IoT)	- Improve efficiency	Wei and Lv, 2019; Liu S.,
	- Better utilization of resources	Zhang, Liu Y., Wang L., and
	- Reduce errors in handling	Wang V., 2019; Chen J., Xu,
	- Accurate product identification	Chen H., Zhao, and Xue,
	- Increase visibility	2020; Ben-Daya, Hassini and
	- Better route optimization	Bahroun, 2019; Tadejko,
	- Support sustainability	2015
Cloud Computing (CC)	- Scalable processes	Subramanian, Abdulrahman,
	- Pricing transparency for customer	and Zhou, 2014; Gantzia and
	- Reduce capital investment	Sklatinioti, 2014; Novais,
	- Increase business agility	Marin and Moyano,2020;DHL
Augmented Reality (AR)	- Integration with service partners	Logistics Trend Report, 2020
	- Reduce handling errors	Glockner, Jannek, Mahn, and
	- Provide anticipatory information	Theis, 2014; Wang W., Wang
	- Facilitate design and planning	F., Song, Su, 2020; Stoltz,
	- Increase security	Giannikas, McFarlane,
Big Data & Artificial Intelligence (AI)	- Improve customer contact quality	Strachan, and Srinivasan.
	- Optimize last-mile deliveries	2017; Tatasciore, 2018
	- High efficiency and speed	Zheng, Zhang, and Song,
	- Proactive operations	2020; Gesing, Peterson, and
Blockchain	- Process automation	Michelsen, 2018; Wang,
	- Predictive logistics	Gunasekaran, Ngai, and
	- Personalization of services	Papadopoulos, 2016
Blockchain	- High level of transparency	Pournader, Shi, Seuring, and
	- Better product traceability	Koh, 2020; Tijan,Aksentijevic,
	- Automation of external processes	Ivanic, and Jardas, 2019;
	- Reduce transaction errors	DHL Logistics Trend Report,
	- Reduce time delays	2020; Dobrovnik, Herold,
	- Secure operations	Fürst, and Kummer, 2018

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Additive Manufacturing / 3D Printing	<ul style="list-style-type: none"> - Greater customization - Shorter delivery distances - Reduce last-mile delivery costs - Reduce inventory costs 	<p>Kubáč and Kodym, 2017; Olsen and Tomlin, 2020; Bhasin and Bodla, 2014; Daduna, 2019</p>
Autonomous (Self- Driving) Vehicles	<ul style="list-style-type: none"> - Less human error, better road safety - Optimized routing, lane density - Reduce environmental impacts - More efficient indoor operations - Increase last-mile delivery quality 	<p>Wieczorek, 2017; Flämig, 2016; Kückelhaus, 2014; DHL Logistics Trend Report, 2020; Bergvall and Gustavson, 2017</p>
Unmanned Aerial Vehicles (UAVs) / Drones	<ul style="list-style-type: none"> - Customized delivery lead-times - Faster and automated delivery - Easy delivery to rural areas 	<p>Perboli and Rosano, 2019; Máthé, Buşoniu, Barabás, and Iuga, 2016; Perera,</p>

Table 2. (continuet)

Advanced Robotics	<ul style="list-style-type: none"> - Inspection of outdoor operations - Remote surveillance of infrastructure - In-plant material movements - Remote stock control and count - Scalable workforce and infrastructure - Limitless (24/7) workforce - Increase speed and accuracy - Better asset utilization - Automation of repetitive tasks - Improve worker safety and health 	<p>Dawande, Janakiraman, and Mookerjee, 2020; Olivares, Cordova, Sepúlveda, and Derpich, 2015; Mészáros, Bona, and Bertalan, 2018 Küpper, Lorenz, Knizek, Kuhlmann, Maue, Lässig, and Buchner, 2019; Huang, Chen, and Pan, 2015; DHL Logistics Trend Report, 2020</p>
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CONCLUSION

"Customization" is the phenomenon of today's business world and is the focus of this study within the business logistics context.

The development of the Internet and mobile communication technologies and anywhere anytime connected lifestyle of the people have particularly increased the scope and importance of the time and place values added on products by logistics. Besides, customer orders have dramatically diversified and delivery lead times have decreased almost to hours. Today's customers have the power to determine even the

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packaging material and color for their orders. Logistics systems are struggling to meet the highly customized demands of customers. In order to respond to these developments, logistics systems are needed to be much faster, much more flexible, and much more agile than ever before.

The findings of this study reveal that the novel technologies such as the Internet of Things, Big Data, Artificial Intelligence, Augmented Reality, Cloud Computing, Blockchain, Self-Driving Vehicles, 3D Printing, Unmanned Aerial Vehicles, and Advanced Robotics have significant potential to contribute to logistics service providers' capabilities for providing customized solutions to their customers in a cost-efficient manner.

We believe this study provides an insight into logistics service providers' decision to adopt the latest technologies in their business processes.

It is noteworthy that, besides their positive impacts on logistics operations, the technologies examined in this study have some constraints and limitations.

Thus, as a further study, this analysis can be enhanced with negative factors that may affect the logistics businesses' decision to adopt new technologies.

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**DEVELOPMENT OF ENTREPRENEURSHIP IN CONDITIONS OF
ECONOMIC TRANSITION**

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Abstract

Entrepreneurship in Macedonia has long been developed in limited socio-economic conditions, low material-financial base, and underdeveloped economic structure. Macedonia belonged to another system of social order, from which Macedonian entrepreneurship lacked any systemic support.

Based on this, if we look at the conditions and the way of the emergence of entrepreneurship in the three basic factors of production: land, work and capital, then the Macedonian entrepreneurs had the most in their work. This finding is especially true for construction and construction crafts.

That is why it is said that the construction and craftsmanship have a mobile resettlement character, which has a favorable impact on the development of the entrepreneurial activity among the Macedonian entrepreneurs who did their business outside the borders of Macedonia.

This was because in construction and craftsmanship the general work was largely learned from the field work itself, while the traditional construction work was taught by masters from Italy, Greece, Austria, the Czech Republic, Hungary, and elsewhere.

The purpose of this paper is to analyze entrepreneurship in Macedonia from its initial appearance to today's model of entrepreneurship development in transition.

Keywords: entrepreneurship, development, entrepreneurial activity, economic transition.

JEL classification: A12; O15

INTRODUCTION

Entrepreneurship is an immeasurable factor of economic development and as a general philosophy of business in market conditions manifests its prosperity in the development of small business. Small and medium enterprises are a very vital and flexible segment of the economy, especially in the context of economic transition. This finding stems from the fact that small and medium-sized enterprises contribute to job creation, diversification of production, activation and valorization of local natural resources, multi-purpose use of technology for rapid production orientation, as well as strengthening and tightening market competition, with the intention of better serving society as a whole. In order to fulfill this ambitious mission, the sector in the small sector should be intensively supported by the state, especially in conditions when there is a slow growth of the economy, and therefore in that direction a greater initiative is

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needed for development of entrepreneurship in such conditions. Providing financial resources for the promotion of the small and medium enterprise sector is one of the most important factors for its quality and quantitative development, thus interacting with other types of support (tax relief and exemptions, customs relief, simpler procedure). of economic activities, business information, management and training, etc.) enables optimal, desired and necessary development of the economy as a whole.

Entrepreneurs' access to sources of financing for their growth and development is one of the key segments of the business climate of any economy.

Entrepreneurship financing in a conditional economic crisis is a very important area of business activity of any business entity, primarily because it monitors the reproduction process and the success of the company depends on its expediency, and the failure of the company despite the action of a number of factors and Implications are also contributed by the poor financial situation. Exactly this factor has a strong impact on the volume and dynamics of entry of new businesses in the economic structure of countries, especially those in economic transition (on the birth rate of the business population), but also on their survival in the competition, and thus on the net entry of new businesses into any economy.

1. RISKS IN FINANCING ENTREPRENEURSHIP IN A LOW ECONOMY

A key prerequisite and the most sensitive domain in the development of entrepreneurship is financial support. In fact, the financing of small enterprises, compared to the financing of large enterprises, has special features, which arise from the degree of risk.¹ Namely, in conditions of low economic transition, what makes small companies especially risky is:

- **Inefficient management.** A characteristic of small businesses is that their management is not well trained and does not have enough experience in business. The entrepreneur in this business model relies only on his knowledge and does not want to delegate his authority and responsibility to other employees;
- **Insufficient specialization.** Specialization in work contributes to its effective and efficient execution. The division of labor allows to hire specialists to perform certain activities in large enterprises. In small enterprises, the manager does all the work, such as: salesman, organizer, personnel manager, financial manager, etc., ie he is a general manager;
- **Reluctance to cooperate.** Owners of small businesses, because they do not want to share control and ownership over the business, very often do not want to mobilize funds by issuing shares or stakes;

¹Таки Фити, Верица Хаџи Василевска - Марковска, Милфорд Бејтман, „Претприемништво“, 2. издание, Скопје, Економски факултет, 2007 година, стр. 120-121.

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- **Lack of experience.** Because it is about new businesses, about starting new companies, they do not have references to a long-term successful businessman;

Based on this, when approving the financial resources of small and medium enterprises, one cannot start from the same principles that are observed in the distribution of funds (loans or capital) to large and already well-known enterprises.

2.THE IMPACT OF BANK LOANS IN FINANCING BUSINESSES IN CONDITION OF LOW ECONOMIC DEVELOPMENT

Before deciding to finance its current and development operations through the use of bank loans, the entrepreneur should examine and estimate the expected profit and the interest he should pay on the loan funds. The funding efficiency rate is used for this assessment. If the financing efficiency rate is higher than one unit, then lending is acceptable and activities are undertaken to conclude a loan agreement.¹ The efficiency rate of financing is mathematically expressed as follows:

$$e_i = \frac{\Delta\Delta i}{\Delta\Delta k} > 1$$

where:

e_i - rate of financing efficiency

$\Delta\Delta i$ - increase profits by investing

$\Delta\Delta k$ - increase in lending profits

Based on that, advantages and disadvantages in lending to businesses through the banking system are shown in the following table 1.

Table 1. Advantages and disadvantages of lending through banks

Advantages borrowing from banks	The downside of borrowing from banks
Banks are a cheap source of financing when they can borrow from the central bank themselves	Numerous forms need to be completed as the bank requires a wealth of information about the business and the entrepreneur
Successful loan repayment brings good business reputation in the eyes of business partners and other banks	Banks are traditionally conservative in terms of risk

¹Филиповски Владимир, „Финансирање на мали бизниси“, во „Како да направите сопствен бизнис“, Центар за развој на нови деловни активности, Универзитет „Св.Кирил и Методиј“, Скопје, ноември 2007 година.

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<p>Choice of loans with different conditions (terms, interest rates, etc.)</p> <p>The bank also offers other related financial services (financial advice, salary payments, etc.)</p> <p>Help the business stay solvent to secure a loan repayment</p> <p>There are numerous sources of information about banks and the financing terms they offer</p> <p>Banks are innovative in offering differentiated loans that correspond to the borrower's situation</p>	<p>The bank may impose restrictions on the financial indicators that the company must maintain</p> <p>It is difficult to establish a long-term relationship with the banker</p> <p>The bank may try to influence the business decisions of the company when it feels that its money is at risk</p> <p>The bank usually has a way to follow in great detail the operation of the company and the way it is run</p>
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Based on that How does the bank decide whether to grant a loan to the entrepreneur?

It is considered to start from five key elements of the loan, known in practice as "five cs of credit". These five elements are the following:

Capacity - this is the ability of the borrower to repay the loan. Such capacity is assessed according to the available assets of the business and according to the analysis of the historical and projected cash flows of the business.

Capital - this refers to the willingness of the borrower to invest his own financial resources to finance the business.

Collateral - funds that the entrepreneur can offer as collateral (pledge) for the loan, which would guarantee some certainty to the lender that he will repay the loan.

Character- the character of the person of the loan applicant, in order to assess the personal readiness to repay the loan. In this context, the character is assessed on the basis of the borrower's past behavior in relation to (discipline in) the payment of credit and other financial obligations by that person.

Conditions - general economic conditions in a particular industry or in the economy as a whole can affect the willingness of banks to grant loans. In conditions when there is a recession or stagnation of economic activity in the country, or when the growth potentials in an industry are exhausted, then the banks find it more difficult to decide to approve loans.

COUNCLUSION

Providing the financial preconditions for encouraging the development of entrepreneurship in conditions of economic transition and the risks it carries includes several measures and instruments, and in order for them to be fully realized and to be able to give the desired results, they should have a long-term character and mutual coordination. For successful development of entrepreneurship in conditions of low economic development, the existence of a developed and efficient financial system for financing extended reproduction, as well as a developed and branched financial market, related to the international flows of capital, is of particular importance.

The financial market should enable efficient and fast cross-sectoral mobility of free financial resources and their allocation in those sectors that are identified as priorities by the economic policy. So creation of sound and solid banking system in times of economic crisis is a prerequisite for successful active and favorable credit policy to support small and medium businesses. In that function, in addition to commercial banking institutions, investment banks, development banks, specialized intermediate

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financial institutions are of essential importance. Small businesses are the most sensitive to all changes in the business environment, but they are the first to prosper by opening new initiatives and rewarding success.

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THE IMPACT OF EMOTIONAL INTELLIGENCE SKILLS TO ENTREPRENEURIAL BUSINESS SUCCESS

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Abstract

Business leaders are playing entrepreneurial roles in the process of decision making. As entrepreneurs, they are characterized with high level of creativity, innovation, taking chances and risks but also their high emotional intelligence can be extremely beneficial. These EQ skills give them better understanding of the needs, feelings, and overall situation of others.

Therefore, entrepreneurs with high emotional intelligence can effectively create a product or service to fit the needs and expectations of their target customers, and business leaders with high emotional intelligence can create quality interpersonal relationships and enhance employees' motivation. As a result, business success can be achieved, operating performance can increase, as well as the overall business effectiveness and efficiency.

The purpose of this paper is to elaborate the influence of EQ skills on business leaders and entrepreneurial success. The analysis is focused on the connection between emotional intelligence and intellectual intelligence, models and components of emotional intelligence, dimensions and factors of emotional intelligence. The importance of assessing, developing and upgrading the emotional skills is also highlighted. A secondary research is provided and supported by survey conducted in North Macedonia on representative number of 30 entrepreneurs in order to determine their awareness for EQ, the usage of EQ skills, and the importance of enhancing EQ skills for business success.

Keywords: entrepreneurship, business, emotional intelligence, EQ skills

JEL classification: M13; L26

INTRODUCTION

Emotional intelligence allows a person to identify and accept their own and other people's emotions and to recognize their manifestation. Therefore, emotional intelligence is the most important for building and enhancing interpersonal relationships. Those who are emotionally intelligent can approach a problem from different point of view and quickly develop a creative solution. Emotional intelligence enables easier social integration in the society.

In both private life and business, social interactions are key to a healthy and stable communication. Creating good and strong relationships with employees and subordinates helps the leader performing tasks in efficient way and achieving organization's goals. In order for the employees to be more productive in the workplace, there is a need of making a creative working atmosphere, intrapreneurial organization culture and a flexible organizational structure with authority of the leader based on respect and trust.

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Developing emotional intelligence allows the leader to gain the knowledge necessary to maintain a well-balanced and compact working climate in order to improve the business. A true leader that employees gladly follow, has a high level of various types of intelligence and continuously focuses on skill development. As a person who is responsible for managing large number of processes in the organization, the leader must be representative and reliable. Study shows that emotionally intelligent leaders are perceived to be highly effective by their followers (Hur, van den Berg, and Wilderom 2011).

Emotional intelligence is one of the main factors influencing the success of an entrepreneurial business leader. Increasing the competencies, abilities and skills, especially in the five domains where emotional intelligence is manifested, is crucial due to their direct impact on the leader's professionalism and success, as well as his productivity, which affects employee's motivation, encourages their creativity and innovation and significantly influences interpersonal relationships, work environment, organizational culture and business ethics.

1. HIGH PERFORMANCE LEADERSHIP

High-performance leadership style is established on a mechanism of cooperation based on freedom of choice, dropping out the system of constraint, force, pressure and control with dominance of democratic, real and enduring values in the organization. It creates organizational culture, where obedience and mechanical approach to work are replaced by creativity, autonomy and continuity in the acquisition of new knowledge. Such a leader encourages innovation, experimentation and risk-taking. It is a person who has positive influence on others, who creates new relationships within the organization and enables new connections within the team. Results of a meta-analysis indicate that emotional intelligence should be considered as a valuable predictor of performance (Van Rooy, and Viswesvaran 2014).

The high performance leader has an unbiased real self-awareness, knows his own abilities and uses them to build and realize his vision. Such a leader thinks about the future and analysis every possibility to achieve his goals. One characteristic that all effective leaders have, is motivation. They are forced to achieve and exceed their own expectations and everyone else's. Additionally, both the intrapersonal and interpersonal dimensions of emotional intelligence of business leaders can have an indirect influence on firm performance via interpersonal processes that entail functioning in key activities within the firm (Ingram, Peake, Stewart, and Watson 2019).

Research results in more than 200 global companies has shown that traditional leadership qualities such as vision, intelligence and perseverance are not enough for today's success. However, emotional intelligence is one of the most important links to effective and successful entrepreneurial leadership. No matter what leadership style is implemented, all leaders need to have a high degree of emotional intelligence, because without it they cannot be successful. EI ability also can be used by HR and leadership development professionals to optimally design EI-based leadership development programs (Foster and Roche 2014).

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Emotional intelligence is defined as the ability to identify and control emotions, own feelings and those of others, ability to motivate and manage emotions positively, both internally and in relationships. Leaders must have a high degree of emotional intelligence to understand employees and their emotions and be able to choose the leadership method tailored to the given situation. Accordingly, managers must fully understand their physical and social environment. After establishing an autocratic or democratic leadership style, they need to convey positive emotional energy to their employees and inspire them. This type of intelligence helps employees trust their managers, which is a very important component of successful leadership. If managers are not emotionally intelligent, they may find themselves using the wrong leadership model. This kind of wrong approach can cost them the expected success. Emotional intelligence is increasingly relevant to employees' organizational development, as the principles of emotional intelligence provide a new way of understanding and evaluating employees' behaviors, attitudes, interpersonal relations and potentials. Emotional intelligence is the ability to think correctly involving emotions and to use emotions to improve thinking. Emotional intelligence helps business leaders to develop a vision for their organizations, motivates subordinates to commit to the vision and energize them to enthusiastically work to achieve this vision (Ugoani 2016). However, studies show that emotional intelligence can also affect emotional exhaustion (burnout) resulting from emotional labor, and this emotional exhaustion can influence on the job performance in terms of organizational commitment and job satisfaction (Moon, and Hur 2011).

One of the most requested skills or qualities of successful business leaders is the emotional intelligence. According to Goleman, an individual's ability to recognize and manage their own emotions and the emotions of others accounts for 80% of leadership success, both in the workplace and in life. In general, a leader who is able to govern himself first and then others with passion and commitment, creates a kind of useful resonance, defined as "emotional resonance" in the organization. Furthermore, results of a study revealed that emotional intelligence has positive significant relationship with organizational commitment (Taboli 2013).

2. EMOTIONAL VS INTELLECTUAL INTELLIGENCE

In the context of entrepreneurial business, emotional intelligence is the ability of the leader to manage support and relationships within a group to focus their work, commitment and skills towards achieving organization's goals. These skills range from the ability to nurture and maintain personal relationships to that of negotiating and resolving conflicts, the ability to analyze themselves and other people, identifying interests, emotions, and motivation to better manage them, to the ability to organize work teams. However, people vary in their ability to perceive, understand, use, and manage emotions; and these variances affect individual capability in a variety of contexts, including organizational leadership (McCleskey 2014).

Emotional intelligence is entrepreneurial leader capacity that allows him to control emotions in an appropriate way. Emotions and intellect are not opposed to each other, but they are both sides of the same coin. Things can be understood through the intellect,

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but emotions allow action. However, emotional intelligence is the ability to use the energy of emotions effectively. Emotional intelligence is found in the basic element of human behavior that is different from the intellect. Intelligence represents the learning ability which at the age of 15 is the same as at the age of 50. Emotional intelligence, on the other hand, is a flexible set of skills that can be acquired and improved through practice. Although some people are naturally more emotionally intelligent than others, high emotional intelligence can be developed.

Emotional intelligence is actually the intelligent use of emotions and the use of the power or information contained in emotions to make effective decisions. The EQ concept is based on the fact that IQ, or conventional intelligence, is too narrow and that there are wider areas of emotional intelligence that dictate and enable success. Emotions related to emotional intelligence work in synergy with the cognitive; one who is capable of excellent performance possesses both. Rational intelligence, or the ability to give effective and efficient answers to a problem through cognitive processes (which can be assessed by IQ tests), is constantly interacting with the emotional one. Therefore, these two intelligences function in synergy. The more complex the work, the more important emotional intelligence is. In general, the emotional intelligence is particularly important and useful for career progress (job success). IQ and technical skills are important, but emotional intelligence is the sine qua non of leadership (Goleman 2004).

The emotional intelligence skills although complementary, differ substantially from rational intelligence, ie. purely cognitive abilities measured by IQ. These two different types of intelligence - intellectual and emotional - express the activity of different parts of the brain. The intellect is based exclusively on the elaborations that take place at the level of the neocortex, ie. on the surface layers of the brain, on recent evolution. Emotional centers are located in depth, in the oldest subcortical regions. Emotional intelligence implies integrated functioning of these centers with intellectual. Emotional intelligence includes self-control, enthusiasm, perseverance, and the ability to motivate oneself, and is clearly focused on motivational characteristics.

Scientific research strongly suggests that there is a genetic component to emotional intelligence. Scientific studies show that certain individuals have an inborn affinity for emotional intelligence. Psychological research shows that nurturing plays a big role. Finally, research and practice clearly show that emotional intelligence can be learned. Emotional intelligence can be improved throughout life, and actually tends to increase. Emotional intelligence is a mixture of natural predisposition and experiential background. Unlike IQ, which remains almost unchanged throughout life, emotional intelligence can be nurtured and strengthened.

In the last twenty years, in fact, a number of studies have dealt with the mutual interaction between feelings and thought, and thanks to this area of research, we now know that emotions change thought, but not necessarily in a way to make a person more intelligent. Since the eighteenth century, psychologists have made a powerful division of the human mind into three parts: knowledge (or thought), affectedness (including emotions), and motivation. The cognitive field includes functions such as memory, reasoning, abstract thinking, and traditionally the term intelligence is used by psychology to qualify for the proper functioning of this field. Thus, the concept of

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intelligence is related to the ability to think, to elaborate abstract thoughts, to judge and to "power to divide and combine" concepts. Emotions, by contrast, belong to the second area, the so-called affective, which also includes: assessment, mood, and other states of mind, such as fatigue and energy. Motivation is a third area and refers to biological needs and behaviors aimed at achieving goals. This area should be considered involved in emotional intelligence, only as secondary.

3. MODELS OF EMOTIONAL INTELLIGENCE

There are three main models: the EI Capacity Model, the EI Character Model and the Mixed EI Model.

Mayer and Salovey model of emotional intelligence (2008) is based on abilities. According to them, EI is the ability to perceive emotion, to integrate emotions to facilitate thought, to understand emotions, and to regulate emotions to promote personal development.

The main principle of this model is that emotions are means of useful information for interaction in social environments and social relations. It is also important to understand that not all individuals have the same ability to process emotional information and then relate that information to overall cognitive processes.

The model proposes four main types of emotional abilities:

- Emotional perception - the ability of the individual to recognize their own emotions and to understand the emotions expressed on the face, through voices and images.
- Emotional use - the ability to use emotions to perform other cognitive activities.
- Emotional understanding - the ability to perceive the nuances of emotions that exist and how different emotions communicate with each other.
- Emotional management - the ability to self-manage emotions and regulate the emotions of others.

Situational emotional intensity refers to the degree to which the characteristics of the situation are affectively evocative and it strengthens relationships between leader attributes and leader emotional management (Kaplan, Cortina, Ruark, LaPort, and Nicolaidis 2014).

The model based on EI characteristics was released in 2009 by Petrides and colleagues. This model makes a break from the idea that emotional intelligence is based on ability. Instead, he suggests that people have a number of emotional perceptions and emotional characteristics as part of their personalities. These attributes are not measured in a scientific sense, but are measured independently. Of course, there is the assumption whether the respondent is able to accurately describe his own characteristics.

The mixed EI model was described by Daniel Goleman in 1995, and today is the most widely accepted EI model. It includes a number of competencies that are divided into groups or sets of skills that form the picture of a person's EI level. Goleman combines emotional skills with elements of personality, motivation and social skills. Finally, emotional intelligence is based on two major skills classified as:

- personal competencies (awareness, self-control and motivation);

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- social competencies, managing relations with others (empathy and social skills).

Awareness is a key competence. Being aware of themselves and the situations they live in with a careful approach can help leaders and managers better focus their strengths and lead appropriately. Another important skill is the so-called resilience, which can be defined as "the ability to adapt positively in highly challenging situations, successfully developed throughout life and as a consequence of different events or experiences. Equally important is "empathy", the ability to perceive another person's mood and feelings, achieving emotional harmony with him. It is also related to consciousness, because deep knowledge of emotions is the basis of the ability to recognize and understand the emotions of others. Above all, it develops by listening. Active listening puts the individual in a position to better understand what he is saying to another person without judgment and without interpreting it according to his own knowledge / experience / beliefs, but also to really pay attention to what others are saying, trying to understand not only the content but also the reasons and motives for communication. Empathy also develops by learning to recognize nonverbal signals while emotions are expressed, and because they are difficult to control, they can reveal much more than is explicitly stated.

For the business leaders is important the fact that believing in co-workers' abilities and supporting them, improves the work and the organizational climate. EI has been an essential component in determining the leadership effectiveness mainly when leaders are dealing with teams in the workplace (Srivastava 2013).

In conclusion, the organizational evolution in recent years has led to the importance of teamwork and the development of cooperation mentality in companies, which is partly expressed through the need of a leadership figure as a team builder who should gain awareness and knowledge of all the factors that affect the effectiveness of the team and therefore, enhance successful performance.

4. DEVELOPING AND IMPROVING EMOTIONAL INTELLIGENCE

Emotional intelligence requires the acquisition of certain emotional skills. Managers need to learn these skills in order to achieve success in their professional life. Emotional intelligence increases with age. There is an old-fashioned word for the phenomenon: maturity. Yet, even with maturity, some people need training to improve their emotional intelligence. Individual success is predicted largely by emotional and social measures, but teachers and parents should be helping also in the development of the emotional intelligence (Goleman 1996). Studies show that students need to possess more emotional values than the cognitive, and need to develop these intelligences, especially communication skills, memory, self-awareness, and empathy, as found to be the most significant predictors of their performances, thus can assist them to be more successful in both academics and professional careers (Khan 2019).

Unfortunately, too many training programs that aim to build leadership skills, including emotional intelligence, are a waste of time and money. The problem is simple: they focus on the wrong part of the brain. Emotional intelligence is born mainly in the neurotransmitters of the limbic system of the brain, which regulates feelings, impulses and discs. Research shows that the limbic system learns best through motivation,

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extended practice and feedback. Compare this to the kind of learning that goes on in the neocortex, which manages analytical and technical skills. The neocortex understands concepts and logic. It is the part of the brain that understands how to use a computer or make a sales call by reading a book. Not surprisingly, but wrong, it is also the part of the brain targeted by most training programs aimed at improving emotional intelligence. When such programs actually take a neocortical approach, research on emotional intelligence in organizations has shown that they can even have a negative impact on people's performance. Research results suggest that groups receiving EI interventions improved. EI is associated with many important work-related outcomes such as increased management skills and work satisfaction performance (Kotsou, Mikolajczak, Heeren, Grégoire, and Leys 2018).

To improve emotional intelligence, organizations and business leaders must refocus their training to include the limbic system. They must help people leave old behaviors and establish new ones. Not only does this take much longer than conventional training programs, but it also requires an individualized approach. On the other hand, scientific research clearly show that emotional intelligence can be learned. In order to make employees emotionally intelligent, companies must have training programs in which they will examine the emotional intelligence of employees and change the habits already acquired. It is important to emphasize that building emotional intelligence will not happen without sincere desire and joint effort. A short seminar will not help; nor can it be purchased as a manual. It is much harder to learn to empathize, to internalize empathy as a natural human response, than to become proficient in statistic and econometric analysis.

5. KEY COMPONENTS OF THE EMOTIONAL INTELLIGENCE

Daniel Goleman proposes a framework for competencies arising from the concept of emotional intelligence. An ideal state of all qualities is not necessary, everyone has strengths and weaknesses. Usually to achieve outstanding performance several of these skills are needed. They are included in 5 groups: self-awareness (through knowledge and control of their emotions, knowledge and control of their nature and development of self-confidence), self-discipline (by managing moods, by adapting their emotions to a given situation and reacting according to the current environment), motivation (through the inner desire for success and achievement of the set goals), empathy (through knowing other people, ability to listen, understand and recognize other people's emotions) and social skills (sociability through conflict resolution, managing interpersonal interactions, developing teams, and developing inspirational leadership), or categorized in two main groups: personal and social skills.

Self-awareness. Leaders, managers and workers who have a high degree of self-awareness know their own emotions, strengths, weaknesses, feelings and needs. These managers know how their emotions affect them and their work habits, as well as other employees and their productivity. Many leaders, with a high degree of self-awareness, are usually self-confident. This self-confidence comes from their perception of their own capabilities. Leaders who possess this component of emotional intelligence uncompromisingly pursue their predetermined goals. They know what they want and

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how to achieve it. Self-awareness includes three skills: emotional self-awareness, accurate self-esteem and self-confidence.

Self-discipline or self-management. Leaders with a high degree of self-discipline can control their emotions and potential reactions conditioned by emotions. They direct their emotions in a way that increases their productivity. Self-discipline is one of the most important components of emotional intelligence, as leaders who possess this characteristic can create an organizational culture in which justice and trust will prevail. In such a culture, personal conflicts are minimized and productivity itself maximized. Leaders and workers who are able to manage their emotions are usually able to cope with various changes in the external and internal business environment. On the other hand, managers who have a high level of self-discipline will overcome their emotions and will work only in the interest of their company. Self-management refers to the act of taking responsibility for own emotions. It helps leaders to overcome obstacles and stay in action towards what they want to achieve. It allows them to experience emotions without being controlled by them and it helps their ability to build strong, lasting and rewarding relationships - both in and out of the workplace.

Motivation. Leaders with high levels of emotional intelligence are not motivated only by high salaries. They are primarily motivated by the desire to succeed, and they constantly set themselves increasingly difficult goals and objectives. This type of motivation, combined with self-discipline, helps leaders to be optimistic in difficult business situations. Namely, leaders, managers and workers who set high goals for themselves, set high goals for companies too. They work very effectively in their environment and motivate other employees to follow their example. In this way, leaders, managers and employees convey their personal characteristics in the business culture and create an environment in which optimism, work enthusiasm and dedication are highly appreciated and valued.

Social awareness and *empathy*. Leaders capable of understanding other people, in the decision-making process, take into account the feelings and opinions of their subordinates. In the modern business world, successful leaders must more than ever have a developed sense of understanding for others, primarily because of team based concept of work and the need to recruit and retain the most talented individuals. To successfully manage a team in today's multicultural world, a leader must understand situations from the perspective its members and to be able to preserve relationships with different types of people. Furthermore, empathy is the ability of a leader to perceive emotions and perspectives of others, to cultivate an active interest in their concerns, to be compassionate and knowing how to meet the needs of others by offering appropriate and relevant solutions.

Social skills. Leaders who have a high degree of sociability as a component of emotional intelligence can guide their employees on achieving company goals. Leaders, managers and employees, who have this skills, have a wide range of business contacts that enable them to cope with various business challenges. These skills help leaders to read the complexity of social interactions, to communicate well in different social situations and to them in order to influence, persuade, negotiate and lead. Social Skills include social relationship management, leadership, communication, change management, conflict Management, team building and collaboration. These skills offer

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a way of interacting with others that help increase productivity, improve relationships and overall quality of life and work. Social skills can also be called "human skills". Leaders who have a high level of this competence are: easy to talk to, good team players, good at resolving conflicts, communicate well, focused on helping others and building strong relationships.

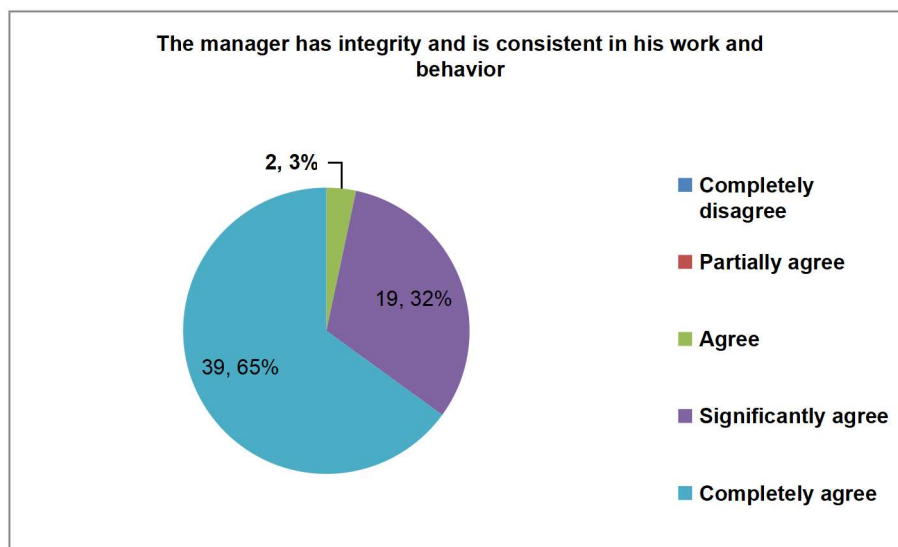
6. ANALYSIS OF THE EMOTIONAL INTELLIGENCE COMPETENCES OF BUSINESS LEADERS AND ENTREPRENEURS IN NORTH MACEDONIA

The research was conducted by survey on 60 respondents, two middle level managers in each of the representative sample of 30 entrepreneurial business in the Republic of North Macedonia. In order to identify the key elements for development and enhancing emotional intelligence skills of entrepreneurs and business leaders in North Macedonia a questionnaire was send for measuring respondents' opinions.

The general assumption for the survey was that if entrepreneurial business leaders improve their personal competencies (self-awareness and self-management) and their social competencies (social self-awareness and relationship management), they will improve their performance and achieve professional success, increase employees' motivation and effectiveness, and positively influence the organizational behavior and the quality of interpersonal relationships.

The analysis of the survey questions gave the following results:

On the claim: *The manager has integrity and is consistent in his work and behavior*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 0 respondents answered, with Agree 2 respondent, with Significantly agree 19 respondents and with Completely agree 39 respondents. The percentage of these answers is presented in Figure 1.



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Figure 1. Integrity and consistence

On the claim: *The manager has self-confidence*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 0 respondents answered, with Agree 10 respondent, with Significantly agree 12 respondents and with Completely agree 38 respondents. The percentage of these answers is presented in Figure 2.

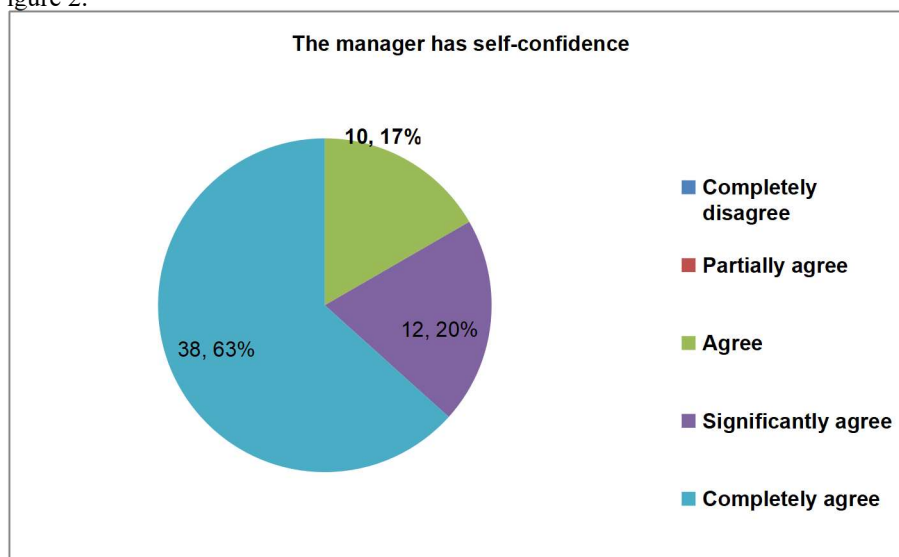


Figure 2. Self-confidence

On the claim: *The manager recognizes his own emotions and their effects*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 2 respondents answered, with Agree 4 respondent, with Significantly agree 26 respondents and with Completely agree 38 respondents. The percentage of these answers is presented in Figure 3.

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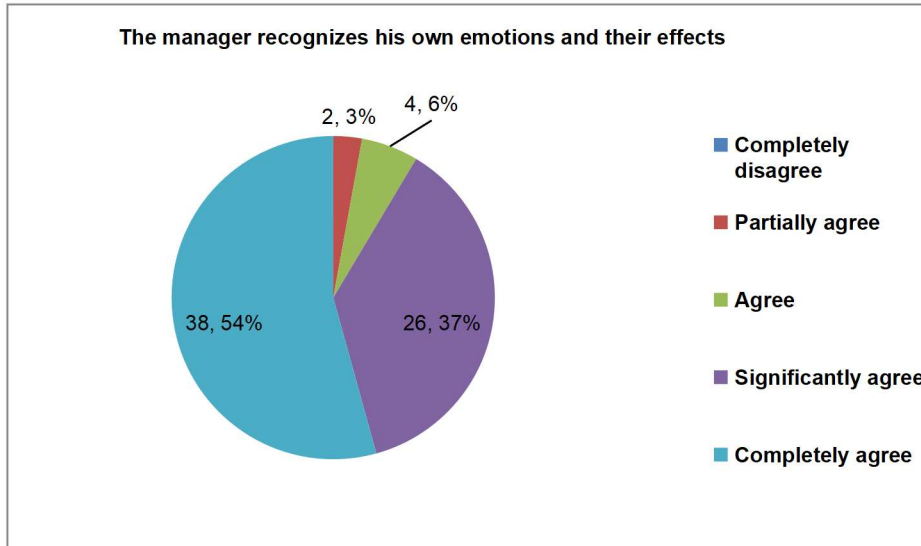
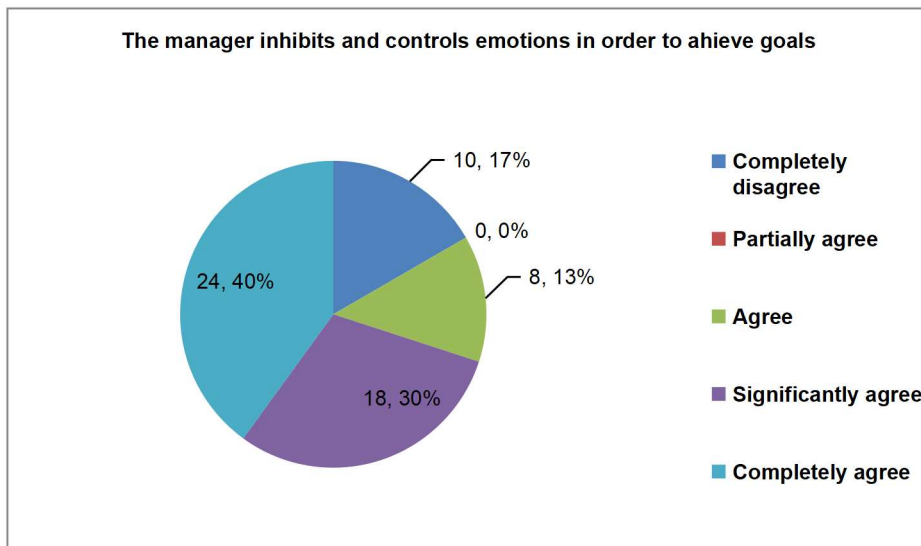


Figure 3. Identifying own emotions

On the claim: *The manager inhibits and controls emotions in order to achieve goals*, out of 60 respondents, with Completely disagree replied 10 respondents, with Partially agree 0 respondents answered, with Agree 8 respondent, with Significantly agree 18 respondents and with Completely agree 24 respondents. The percentage of these answers is presented in Figure 4.



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Figure 4. Controlling emotions

On the claim: *The manager has understanding for others*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 2 respondents answered, with Agree 12 respondent, with Significantly agree 18 respondents and with Completely agree 28 respondents. The percentage of these answers is presented in Figure 5.

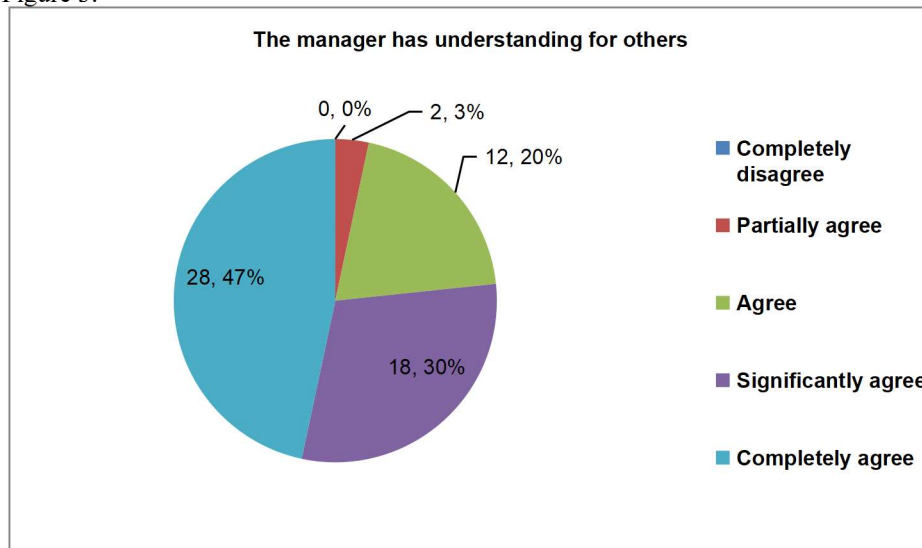


Figure 5. Understanding for others

On the claim: *The manager recognizes and satisfies the needs of the employees*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 2 respondents answered, with Agree 28 respondent, with Significantly agree 14 respondents and with Completely agree 36 respondents. The percentage of these answers is presented in Figure 6.

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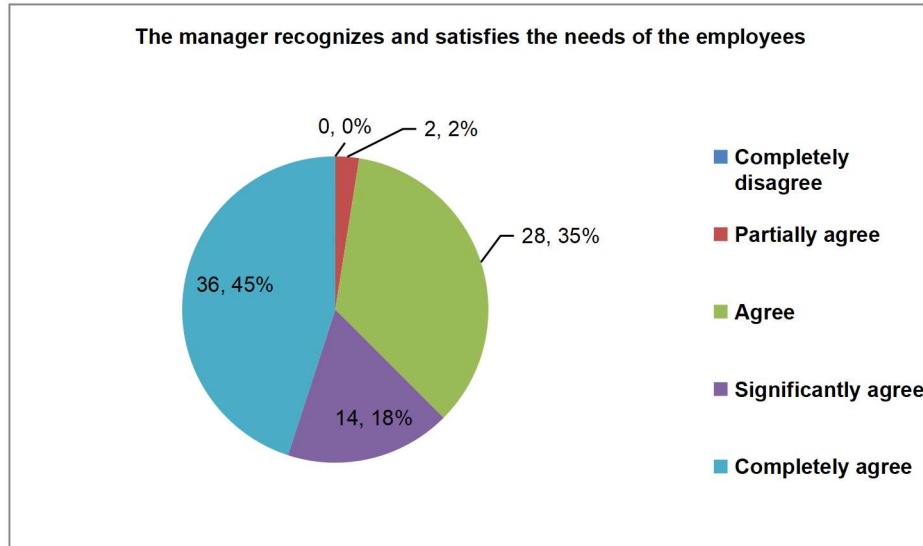


Figure 6. Recognizes employees' needs

On the claim: *The manager has the ability to recognize and foster useful interpersonal relations*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 0 respondents answered, with Agree 14 respondent, with Significantly agree 18 respondents and with Completely agree 28 respondents. The percentage of these answers is presented in Figure 7.

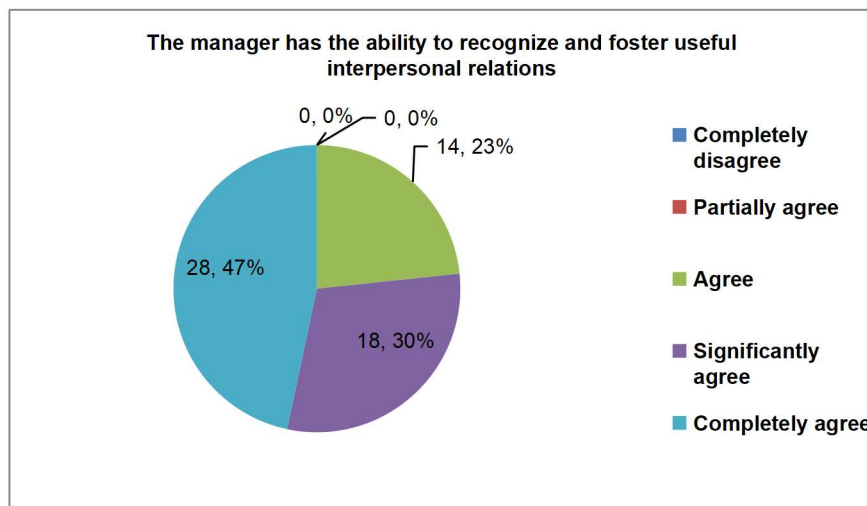


Figure 7. Understanding and fostering interpersonal relations

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On the claim: *The manager inspires and motivates employees in the organization*, out of 60 respondents, with Completely disagree replied 0 respondents, with Partially agree 0 respondents answered, with Agree 2 respondent, with Significantly agree 22 respondents and with Completely agree 36 respondents. The percentage of these answers is presented in Figure 8.

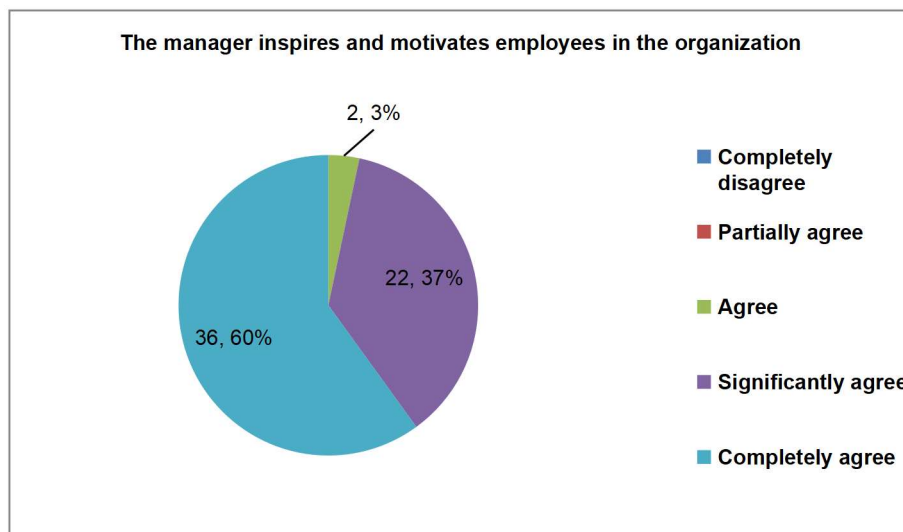


Figure 8. Motivating employees

In the Republic of North Macedonia, entrepreneurial business leaders generally are aware of their emotional intelligence, they are using their emotional intelligence skills partially and they have a need of upgrading and developing their emotional intelligence competencies in order to fully benefit from this key factor in enhancing business performance and success. It should be kept in mind that emotional intelligence can be developed over time and improved through training and seminars that can help in creation of better interpersonal relationships in the organizations, and leaders should continuously analyze their own emotional intelligence competences and skills that can encourage the use of so called emotional leadership.

CONCLUSION

People who possess emotional intelligence are more successful professionally than others. Researches have shown that it is possible to increase the level of emotional intelligence through various workshops and seminars, so the manager can become more competent to lead a group of people according to the needs of the company or will develop qualities that are necessary for effective leadership.

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Emotional intelligence is the skill of a leader who never allows his temperament and emotions to be out of control in times of crisis or adverse conditions. This leader completely trusts his staff, subordinates find it easy to talk to him and he always makes careful decisions. Emotional intelligence is not limited to personal qualities, but is the ability to understand and manage the emotions and feelings of other people. Emotionally intelligent business leaders usually know their own mind, and how their emotions and actions can affect others. Building good relationships and successful cooperation with employees help the leader in performing tasks that are directly aimed at achieving the goals of the organization.

In the new way of doing business, the emphasis is on teams, not the individual, therefore, relationship between employees and their superiors is important. Employees, who feel comfortable in their work environment, become more productive. They also respect and follow the leaders. We can say that emotional intelligence is indirectly related to the financial success of the organization and it should be developed as other types of intelligence.

Considering the results from the conducted empirical research, entrepreneurs and business leaders in North Macedonia have sufficiently developed personal competencies, not excluding the need for further improvement and development to a higher degree. They are aware of their emotions, advantages and disadvantages and they know how to manage them. They have gained respect and desired status in the society and the business community due to the level of development of their personal competencies of emotional intelligence. Their greatest wisdom and self-control lies in their ability to make logical decisions in unexpected and uncertain situations, without being "slaves" to emotional storms.

In terms of social competencies of emotional intelligence, it can be concluded that they are developed to a less extent than personal ones between business leaders in North Macedonia. Entrepreneurs have developed empathy for others, they are aware of the emotions and needs of others, and use this with their influence tactics and persuasion skills to guide employees toward common goals. They put a special emphasis on motivating, inspiring and supporting employees through guidance and feedback. In order to achieve a positive working environment, the main precondition for them is establishing a high quality of interpersonal relations. The results indicate that business leaders successfully resolve situations, disagreements or conflicts, manage change and build teamwork, therefore, enhance collaboration by creating a synergy in achieving common goals.

The research shows that in the Republic of North Macedonia, the emotional intelligence competencies are highly developed between entrepreneurial business leaders, but they still need to be promoted, especially in terms of social competencies that would lead to greater employee motivation, better interpersonal relationships and more effective work, and thus greater professional success.

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THE ROLE OF MANAGERS IN THE PROCESS OF CREATING COMPANY VALUE IN CRISIS SITUATIONS

Martina Sopta¹

Abstract

The function of the management economy, in addition to evaluating the current distribution of resources, includes a timely response to signals from the economic environment. Internal or external disruptions that may jeopardize the success and survival of the company can be contextually identified as signals that imply an adequate response of the manager. The basic role of managers during the crisis period is to understand and contextualize the symptoms and causes of the crisis and timely action that will provide the prerequisites for effective management during the crisis and the recovery of business operations. From the managerial aspect, crisis management after its identification refers to the process of business restructuring which, by analyzing the situation and planning recovery measures, should enable the renewal of the company, ie crisis management. Furthermore, digital technology today is almost essential for business success, while the development of digital technologies is strongly reshaping modern businesses and creating added value. New digital technologies are already improving companies' ability to anticipate problems, make effective decisions and adapt to their business quickly. In crisis situations such as this one sampled by the Covid-19 crisis, business models need to be rapidly transformed and adapted to ensure business continuity and create company value in crisis situations.

Keywords: management economics, enterprise value creation process, Covid-19 crisis

JEL classification: M13; L26

1. THE ROLE OF MANAGERS IN THE PROCESS OF CREATING VALUE IN CRISIS SITUATIONS

1.1. INFLUENCE OF YIELD ON SCOPE ON MANAGERIAL DECISION MAKING

Management economics or managerial economics begins with an exposition of the theory of the enterprise which it then uses in the analysis of managerial decision making based on the assumption that among other things the goal of the enterprise is to maximize the wealth or value of the enterprise. Typically, the basic role of managers during the crisis period is to understand and contextualize the symptoms and causes of the crisis and timely action that will provide the prerequisites for effective management during the crisis and recovery of the company.

Furthermore, economies of scale and yields to scale are two closely related concepts because yields to the scale of a production function determine how long-run average costs will behave at different levels of production, and therefore it holds:

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a) if with an increase in production the average cost decreases, then economies of scale and increasing yields on volume are present

b) if the average cost increases with the increase in production, then volume diseconomies and declining yields per volume are present

c) if the average cost does not change with the increase in production, then there are constant returns to volume and neither economies nor diseconomies are present.

Therefore, the task of managers is to identify the crisis as early as possible, discover the causes and successfully master it, which depends on the degree to which the crisis has been identified. Therefore, the following stages of the crisis process are usually highlighted:

- Potential crisis;
- Latent crisis;
- Acute crisis.¹

Business decisions, activities or measures not taken can, in combination with adverse developments, cause or exacerbate a possible crisis. Potential causes of a business crisis exist in a situation where individual risk or their cumulation with other circumstances becomes a serious threat to the achievement of primary business goals. A latent crisis is a situation in which a danger has developed from a potential possibility, but it is hidden and cannot be identified by the usual economic instruments, but instruments such as early warning indicators are needed. Identifying potential opportunities and risks represents a way out of the crisis, while their further neglect leads to negative self-reinforcing dynamics. Acute crisis is the third stage of development in which the symptoms are directly visible in business processes, and it is characterized by the inability to achieve the primary goals of the company. Rehabilitation or liquidation are the final outcomes of an acute crisis.²The function of the manager in the context of these phases unites all crisis management procedures, from preventive action before the crisis, through management in the narrower sense, ie crisis management to learning new ways of thinking and acting about the crisis. Crisis management is a process called crisis management and can be presented through its phases: preventive management; identification and reactive business crisis management.³Therefore, Krummenacher defines crisis management as an activity aimed at managing a situation dangerous to the survival of the company, planning and implementing measures to ensure the fundamental goals of the company.⁴

From the managerial aspect, crisis management after its identification refers to the process of business restructuring which, by analyzing the situation and planning recovery measures, should enable the renewal of the company, ie crisis management. In a narrower sense, the crisis management process can be divided into several phases:

¹Birker, K., Pepels, W., Hrsg., Op. cit., p. 28.

²Osmanagić Bedenik, N., op. cit., p. 19-20.

³Osmanagić Bedenik, N., *Krizni menadžment: teorija i praksa*, op. cit., p. 108.

⁴Krummenacher, A. (1981) *Krisenmanagement*. Zürich: Industrielle Organisation

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1. Ensuring liquidity, which means mobilizing all reserves of money to preserve key functions and important business relationships while eliminating organizational shortcomings;
2. Development of the concept of restructuring by designing a plan based on the analysis of internal and external business factors and the beginning of its implementation;
3. Realization of the concept of strategic and operational restructuring;
4. Identifying structural changes and concentrations on key competencies that are implemented in order to avoid repeating the processes that led to the crisis while achieving and ensuring business profitability.¹

The crisis management process in a narrower sense is identical to the restructuring process, although the term restructuring conceptually encompasses a wider range of activities. Basically, restructuring means a legal, formal, operational or financial reorganization of a company in response to changes in the business (eg mergers, acquisitions or dismemberment of the company and its parts) or negative impacts such as crises. Thus, Benaković states that there are generally three types of restructuring: financial, operational and strategic. Financial restructuring includes the restructuring of the company's balance sheet, ie changes in the structure of fixed and current assets and liabilities and liabilities in order to increase liquidity in the company. Operational restructuring is also called business restructuring, and refers to the reorganization of functional business units with the aim of increasing cash flow, improving profitability, reducing costs and increasing the solvency of the company. Strategic restructuring is carried out with the aim of long-term business sustainability, and includes: reducing the complexity of the range; identification of additional profit areas; design of innovative performances in new markets; focusing on the most profitable elements of the value chain; new business models and the application of new technology.²

Managers who manage the crisis anticipatory, ie act preventively, with the development of organizational resilience, establish a high readiness for potential current and future internal and external changes. In conditions of growing complexity and dynamics of the external and internal environment, in order to reduce the risk arising from the challenges of such an environment, managers use the tools of anticipatory management. The most complex and important such instrument is the early warning system, which, depending on the system level and type, provides managers with the necessary information on latent hazards and opportunities by identifying silent signals from the environment.³ However, regardless of the crisis

¹Osmanagić Bedenik, N., *Crisis as a chance: Through a business crisis to business success, op. cit.*, p. 45-47.

²Benaković, I. (2012) Restructuring plan as part of the mandatory documentation in the pre-bankruptcy settlement procedure. *Journal of Accounting and Finance* 12, 2012. p.113-117.

³Osmanagić Bedenik, N., *Crisis as a chance: Through a business crisis to business success, op. cit.*, p. 137.

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competencies of its own managers, awareness of the complexity of its own business or the achieved level of quality of anticipatory management systems, to certain crisis situations that have their source in the wider environment, the company simply can not have a ready response. Such a situation is the current crisis caused by the new coronavirus pandemic which has brought modern business in a global context to critical limits of endurance. In such an unprecedented situation, the first step of a manager is to ensure the safety and health of their own employees, customers, associates and the entire value chain, and then the financial stability of the company.

In the current circumstances of the crisis caused by the coronavirus pandemic, among others, it is possible to identify the following tasks of managers:

- Preservation of liquidity - by selling liquid assets without jeopardizing the success potential, borrowing, using state aid, etc .;
- Rationalization - in terms of working capital management, reduction of unnecessary inventories, narrowing the range, optimizing production and increasing productivity; in financial terms, optimizing balance sheets, portfolios and investments;
- Strengthening the resilience of the value chain - regionalization versus globalization of the value chain and diversification versus concentration of suppliers and customers;
- Identification and implementation of new business models - shift from physical to virtual interaction;
- Adaptation of one's own organization - shallower hierarchical structure, creation of cross-functional teams with the aim of accelerating decision-making, digital transformation in all aspects of business;
- Redefining goals - adjusting long-term plans to the expected recession;
- Identifying potential opportunities - different strategies of taking over, merging, diversifying or selling business units can take the opportunity to improve the competitive position.

In the current crisis, managers as decision makers need to lead change, build trust, yield volume, ensure transparency in communication with all stakeholders, and enable their own organizations to maintain short-term stability and long-term growth and development.

1.2. THE IMPACT OF TECHNOLOGICAL DEVELOPMENT ON THE VALUE CREATION PROCESS

Rising yields per volume or declining costs according to Salvatore¹ arise for technological or financial reasons. At the technological level, volume savings arise because with an increase in production volume, there can be a greater division of labor and specialization, and the use of more specialized and productive machines. When considering production efficiency, it is important to distinguish between dynamic and static efficiency. Static efficiency refers to the efficiency in the production and allocation of resources with a given technology and, hence, depends on the volume, ie

¹Salvatore, D. (1993) *Economics for managers in the world economy*, Mate d.o.o., Zagreb. p.284.-286..

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both production and allocative efficiency. In the case of dynamic efficiency, we have the emergence of a change in technology (improvement of the organization, introduction of new products, new processes, etc.). Static and dynamic efficiency are not always directly related. Routines that improve static efficiency can result in inertia and thus prevent dynamic efficiency. Therefore, instruments that promote static efficiency are different from those instruments that promote dynamic efficiency.

Technological advances are very close to dynamic efficiency. According to Robert E. Hall¹ There is a detailed calculation of the different ways in which neoclassical but also new growth theories can be used to measure technological progress. According to Hall, technical economic models (diagrammatic, algebraic, statistical) provide hope for a better and deeper understanding of a phenomenon called technological progress. Many efforts, however, aimed at developing national innovation systems are at odds with these models, but then, technological advances resulting from the convergence of the buyer-seller relationship can be studied through case studies. For example, if factors such as trust and debt relations of an intangible nature between companies (so-called moral debt) are the main determinants of progress (introduction of new products, new processes, advanced organizational systems, etc.), and all these factors cannot be measured, then no it remains nothing but to rely on a case study). Technological intensity refers to the size of a product, or export, that is produced by a company or industry, and is classified into high technology. At the macroeconomic level, for example, technological intensity can be measured by the share of high-tech industries in the structure of the total industry of a particular country.

Digital technology is the result of technological development and today is almost necessary for business success, while the development of digital technologies is strongly reshaping modern enterprises. The implementation of digital technologies in business can be monitored through three complementary processes: digitization, digitization and digital transformation.

Digitization basically represents the transformation from analog to digital, in the context of a company it means the conversion of information and data used in business into digital form. Digitization further represents key changes in business and business models based on the newly acquired knowledge gained through digitization initiatives. Finally, digital transformation, based on the previous two processes, represents a comprehensive organizational and operational shift at all system levels in which people, technology and innovation are key factors, all with the aim of creating added value for end customers. Westerman et al. have defined digital transformation as “the use of technology to radically improve the efficiency and reach of businesses”.² Spremić defined digital transformation in more detail as the intensive application of digital technology and resources in order to turn these resources into new revenues, business

¹Hall, E.R. (2002) *Digital Dealing: How eMarkets are Transforming the Economy*. Norton, USA, p. 64.

²Westerman G. et al. (2011) *Digital transformation: a roadmap for billion-dollar organizations*. Cambridge, MA & Paris: MIT Center for Digital Business & Capgemini Consulting, p. 5.

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models and ways of doing business. Transformation occurs when a company decides in a relatively short period of time to fundamentally change its business processes, strategies, activities, hierarchical and organizational structure, all in order to better connect these processes and strategies and ultimately give the company a better competitive advantage in the market.¹

New digital technologies are already improving companies' ability to anticipate problems, make effective decisions and adapt to their business quickly. In crisis situations, business models need to be rapidly transformed and adapted to ensure business continuity. In crisis situations, where customers, employees and entire supply chains are forced to function differently, the processes of digitization and digital transformation are an effective response. Effective and rapid implementation of technology at the level of the entire organization aims to enable short-term flexibility, but also long-term growth and development after the company manages the crisis.

The current crisis is a strong reminder that the level of digitalisation of companies coincides with their resilience in the event of unexpected events and competitiveness in a new business reality focused on digital. For example, this crisis highlights how advanced robotics can enable companies to continue to operate autonomous factories despite safeguards, how machine learning and data analytics allow early detection of signs of change in customer preferences, and how extended artificial intelligence supply chain management increases enterprise agility in response to rapid and drastic changes in supply and demand.²

The COVID-19 crisis seemingly provides a sudden glimpse into a future world, one in which digital has become central to every interaction, forcing organizations and individuals to make a leap on the learning curve almost overnight. A world in which digital channels are becoming the main (and, in some cases, the only) model of customer engagement, and automated processes are becoming the main driver of productivity - and the basis of a flexible, transparent and stable supply chain. A world in which agile ways of working are a prerequisite for everyday encounters with changes in customer behavior. Many companies are accelerating the shift towards digital models with incredible speed. In addition to digitalization, companies also need to rethink customer experiences to reduce resistance, accelerate the transition to digital channels, and ensure new security requirements. For example, a car manufacturer now manages functions traditionally performed by dealers, such as trade, financing, service and delivery of cars. Airlines are redesigning the experience of contactless travel focused on passenger health and safety to make customers feel comfortable again.³

¹Sprenić, M. (2017) *Digital business transformation*. Zagreb: Ekonomski fakultet, p. 53.

²Candelon, F. et al. (2020) *As the COVID-19 Crisis Reveals, Europe Urgently Needs to Digitize Its Industry*. [online]. Boston Consulting Group & BCG Henderson Institute. Available at: <https://www.bcg.com/publications/2020/covid-crisis-reveals-europe-urgently-needs-industry-digitization> [08. kolovoz 2020.]

³Baig, A. et al. (2020) *The COVID-19 recovery will be digital: A plan for the first 90 days*. [online]. McKinsey Digital. Available at: <https://www.mckinsey.com/business->

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A crucial process in the digital future is the concept of design thinking, which involves the use of systems reasoning and intuition to solve complex problems and explore ideal future states. The design-focused approach is primarily end-user or customer-oriented, but also helps to understand in real time how suppliers, chain associates and competitors are responding to the crisis and how the ecosystem that connects them all is being upgraded to the next normal after the crisis. Organizations that are able to take advantage of concepts such as design thinking in shaping a new offer during a crisis will gain a significant advantage over the competition. ¹The experiences of leading companies suggest that a focus on the areas that most touch the core of the business provides the best chance of success, both in the short and long term. Organizations that implement minor changes at the edges of their business model almost always lag behind set goals. Fluctuation leads to a return on investment below the cost of capital and to changes (and learning) that are too small to match the external rate of disruption.²

- Although the results of the required changes will vary significantly between industries, several common themes emerge between sectors that define the following “normal” changes in cost structure and operational models:

- • Transparency and flexibility of supply chain based on technology such as prediction algorithms should make it possible to avoid or mitigate supply chain disruption in the future;

- • Data security in the context of employees and the data of the companies themselves;

- • Teleworking and automation related to the need to build the flexibility and diversity that teleworking brings while maintaining productivity and automating activities and processes that will bring cost advantage;

- • Expanding the business portfolio in the form of acquisitions and mergers is an imperative for companies because it enables faster strategic implementation of digital technologies by building talent and capabilities and creating access to new products, services, markets and market segments. The crisis, causing a general decline in the value of companies, is an opportune time to buy what was previously unavailable.³

The extraordinary time of crisis represents a unique opportunity to try and experiment with different types and aspects of digital technologies on the largest scale that are otherwise difficult to implement or test under normal conditions. The rapid transition to the full level of many types of digital operations and interfaces brings many challenges, but also opportunities. At the broadest level, there is the opportunity to learn in real time about the values of markets and industry, and the opportunity

functions/mckinsey-digital/our-insights/the-covid-19-recovery-will-be-digital-a-plan-for-the-first-90-days [08. kolovoz 2020.]

¹Blackburn, S. et al., *op. cit.*, p. 4.

²*Ibid.*, p. 5.

³Blackburn, S. et al., *op. cit.*, p. 5-6.

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to quickly learn and get feedback on business effectiveness and agility of the organizational approach.¹This is perhaps the first global crisis in which companies are able to collect and evaluate real-time data about their customers and what they are doing in this time of forced virtualization. Reducing activities and supply that are no longer needed while correcting supply-side issues will help increase the chances of retaining more low-cost customers in digital channels after the crisis is over.²Businesses that once shaped a digital strategy in phases of one to three years now have to narrow initiatives to ranges of just a few days or weeks. The sharp acceleration is already visible through different sectors and geographical areas. In this unique moment, businesses can learn and thrive faster than ever before. Ways of learning and adapting to the current crisis will profoundly impact their impact in tomorrow's changed world, providing an opportunity to maintain greater agility and connectivity with customers, employees and suppliers.³Digitization and digital transformation are a necessary process that enables modern companies to create new business value and development strategies for further expansion. In crisis conditions, the achieved degree of digitalization and the speed of adaptation to digital modes of work differentiate success between different companies, conditioning their further development or survival in the market or stagnation.

1.3. DECIDING ON THE DEGREE OF CAPACITY UTILIZATION

Capacity is another concept that can be easily derived from the microeconomic concept of the production function, but it is extremely difficult to measure. Due to the urgent need to decide which criterion to take to measure capacity, it can be included in the deductive or inductive approach. For example, if the calendar time of functioning of the production system is taken to measure capacity, then it is indisputably a deductive approach to expressing production efficiency. But if we rely on the time operation of machines, since their operation has the highest impact on the amount of production, then we should talk about the inductive approach of expressing production efficiency.

If we mark with the symbol Q_M the possible production of a particular production system (factory, company or industry), and with the symbol Q_S the realized quantity of production of the same production system, then the degree of capacity utilization (SIK) is equal to:

$$SIK = \frac{Q_S}{Q_M} .$$

If SIK is closer to one, ie 100% since SIK is often expressed in the form of a percentage rate, then the observed production system is very well, almost maximally used. The difference of up to 100% de facto represents the extent of unused capacity and can be freely treated as excess or excess capacity. Is it good or bad? Excess capacity, ie capacity that has remained unused, is a sign of poor management of

¹ibid., p. 8.

²ibid., p. 9.

³ibid., p. 2.

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economic activity of a particular production system or enterprise. On the other hand, however, overcapacity can be a barrier to entry in such a way that a company wishing to enter the industry, when it sees the existence of overcapacity, will have to make a special effort to answer, for example, the following question: the company operates with the maximum possible capacity and, based on that, decides to lead a predatory pricing of the product. It follows from all the above that unused capacity not only harms the company itself and the entire industry.

1.4. THE PROCESS OF CREATING VALUE FOR SHAREHOLDERS

A company creates value for its shareholders when the return for shareholders exceeds the required return on capital, ie the company creates value in one year when it exceeds expectations. An overview of the creation of value created for shareholders is given in Figure 4. It is important to note that the total return of shareholders consists in part of current income received during the holding period (dividends) and changes in market share price during the holding period (capital gain). The first step¹ in the emergence of value for shareholders is an increase in the market value of share capital. The market value of the capital of a listed company is the market value of the company, ie it is the value obtained by multiplying the price of an individual share by the total number of shares. An increase in the market value of capital in one year represents the difference between the market value of capital at the end of that year and the market value of capital at the end of the previous year.

The next step observed is value added for shareholders, a term used to distinguish between wealth held by shareholders at the end of the observed year and that held by shareholders at the end of the previous year. An increase in the market value of capital is not an added value for shareholders.

An increase in the market value of capital, but not value added for shareholders is when:

- shareholders buy new shares of the company;
- conversion of convertible debentures occurs.

The decrease in the market value of capital, but not the decrease in value for shareholders is discussed when:

- the company pays dividends to shareholders because although shareholders receive money, the market value of capital (ie the price per share) decreases by a similar amount;
- the company buys shares on the market (purchase of shares).

Value added for shareholders is calculated as follows:

¹Fernández P. (2001.): *A Definition of Shareholder Value Creation*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=268129, p. 3.

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Value added for shareholders =

Rising market value of shares

+ dividends paid during the year

- capital increase expenditures

+ other payments to shareholders (purchase of shares)

- conversion of convertible debentures

Return on shareholders is the next step in creating value for shareholders. Return on shareholders is the value added for shareholders in one year, divided by the market value of the share capital at the beginning of the year.

$$\text{Return on shareholders} = \frac{\text{added value for shareholders}}{\text{market value of capital}}$$

The required return on share capital (cost of capital) is further observed, which represents the expected return on shareholders as compensation for the risk inherent in investing in shares.

The required yield will depend on the risk-free interest rate (eg long-term government bonds) and the company's risk premium. The company's risk premium depends on the assessed risk of the company in whose share it invests:

$$\text{required return (Ke)} = \text{risk-free interest rate} + \text{risk premium}$$

The value created for shareholders is the goal of the observed procedure. A company creates value for its shareholders when the return for shareholders exceeds the cost of capital or the required return on share capital. It follows that,

$$\text{value created for shareholders} = \text{market value of share capital} \times (\text{return for shareholders} - \text{cost of capital})$$

Consequently, the value created is the added value for shareholders above expectations, which is reflected in the required return on share capital. Creating added value for shareholders is the goal of the company's business and the primary interest of shareholders.

2. THE IMPACT OF THE COVID-19 CRISIS ON THE OPERATIONS OF CROATIA AIRLINES D.D.

The flexibility of management economics as a science is manifested in the unique and complex problems that managers as managers of companies face on a daily basis. As stated in the previous chapter, management economics deals with the application of economic theory, ie economic methods, techniques and tools in order to determine how to most effectively achieve the goals of the organization in the context of current events and the given environment. The manager, in his capacity as a person or an entire team, is a major stakeholder in the decision-making process.

Crisis situations, regardless of the source, require management to be able to adapt strongly in the management and decision-making process. The word crisis (Greek *krisis*) defines a transient unfavorable state in every thought, natural and social process, or a turning point associated with the need to make a decision. In the context of business operations, such a situation can be described as an unconventional situation that leads to a threat to the company as a system. In crisis situations, the classic optimization goals on which the management economy is based are redefined, so that priority is given to goals and tasks that should enable successful overcoming and exit from the crisis.

Three elements are common to crises: threat to the organization; an element of surprise and a short decision-making period.¹

A business crisis is thus most often defined as an unplanned and unwanted process of limited duration and ability to influence, which harms the primary goals, with an ambivalent outcome.²The primary goals of a company are those whose non-compliance leads to the sanctioning of the system as a whole. These are vital, existential goals:

- preserving solvency at all times - the principle of liquidity or the principle of financial stability is an extremely important operational goal of the business;
- achieving a minimum profit, in special situations of covering costs, ie avoiding unbalanced or excessive losses is also a vital operational goal of the business;
- Creating and maintaining sufficient success potential is a strategic goal of the business.³

The sources of a business crisis can be external or internal. External sources of business crisis arise from unfavorable development of the environment which cannot be prevented, ie an individual company as a rule cannot influence the development of events in a branch or in the economy. In such cases, it is important to develop and use instruments that will warn the company's management in a timely manner of possible

¹Seeger, M. W.; Sellnow, T. L.; Ulmer, R. R. (1998) *Communication, organization and crisis*. Communication Yearbook. Vol. 21, str. 231–275.

²Osmanagić Bedenik, N., *op. cit.*, p. 11.

³Birker, K., Pepels, W., Hrsg., (2000) *Handbuch Krisenbewußtes Management, Krisenvorbeugung und Unternehmenssanierung*. Berlin: Cornelsen

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negative trends in the environment. Internal sources of business crisis ("home crisis") are located in the company itself and its way of doing business. Since management bears the greatest responsibility for the way it does business, it is also considered the most responsible for the internal business crisis, which is confirmed by the results of numerous empirical studies.¹

In the context of the system control model, the causes of the crisis can be sought at all hierarchical management levels; operational, strategic and normative. Early identification of the crisis caused by internal factors can be achieved by traditional analysis of financial statements, more precisely by analysis of appropriate financial indicators and indicator systems designed to assess the overall business, while the identification of external factors is more complex and usually refers to early learning at different levels .

Liquidity ratios are one of the first alarming indicators of a crisis and (liquidity ratios) measure a firm's ability in the context of its ability to meet due short-term liabilities.²Table 1 observes the ratios of current liquidity, accelerated liquidity and current liquidity. Although it is considered that they should be as large as possible, for the optimal management and allocation of funds it is necessary to take into account the specifics of the industry and the country in which the company operates. It is generally assumed that they should have a value of at least 1. Within industry averages, it is difficult to identify benchmarks for comparison because these indicators vary depending on the size of the company, the market in which they operate and the current circumstances in which they find themselves.

The current liquidity ratio of the Croatia Airlines Group, which puts short-term assets and short-term liabilities in the ratio, achieved the most favorable value in 2017. Accelerated liquidity as a more conservative indicator removes inventories from the ratio, while current liquidity puts money and cash equivalents in the ratio with short-term liabilities. The accelerated liquidity ratio is particularly useful in the analysis of airlines because they are often capital intensive and highly indebted. It should be noted that in practice it is usually not profitable to keep significant amounts of money in accounts because it can be more usefully used. Accelerated and current liquidity also recorded the most favorable values in 2017. Next year, short-term trade payables and short-term debts will grow. Liabilities to suppliers are higher primarily due to obligations for engine investment maintenance. Inventories are constant throughout the observed period, hovering around 60 million kuna.

¹Osmanagić Bedenik, N. (2010) Crisis Management: Theory and Practice. Proceedings of the Faculty of Economics in Zagreb, vol. 8, no. 1, p. 108.

²Žager, K. et al., Op. cit., p. 45

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Table 1. Liquidity indicators of the Croatia Airlines Group in the period from 2015 to 2020

	2015.	2016.	2017.	2018.	2019.	I-XI. 2020.	Prosjek
Current liquidity ratio	0,48	0,46	0,51	0,44	0,40	0,48	0,46
Accelerated liquidity ratio	0,34	0,31	0,36	0,30	0,27	0,36	0,32
Current ratio	0,09	0,08	0,11	0,05	0,08	0,15	0,09

Source: authors' work according to the financial statements of the Croatia Airlines Group (2016-2020).

Table 2 shows the relative changes in liquidity ratios. It can be seen that all indicators show a positive trend between 2016 and 2017. After that, it will deteriorate again in the next two years, so that in the first two quarters of 2020, all indicators will achieve relative growth. The reason for this is the significant growth of short-term assets. This growth is mostly due to the increased cash balance due to the payment of the second part of the shareholder loan of the state in the amount of HRK 150 million intended for the stabilization of operations before the planned recapitalization.

Table 2. Relative changes in the liquidity ratios of the Croatia Airlines Group in the period from 2015 to 2020

	15-16. %	16-17. %	17-18. %	18-19. %	19-H20. %
Current liquidity ratio	-3,7%	8,8%	-13,3%	-8,2%	20,5%
Accelerated liquidity ratio	-8,1%	13,9%	-15,5%	-9,3%	32,5%
Current ratio	-14,0%	39,8%	-55,9%	73,9%	78,9%

Source: authors' work according to the financial statements of the Croatia Airlines Group (2016-2020).

In the current circumstances of the coronavirus disease pandemic that has caused flight cancellations, reduced capacity and the general shutdown of regular operations, maintaining liquidity is a major challenge. Liquidity risk is further accentuated by the inability to predict future circumstances and the time frame of the current crisis.

In the context of liquidity risk management, Croatia Airlines Group takes measures to reduce costs at all levels of the company. Of the current 13 aircraft and engine lease agreements, 11 have been agreed with landlords to reduce the cost of monthly lease installments using Power by the Hour (PBH). Also, reductions in various costs or payment delays have been agreed with other suppliers.¹

According to certain projections of the International Monetary Fund, the current recession is predicted to be the world's largest economic slowdown since the Great

¹Croatia Airlines (2020) Consolidated and separate business reports Croatia Airlines d.d. for the period January - June and II. quarter 2020, op. cit.

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Depression, and to be "significantly worse" than the Great Recession of 2008-2009. years.¹

The current pandemic caused by a new strain of coronavirus, originally recorded in the Chinese province of Wuhan in late 2019, poses a strong destabilizing threat to the world economy with far-reaching negative consequences. Anti-epidemic measures, introduced to combat the spread of the virus, have virtually paralyzed the world economy. At certain times, according to some estimates, almost a third of the world's population was in the so-called. "Lockdown", ie a situation of restricted movement with the exception of activities that cannot be performed from home. In economic terms, the pandemic has caused a new recession. The fall of world stock markets in March 2020, followed by sudden and volatile changes in prices and major world indices, marked the beginning of a recession. Due to the high uncertainty in the coming future, current estimates of the extent and duration of the recession are quite pessimistic.

CONCLUSION

In the current situation of extensive measures of isolation, restriction of movement, closure of educational institutions and measures of social distancing, life and business need to be adjusted to the "new normal". In this context, the task of management economics is to adapt the entire decision-making process in a situation of sudden changes marked by shocks in demand that lead to accumulation of stocks and a sharp decline in corporate income on the one hand, sides. In the enterprise, knowledge and methods of management economics should have the role of increasing efficiency and reducing unnecessary costs while identifying those strategic products and services that have perspective in the circumstances of the crisis. The analysis of the financial situation indicates that in the immediate years before the external crisis caused by the pandemic, the Croatia Airlines Group showed significant difficulties in doing business, which were reflected in the final result. Poor financial condition posed a significant risk to the very survival of the company. Currently, the biggest internal risk is maintaining a sufficient level of liquidity, which will require urgent financial assistance from the state. Due to quality management measures, reduction of liquidity risk and continuous action in the interest of the Republic of Croatia and its citizens, primarily due to the tourism sector, the company has proven its importance, which is why the state is very likely to financially support operations. Management needs to make agile and quick decisions with the aim of strengthening the resilience of its own value chains in the conditions of disruption of existing ones. Finally, as a functional part of every management team in the company, the management of the group has the task of harmonizing redefined goals by making optimal decisions under the pressure of uncertainty of the scope and

¹Gopinath, G. (2020)*The great lockdown: Worst economic downturn since the Great Depression*. [online]IMF Blog–Insights & analysis on economics & finance. Available at: <https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/> [01. kolovoza 2020.]

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duration of the current crisis situation. However, it should be noted that the current crisis is unprecedented in the history of the air transport industry. In this sense, the positive aspect is the strong interest of the owners, ie the Republic of Croatia, in supporting the company in the current circumstances, as well as future directions of development. In addition to the urgent financial assistance package that should enable business continuity, efforts should be made to select the best recovery strategy and future development alternative that will enable long-term improvement of the competitive position and financial sustainability of Croatia Airlines Group's operations.

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MANAGEMENT ASPECTS OF BUSINESS PERFORMANCE - THEORETICAL FRAMEWORK

Martina Sopta¹

Abstract:

Business decision-making problems are present in almost all organizations, profit-oriented or non-profit-oriented, because the resources that seek to achieve a certain goal are limited. In general, the process requires relevant knowledge and information about the problem of decision making, elaboration of potential solutions and decision making. In developed business entities, the subjects in charge of decision-making are most often managers. The quality of the decision-making process therefore has far-reaching consequences for the functioning and survival of the organization, as well as for the attitude towards all involved stakeholders. The flexibility of management economics as a science is manifested in the unique and complex problems that managers as managers face every day, ie management economics deals with the application of economic theory and economic methods, techniques and tools to determine how to most effectively achieve organizational goals in the context of current events and given environments. Profit is a key determinant of business results, and given the covid-19 crisis that is present, the goal is certainly the survival of the company Manager, as a person or an entire team, is a major stakeholder in the decision-making process.

Keywords: management economics, profit, management team

JEL classification: M13; L26

1. MANAGEMENT ASPECTS OF BUSINESS RESULTS

Management economics is defined as the application of the methodology of economic theory to decision-making problems within an enterprise. In other words, it studies the regularities and laws that managers should adhere to when making decisions about making a profit. Hence, the link that making a profit is actually the heart of the management economy. There are two tasks of management economics:

- a) enable the manager to evaluate the existing current resource allocation
- b) help manager to respond properly to signals from the economic environment

The conditions in which modern companies operate are becoming increasingly complex. Due to the global change in the supply-demand relationship, it is becoming increasingly difficult to meet the requirements for high levels of profit, quality, environmentally friendly products, as well as the satisfaction of all stakeholders.²The

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²Rupčić N. (2016) Management Economics - Theory and Practice, Faculty of Economics, University of Rijeka, p.

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control variables considered by the operational management level are liquidity and profit. A higher, strategic management level deals with the prerequisites for making a profit. In order to be able to adequately observe the business result, it is important to first clarify the determinant of the same.

1.1. THE NATURE AND THEORY OF PROFIT

Profit, as said, is the difference between income and expenses. A prerequisite for its calculation are two terms that must be known, revenue and expenditure. Revenue is easy to get by multiplying the price by the quantity sold. On the other hand, we define costs as expenses where it is possible to establish a connection with the goal of spending value, ie costs can be considered all those business expenses that can be calculated in the price of the product or the price of the service.¹

The role of profit is extremely important because companies usually leave areas where they lose money, and on the other hand, high profits lure companies to produce goods for which there is a high demand.²

1.1.1. PROFIT THEORIES

Profit rates vary markedly across firms in industries, while even greater differences occur across firms in different industries. Industries such as steel, shipbuilding and railways make low profits while the pharmaceutical and broad goods industries make much higher profits. Precisely because of this, there are several theories that seek to explain these differences. It should be added that each of these theories may be applicable in some industries. Profits arise as a combination of factors, the inclusion of differentiated risk, market imbalances, monopoly power, innovation and above-average managerial efficiency.³

1.1.2. PROFIT RISK EXPLANATION THEORY

Risk Profit Explanation Theory - According to this theory, firms require above-average returns to enter such areas with above-average risk. Thus, for example, profits in the pharmaceutical industry are much higher than in the wood industry due to the much higher risk faced by pharmaceutical companies.

¹Santini I. "Costs in business decision-making" HIBIS, Zagreb, 1999, p. 4

²Samuelson, P., Nordhaus, W. : Economics, 19th Edition, The McGraw-Hill Education, USA p.2

³Salvatore, D. : Economics for Managers in the World Economy, MATE, Zagreb, 1994, p. 17

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1.1.3. FRICTIONAL THEORY OF PROFIT

Frictional Profit Theory - This theory points out that profits arise from friction or deviation from long-term equilibrium. This means that in a long-term perfectly competitive equilibrium, companies tend to earn only a normal return or zero profit on their investments

1.1.4. MONOPOLY THEORY OF PROFIT

Monopoly theory of profit - Companies with monopoly power can reduce production and demand higher prices than in conditions of perfect competition, thus earning a profit. Due to limited entry into the industry, companies may even continue to make profits in the long run.

1.1.5. INNOVATIVE THEORY OF PROFIT

Innovation Profit Theory - Claims that profit is the reward for introducing successful innovation. Thus, after patenting the world-famous antibiotic Sumamed, Pliva made profits as a reward for innovation.

1.1.6. PROFIT THEORY BASED ON MANAGERIAL EFFICIENCY

Profit theory based on managerial authority - It is based on the observation of companies that have achieved above-average returns and economic profits with above-average efficiency.

1.1.7. THE ROLE OF PROFIT IN A MARKET ECONOMY

In the economy, profit primarily has a signaling role. The high profits made in the industry give signals to companies, but also to competitors. Primarily, high revenues and, consequently, high profits, are a sign to companies that consumers have accepted the product well and that they want even more products, and they represent a reward for efficiency. However, they are also an invitation to competing companies to enter that part of the industry with their product in the hope that they will make a part of the profit as well. On the other hand, if profits are small, the company is encouraged to increase its efficiency and / or to produce fewer goods or to leave the industry in order for more efficient companies to enter it. Additionally, the second role of profit is rewarding. If companies have chosen and well supported the right product, the reward they receive for it is in the form of high profits. On the other hand, small or negative profits are a sign to companies that the product they have chosen is probably the wrong choice and the negative profit is a consequence of that decision.

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2. THE INFLUENCE OF MANAGERS ON THE MANAGEMENT STRUCTURE

2.1. MANAGEMENT STRUCTURE

A simple management structure is one that is based on rules, such as debt for example, and is easy to apply to simple transactions that also need a management structure. As contractual risks increase, in the case of joint stock companies as a complex entity, simple management structures come under stress and there is a need to adapt them to much more complex circumstances.

A complex joint stock company consists of a number of subsidiaries ($N > 1$). Each subunit is characterized by some structure (organization and technology) and some degree of efficiency, a parameter and it is assumed to be constant. It is the management structure of a joint stock company that is its backbone, without whose efficient operation the growth of the value of that same company would not be possible.

The management structure is built by the sector manager, executive management or board of directors and the supervisory board, which has observational skills and powers that allow it to request inside information on the operations of individual divisions, and to broadcast proposals to improve resource allocation within the corporation.

Furthermore, entering into a deeper understanding of the management structure, it is inevitable that there will be managers of subunits or departments that are the operational builders of the empire, as opposed to management that is of a strategic nature. Department or sector managers benefit only by investing in the subunit they manage. Sector managers can take non-observable actions, which undeniably cost, but therefore generate an increase in sector profits in period 1. These and such actions, of course, the sector manager will not take if the increased profits do not improve the assessment of sector potential by external investors and / or executive management regarding future profits. The future promise of making a profit will attract new investment funds in the future. Based on the above, the utility function of sector managers "i" could be formulated as follows:

$$u_i = I_{i1} + I_{i2} - g(a_{i1})$$

where individual symbols mean:

u_i - utility function of the sector manager,

I and 1 - investment amount in period 1,

I and 2 - investment amount in period 2,

g - cost function,

and 1 - actions taken by the sector manager in period 1.

The cost function (g) generated by the sector manager depending on its own actions taken in period 1 is by its nature increasing and convex which implies $g'(0) = 0$. The implication here is that the manager's participation in the sector is limited and not chained. The sector manager takes actions, which cost money, but he is not rewarded for them if equilibrium exists. The profits of individual subunits within the corporation increase due to actions taken by their managers in period 1.

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Thus, maximizing expected investments, and assuming that shareholders do not show preferences but are indifferent to the internal allocation of investment money, will lead to maximizing expected profits.

2.2. MAXIMIZING THE GROWTH OF THE VALUE OF A JOINT STOCK COMPANY

Maximizing the growth of the value of a joint stock company is reflected in the economic value of the company and in the time value of money. Nevertheless, maximizing the value of a joint stock company could appear as a fundamental goal of doing business only in ideal conditions of a perfect and fully efficient market.¹ Namely, in the conditions of a perfect market there is no friction and there are no transaction costs or taxes, which gives room to maximize the value of the joint stock company. On the other hand, there is no potential conflict between owners and creditors because the ultimate goal for all of them is to maximize the value of a joint stock company that can be achieved by proper choice of capital structure, but more on that in the next chapter.

2.3. TEAMWORK

Teamwork originated from a team organization where in law the teams that are formed within a functional or divisional organizational structure have a central place in the team organization. Teamwork removes business rigidity, rigidity of classic structures and breaks down the boundaries between individual organizational units, which makes the organizational structure shallower and more flexible.²

Everyone knows the undeniable and indisputable fact that a manager as an individual very quickly comes to a state of overload, 'overwhelmed', primarily due to the range of tasks he has to perform, and not so much due to the growing scope of particular activity, although the impact of this fact should not be underestimated. It is logical, hence, that the manager should be 'empowered', and this is achieved by establishing a management team headed by a general manager.

There are many cases of teamwork, and very common and ancient phenomena. In enterprise theories, however, this phenomenon entered quite late, through the famous duo, Alchian and Demsetz.³ Their phrase 'team production', which rejected the assumption of neoclassical microeconomic theory, which is simplified but concise: fiat management, and which explains the microanalysis of finished product production within the production systems of economic organizations, has become a common component of modern vocabulary. and stock). Let us examine, therefore, what this phrase means and what it explains?

¹Orsag, S.: Securities - Investments and Financing Instruments, Revicon, Sarajevo, 2011, p.132.

²I.Santini: Materials for the course PROFIT MANAGEMENT, Faculty of Economics, University of Zagreb, 2008.

³. See: A. Alchian, H. Demsetz: "Production, Information Costs and Economic Organization," American Economic Review, 62 (1972), p. 777-795.

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The essence of team production, ie the core of any production system, is primarily reflected in the fact that the finished product is not a simple sum of separate production effects (intermediates) of particular production factors. On the contrary, all interacting production factors create intermediate products and / or finished products. The finished products, furthermore, are not produced by one and the same individual as is the case of the farmer or the finished product of the ancient artisan. The effects produced are the result of the work of a smaller or larger number of different employees, and none of these employees can attribute the credit for creating the effects in question. It is the team, therefore, that creates the effects.

The existence of a large number of individuals involved in the production process on the production of the finished product automatically leads to a problem that could be summarized as follows: all team members, in performing their work duties, do not necessarily have to strive equally. Some will really be enthusiastic and conscientious while others will, to a greater or lesser extent, avoid fulfilling their obligations. The latter, popularly speaking, are called slackers and can be distinguished according to the degree of slackness.

Ex ante contracting does not envisage that employees will slack off, but it is held that individuals via the team will work exactly as they should. Based on these premises, the amount of monetary compensation for their work is derived at the same time. The money to pay for work can only come from the sale of finished products that the team produces. If we have slackers, on the one hand, and if we have compensation related to the finished product created by the team, on the other hand, the occurrence of injustice is inevitable. The resulting diminished performance of the team, namely, which occurs due to the slackness of individual members, will be divided according to ex ante terms, and at the same time we have different ex post engagements of individuals within the team. It is not surprising, therefore, that some members of the team will 'reap' the benefits they did not deserve, while others, enthusiastic and conscientious, will be deprived.

Unfair rewarding resulting from unequal engagement (slacking) is certainly an undesirable phenomenon that is sought to be eliminated, primarily because this and such a situation, if it lasts, can cause the team to break up. In order for the team not to fall apart, there must be a supervisor who will notice the discrepancy between rewarding and performance. Although the perception of injustice is extremely important, it is not enough in itself. The observed gap between reward and performance needs to be quantified, and this requires the fulfillment of one important assumption, the verification assumption. It is extremely difficult to check whether a team member is slacking off for an enormous number of reasons, of which a large minority of reasons are quantifiable and thus unquestionable and indisputable.

Some team members may use working hours more often for physiological purposes, private telephone conversations, etc., than other team members do. While the first reason for not doing work is difficult to control, the second is somewhat easier, but by no means simple and without difficulty. Some team members show a quick understanding of the task they need to do, and for others, apparently, it is more difficult regardless of whether it is really difficult to understand or it is just acting. These and similar reasons are de facto 'trifles' towards phenomena that could be subsumed under

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the phrase misrepresentation. Misrepresentation occurs when a team member transmits unreliable information and thereby causes a distorted action by another team member. The negative consequences of inadequate information can be large and significant, and even devastating, but it is difficult to verify whether inadequate information was sent intentionally or due to the inability of a team member to select just adequate, not inadequate information. It is easy to conclude, from there, that the appearance of inadequate information is noticeable, especially in terms of consequences, but it is undoubtedly and indisputably difficult to verify.

There is a very loose line between misrepresentation and moral hazard that can also occur within team production. The occurrence of moral hazard occurs in the case when a team member presents his abilities in an unreliable manner, and at the same time ex ante concludes a contract on the basis of which he should be rewarded accordingly. He says, for example, that he knows how to do the job that needs to be done within the team, that he wants to do it, etc., and ex ante concludes an employment contract. The ex post shows, however, some of the following: (a) that the deeper nature of the work is not known to him at all, but shows enthusiasm (b) that the deeper nature of the work is insufficiently known to him, but tries (c) to have a deeper nature of the work known but insufficiently desirable, (d) that the deeper nature of the business is known to him but undesirable. Most likely none of the answers offered are correct, but should be sought somewhere 'between the lines'. In this case, *nota bene*, if the consequences of moral hazard are so great and so significant, the 'accuracy' of the answer will most likely have to be sought through the courts, in civil proceedings. But here, too, it should be explicitly emphasized: moral hazard is indisputably and unequivocally observable, but it is quite difficult to verify, and verifiability will certainly depend, among other things, on the ability of the legal team.

On the basis of understanding the attributes of team production, it is possible to approach a deeper understanding of the nature and characteristics of the management team for which the well-known and generally accepted term management is used today. We have already been acquainted with the content of the management service and we have found that it covers at least planning, organizing and controlling, although the list of these activities is much wider and more comprehensive. The above content determinants, as shown in Figure 1.6. obviously, at least three dimensions should be added: (1) the dimension or line of work that we observe in terms of width, depth, and diversification; (2) the dimension or line of functional specialization such as procurement, production, sales, finance, research and development, etc. ; (3) the dimension or line of the market in which it operates and operates. In all this information space, to find a common denominator of the overall complexity of the managerial service, a single manager cannot act sovereignly and effectively, as it is usually assumed in the spirit of neoclassical and managerial theory of the company. of a larger or smaller number of members.

Each member of the management team is in charge of one segment of the information space which monitors and directs the corresponding segment of real and monetary flows. A larger or smaller number of information segments, of course, will require a larger or smaller number of members of the management team. but they still will not cover the need to perform a specific task, the task of unifying and coordinating

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partial segments of the information space. It is plausible, hence, that the management team represents a hierarchy designed at least on two levels. This is true for a firm of type K1 and a firm of type K2, but for a firm of type K3 (see Figure 1.1.) Or a corporation is characterized by a larger number of hierarchical levels. The specific number of hierarchical levels, however, is determined by each corporation individually, primarily depending on the specific production-technical, market, geographical, financial, institutional conditions and circumstances of the corporation exists and operates.

Problems of slackness, misrepresentation, and moral hazard, which arise within team production, also arise within the managerial team. In the case of team production, to illustrate with concrete examples the existence of these problems and was not particularly difficult, it was almost trivial and from the point of view of the corporation as a whole, as a rule, easily solvable. In the case of the management team, however, the situation regarding illustrating the problems of slackness, misrepresentation and moral hazard is much more difficult and dubious.

A member of the management team, for example, is not likely to 'pull out' to physiological needs, but will try to 'pack' slack into a more plausible reason such as the need for peace in his or her own cabinet so he can focus on a specific and complex problem. focusing can really be used to connect to the internet and watch other, preferred content. An example of misrepresentation of a member of the management team could be the case when he declares an important business trip to meet with an important business partner, and it is really a tourist trip. If we remember the case of Enron, the energy giant in the USA, and his bankruptcy, we will get a suitable picture of the consequences of moral hazard that a member of the management team, a coalition of some of its members or the entire management team can cause. A concise and extremely simplified illustration of the problems that arise within the management team, on the one hand, and that appear at the level of management as a whole, on the other, is only the basis of another, extremely important question: what is the specific difference in consequences between occur within team production and problems occur within the management team? Roughly speaking, there is a fundamental difference in the extent of the consequences that the problems of slackness, misrepresentation, and moral hazard have for the corporation as a whole. While the consequences of problems related to team production are relatively small and easy to solve, the consequences caused by problems related to the management team are significantly large and can go, as in the case of Enron, all the way to bankruptcy or euthanasia of the corporation. It is not surprising, therefore, that the work of the management team is subject to analysis, stimulation and monitoring.

CONCLUSION

Previous presentations have convincingly explained what profit is, how it is determined, and how it is purposefully modified and adapted to the needs of managerial decision-making. Not everyone writes about the role of profit in a market economy in the way it was done before. For some, making a profit is not an honorable activity and it is often called profiteering. People, but also companies, sometimes experience greed, greed,

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hypocrisy, breaking the law, etc., all with the intention of making as much profit as possible. But this is not typical in developed market economies primarily because competition and legislation will, sooner or later, eliminate such phenomena. So far, it is true that these phenomena have not been eliminated, but it is equally true that no adequate replacement for profit has been found as the driver of the entire economy. It is clear, from there, that profit has more positive than negative attributes, which, given the fact that there is no better driver of a market economy, suggests the conclusion that both its roles should be understood and used usefully, but also ethically used. In the enterprise, knowledge and methods of management economics should have the role of increasing efficiency and reducing unnecessary costs while identifying those strategic products and services that have perspective in the circumstances of the crisis. Finally, as a functional part of every management team in the company, it has the task of aligning redefined goals by making optimal decisions under the pressure of uncertainty of the scope and duration of the current crisis situation.

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**BRANDING OF PRIVATE LABEL PRODUCTS BY PRODUCT CATEGORY:
A MODEL SUGGESTION FOR FMCG MARKET**

**Ayse Sarimehmet¹
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Abstract

The private label products market is expanding day by day, and the decisions and applications made in this market have become important for retailers, national producers, and consumers. For retailers, private label products are being used as a differentiation tool in terms of offering more affordable prices and more options to their customers, while also providing high-profit returns. National producers, on the other hand, have been negatively affected by the fact the retailers allocate more shelf share for their own products and consumers find and prefer these products of high quality. Today, consumers are rational in their shopping behaviors by emphasizing price-quality performance as a major decision criterion. Thus, consumers may prefer private label products from retailers that they trust and perceive of high quality. Beyond offering only low prices, private label products are now able to compete with national brands with their quality and diversity. The increase in private label products in consumers' purchasing preferences has created a strong competitor for national brands. Despite its increasing importance, there is no clear and widely recognized model for branding private label products. Along with the similarity to the branding model of national brands, the branding of private label products differs at some points. There are basically two different ways to brand a private label product, using the retailer's own corporate name, or the second way, choosing a completely different name. In this study, the relationship between the brand value of the retailer, the real quality of the product, and the category of the product will be evaluated in terms of branding of private label products in fast moving consumer goods market (FMCG), and a branding model will be proposed to comprise the mentioned factors on the branding of private label products. By selecting one of the largest FMCG retail chain of Turkey, a measurement form was developed and applied as a survey (n=353). The results of the research revealed that the perceived brand equity of the retailer has an effect on the branding of private label products according to product quality in the FMCG sector. Another finding of the research is that there is also a relationship between the category of the product and the brand equity of the retailer. Further, a model is suggested by gathering the findings of the study in line with the brand literature.

Keywords: Branding, FMCG, private label brands.

JEL classification: M30; M13

INTRODUCTION

The market share of private label products and the diversity of the products in this category grows day by day, and in turn, the importance of private label for retailers, national manufacturers, and consumers increases accordingly (Nielsen, 2014). Private label products are becoming a point of differentiation, on the other hand, they ensure

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high-profit margin. The consumers of today behave rationally at their shopping, evaluating both the price and quality performances of a product. More consumers started to consider private label products in their buying decisions, thanks to this reason (Ailawadi et al., 2008).

Branding, in the most general sense, is the process to gain a brand identity to a given non labeled product (Keller and Aaker, 1992). Generally, the first and most important step of marketing is the branding of a product. Products will have a well-defined position in customers' mind depending upon their brands, thus the life cycle of the products are also shaped by their brands (Aaker and Keller, 1990). In the marketing history, there are too many examples of unsuccessful branding which are not understood and accepted by customers and revealed a low performance. In many cases, these brands disappeared totally or tried to be survived by rebranding with changed communication efforts (Haig, 2005).

The meaning of brands for consumers and the influence of it in terms of customers' behaviors and attitudes have gained a large interest from both scholars and practitioners, and in turn, the brand literature is a mature academic field (Gil-Saura et al, 2013; Pappu and Quester, 2006). But, still there is no specific process or a solid model for private label products about how they should be branded despite their importance increases. Branding of private label products is different to some extent other than the model of branding of national brands. There are two different ways of branding private label products basically. The first is using the retailer's own name as an umbrella brand, the second is choosing other unique names. Today, the branding of private label products is changing according to the type of product categories and targeted market segments. While national retail chains most often use their corporate name for branding, discount supermarket chains opt for using a different name for each of the product categories.

This research examines the relationship between perceived brand equity of the retailer, the exact quality of the product, and the product category in order to explore the branding of private label products. The data for the study were collected from a sample of consumers of one of the largest Turkish FMCG retailers. Understanding how private label products be branded is a critical issue for marketers in FMCG business where these products tend to grow continuously and reach a dimension to compete with national brands (McNeill and Wyeth, 2011).

1. LITERATURE REVIEW

1.1. Brands and Branding

A brand is the definite type and name of a product manufactured or designed by a company (Oxford, 2020). According to the American Marketing Association, a brand is a name, term, design, symbol, or other features defined by a seller in order to differentiate from the others (Marion, 2015). According to David Aaker, who has global reputation in terms of his expertise in brands and brand management, a brand is a promise given to the customers in terms of functional, emotional, and social dimensions instead of a single name and/or logo (Aaker, 2014).

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On the other hand, branding is defined as a process to form a brand, comprising all activities in order to make the products and/or services from the others and making them become noticed easily (Anselmsson and Bondesson, 2015). According to Aaker (1996), branding is a process to create an identity for the brand. The process of branding has three dimensions. The first step is the strategic analysis of the brand that includes the customer, the competition, and other internal and external factors. In the second step, brand identity is constituted and formed in compliance with the value propositions. The third step is the positioning of the brand. Here, by using communication tools the brand identity and value propositions are transmitted actively to the targeted market segment. Then, the relation between the primarily targeted position of the brand and customers' perceptions are evaluated, and the success of the process is determined (Aaker and Keller, 1990).

In the branding process, forming the brand identity is one of the most important stages of branding (Jones, 2005). Because this stage gives a strategic direction to a brand and several decisions are taken about how it should be perceived by customers. In this context, brand identity can be defined as perception in customers' minds that consists of promises and associations of the brand (Jara and Cliquet, 2012). Brand identity is the whole of associations created and desired to be protected as well. These associations also remark about what is the brand and what it represents to whom. Brand identity also links the value proposition of the company or products (including emotional, functional, and personal benefits offered) to its customers (Kotler and Keller, 2006).

Brand architecture is the management process of the design of a brand portfolio. Thus, each sub pieces ensure an advantage to the whole. In this context, brand architecture is a subject of trade branding. It is used for the design of the construction of brands thus this role tries to harmonize each different brand created by the same source (Dooley and Bowie, 2005). Aaker and Joachimsthaler (2000) have contributed significantly to the current perspective of brand architecture and suggested the tools of brand architecture, called the brand relationship spectrum. This tool has four strategies; the house of brands strategy, endorsed brands strategy, sub-brand strategy, and branded house strategy.

The house of brands strategy involves a portfolio of sub-brands that act independently from each other and from the umbrella brand. Unilever, Procter & Gamble, and Volkswagen Group are typical examples of companies that have established and managed their brand portfolios using the house of brands principles (Dooley and Bowie, 2005). The endorsement brand strategy differs from the house of brands strategy. Here, the umbrella brand and its sub-brands are perceptually linked, and the more general values such as credibility, reputation, and quality are provided by the umbrella brand. Novotel by Accor Group and Kit Kat by Nestlé are two examples of this strategy (Dooley and Bowie, 2005).

In contrast, the sub-brand strategy includes more relation between the master brand and its sub-brands. In the sub-brand strategy, both the umbrella brand and the sub-brands are strong drivers. Both of them influence consumers' purchase motivation. Microsoft and Microsoft Office, Gillette and Gillette Mach 3 can be examples of this strategy. Finally, a branded house strategy is featured by a single brand with a

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dominant driver role which is used to support other descriptive brands. Virgin, for example, has used its name for a whole range of brand extensions, including Virgin Radio, Virgin Active, and Virgin Cola (Dooley and Bowie, 2005).

Brands are categorized into three groups more generally: generic brands, manufacturer brands, and social brands. Generic brands have a strong identity but don't have intangible values. According to Kotler and Keller (2006), if a brand doesn't have an advantage against its competitors, then it is classified as commodities or generic products. Producer brands can be defined basically as a reference brand or the first brand comes to the mind to reflect the general values. On the other hand, a social brand is a brand concept formulated by having a social benefit (social, environmental, and/or benefit of humanity) (Aparecida Gouvêa et al., 2018). Other classification of brands can be made according to the fields of use as producers brands, commercial brands, and distribution brands (they called also as private label or retail brands).

1.2. Private Label and Store Brands

Brands that are formed by retailers, instead of producers or manufacturers are called private label or store brands. Private label business has developed especially in mature markets like Europe and North America. According to Nielsen (2014), customers prefer buying these products when they perceive little differences among the products in a specific category. The history of private label has roots in the early 1900s when retailers started to emphasize their own brands to customers (Taylor, 2017). But, in modern marketing, the private label phenomenon began in the 1980s. At that time private label products used to compete with only price. Today, the retail giants are able to serve special products like milk-free, gluten-free, and organic to meet customers' specific requirements, and thus the competition now has risen to quality and diversity as well (McNeill and Wyeth, 2011).

From the perspective of retailers, private label is an attractive business due to high-profit margin and product turnover. Retailers offer private label products that can satisfy their targeted customers in terms of quality and price. There are three main branding strategies for private label products: economic private label products, standard private label products, and premium private label products (Thanasuta and Chiaravutth, 2018). Private label products most often have lower prices in comparison to the standard national brands. But according to the quality level of the product or the brand positioning of the retailer, the level of the price may compete with the cheaper, standard, or premium national brands.

1.2. Perceived Brand Equity

Brand equity can be defined generally in two aspects. The first is the total economic value of the brand in terms of economic parameters, and the second is the perceived value of the brand in the customers' minds. Aaker's (1996) brand equity model consists of measures such as awareness, perceived quality, loyalty, and associations.

The core of a brand value is loyalty. If the company has a loyal customer base, then it will be hard for the rivals to attract and gain customers from that company. The best

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indicator of customer loyalty is the inelasticity of customers in terms of price changes. Perceived quality is another important dimension in Aaker's (1996) model in the way that there is a solid link between the customers' perceptions related to product quality and the brand itself.

2. METHODOLOGY AND DATA

The research model that covers the research variables and the relationships between them is shown in Figure 1. Regarding the brand value, Aaker's (1996) Perceived Brand Equity model was used. To test the model, one of Turkey's leading FMCG retailers was chosen and a survey was conducted to its customers. A total of 353 respondents were reached out of the surveying method which is applied to the retailer's customers by interviewing them individually after they visit the stores.

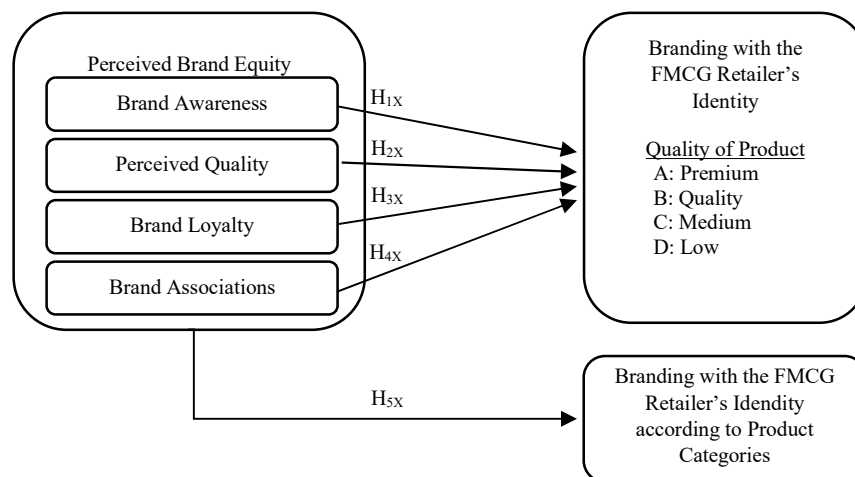


Figure 1. Research Model

In this direction, the hypotheses of the research are given below.

H_{1X} : Brand Awareness of the FMCG retailer has a positive effect on branding private label products of [Premium Quality (H_{1A}) / Quality (H_{1B}) / Medium Quality (H_{1C}) / Low Quality (H_{1D})].

H_{2X} : Perceived Quality of the FMCG retailer has a positive effect on branding private label products of [Premium Quality (H_{2A}) / Quality (H_{2B}) / Medium Quality (H_{2C}) / Low Quality (H_{2D})].

H_{3X} : Brand Loyalty of the FMCG retailer has a positive effect on branding private label products of [Premium Quality (H_{3A}) / Quality (H_{3B}) / Medium Quality (H_{3C}) / Low Quality (H_{3D})].

H_{4X} : Brand Associations of the FMCG retailer has a positive effect on branding private label products of [Premium Quality (H_{4A}) / Quality (H_{4B}) / Medium Quality (H_{4C}) / Low Quality (H_{4D})].

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H_{5X}: There is a positive and significant relation between Perceived Brand Equity of the FMCG retailer and branding private label products from [Vegetable&Fruit (H_{5A}), Meat&Fish (H_{5B}), Milk (H_{5C}), Breakfast (H_{5D}), Food (H_{5E}), Snacks (H_{5F}), Beverages (H_{5G}), Detergent (H_{5H}), Paper (H_{5I}), Cosmetics (H_{45J}), Health (H_{5K}), Baby (H_{5L}), Home Appliances (H_{5M}), Textile (H_{5N}), Electronics (H_{5O}), Pet (H_{5P}), Stationary (H_{5Q})] product categories.

For the hypothesis group of H_{5X}, Perceived Brand Equity of FMCG retailer “M” is considered as a first-degree variable which consists of the aforementioned dimensions as a whole. The product categories were determined by evaluating the websites of FMCG retailer “M” and as well as the other well-known Turkish retailers. The demographic profile of the sample is given in Table 1.

Table 1.Demographic Profile of the Sample

	Criteria	f	%
Age	18-25	31	8.8
	26-35	200	56.7
	36-45	96	27.2
	46-60	23	6.5
	60+	3	0.8
Gender	Male	185	52.4
	Female	168	47.6
Education	Primary	14	4.0
	High School	89	25.2
	Undergraduate	100	28.3
	Bachelors	134	38.0
	Graduate	16	4.5

Brand Equity was measured with the scale developed by Aaker (1996). To measure the product quality, scales from Asiedu (2008) were taken. The product categories were defined by examining the website of the FMCG retailer. Table 2 represents the items used to define the level of quality of the products. “M” stands for the chosen well-known and reputable Turkish FMCG retailer. All items were measured by 5-point Likert scale.

Table 2.Branding by Level of Product Quality

Premium Quality	Think of a food product. Beyond your expectations, it is a premium quality, high-priced product that is produced hygienically in accordance with natural production methods, very healthy, environmentally friendly (recyclable), belongs to a special place, is fresh, has high nutritional value, meets your expectations with its taste and appearance. the product is to be branded and this high quality product is to be named “M”. How would you approach this branding decision?
Quality	Think of a food product. It is a product that meets your expectations, is fresh, delicious, looks good, is produced in a healthy, hygienic environment, suitably packaged, has good nutritional value, but does not offer any extra features beyond these, quality and above the average price, and this quality product is named “M”. How would you approach this branding decision?

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Medium Quality	Think of a food product. It is a product with medium taste, appearance, nutritional value, packaging and production conditions, medium quality and at an average price, and this medium quality product is called “M”. How would you approach this branding decision?
Low Quality	Think of a food product. It is a product that has not been produced under good production conditions, with its taste, appearance, nutritional value, and good production conditions, and this low quality product is called “M”. How would you approach this branding decision?

3. ANALYSIS AND RESULTS

The data were analyzed by SPSS v22 software. Before moving to test the hypothesis, Exploratory Factor Analysis and Reliability analysis were conducted. Out of the analysis the factors were obtained and they were found reliable. The results are depicted in Table 3 and Table 4.

Table 3. Exploratory Factor Analysis

	F1	F2	F3	F4
“M” is the first brand that comes to my mind in terms of FMCG.	0.583			
“M” is a brand that I have an idea about.	0.607			
“M” is a brand I am familiar with.	0.809			
“M” is a market that sells quality products.		0.766		
“M” is better than other markets in terms of quality.		0.692		
“M” is the leader in the market category.		0.599		
Even “M” stores sell more expensive, I still do my shopping from there.			0.686	
“M” stores always meet my shopping expectations.			0.572	
I only shop at “M” markets.			0.676	
I recommend “M” markets to those around me.			0.699	
After that, I always prefer “M” markets.			0.699	
The “M” brand has a personality.				0.553
The “M” brand has a rich history.				0.604
“M” is a brand I can trust.				0.818
“M” stores are different from other stores.				0.614

F1: Brand Awareness, F2: Perceived Quality, F3: Brand Loyalty, F4: Brand Associations
K-M-O Adequacy: 0.947; Bartlett’s Sphericity: $\chi^2 = 2555.534$; $p < .05$

Table 4. Reliability Analysis

Variables	Cronbach’s α
Brand Awareness	0.719
Perceived Quality	0.761
Brand Loyalty	0.881
Brand Associations	0.762

Correlations between the research variables are depicted in Table 5.

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Table 5. Correlation Analysis

	Premium	Quality	Medium	Low
Brand Awareness	0.627**	0.504**	0.002	0.002
Perceived Quality	0.657**	0.500**	0.112*	-0.020
Brand Loyalty	0.787**	0.582**	0.080*	-0.085
Brand Associations	0.630**	0.512**	0.124**	-0.003
Perceived Brand Equity	0.791**	0.612**	0.094*	-0.036

*p<0.05,**p<0.01

The hypotheses which examine the effect of perceived brand equity on branding private label products according to their level of quality were tested by performing linear multiple regression analyses. Table 6 indicates the results of the hypotheses that cover the effects of dimensions of brand equity on branding premium quality products, that is “ H_{XA} : [Brand Awareness (H_{1A}) / Perceived Quality (H_{2A}) / Brand Loyalty (H_{3A}) / Brand Associations (H_{4A})] of the FMCG retailer has a positive effect on branding private label products of Premium Quality”. The result of the analysis revealed that all dimensions of perceived brand equity of FMCG retailer “M” have positive and significant effects on branding a private label product of premium quality ($R^2=0.654$). Thus, H_{1A} , H_{2A} , H_{3A} , and H_{4A} were supported. The dimension that has the most effect is found to be Brand Loyalty ($\beta=0.543$, $p<0.01$).

Table 6. Branding Premium Quality Products – Regression Analysis

Independent Variables	<i>B</i>	<i>p</i>
Brand Awareness	0.106	0.000
Perceived Quality	0.142	0.026
Brand Loyalty	0.543	0.003
Brand Associations	0.107	0.000
R^2	0.654	0.000
F	164.713	

Table 7 represents the results of the regression analysis for the hypotheses that cover the effects of dimensions of brand equity on branding quality products, that is “ H_{XB} : [Brand Awareness (H_{1B}) / Perceived Quality (H_{2B}) / Brand Loyalty (H_{3B}) / Brand Associations (H_{4B})] of the FMCG retailer has a positive effect on branding private label products of Quality”. The result of the analysis revealed that on branding a private label product of quality only Brand Associations of FMCG retailer “M” has a positive effect ($\beta=0.147$, $p<0.01$). Thus, H_{4B} is supported but H_{1B} , H_{2B} , and H_{3B} were rejected ($R^2=0.380$).

Table 7. Branding Quality Products – Regression Analysis

Independent Variables	<i>B</i>	<i>P</i>
Brand Awareness	0.124	0.075
Perceived Quality	0.105	0.051
Brand Loyalty	0.326	0.098

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Brand Associations	0.147	0.000
R ²	0.380	0.000
F	53.282	0.000

Table 8 represents the results of the regression analysis for testing hypotheses that cover the effects of dimensions of brand equity on branding medium quality products, that is “H_{XC}: [Brand Awareness (H_{1C}) / Perceived Quality (H_{2C}) / Brand Loyalty (H_{3C}) / Brand Associations (H_{4C})] of the FMCG retailer has a positive effect on branding private label products with Medium Quality”. The result of the analysis revealed that on branding a private label product of medium quality only Brand Associations has a positive and significant effect ($\beta=0.182$, $p<0.05$). Thus, H_{4C} is supported but H_{1C}, H_{2C}, and H_{3C} were rejected ($R^2=0.037$).

Table 8. Branding Medium Quality Products – Regression Analysis

Independent Variables	<i>B</i>	<i>p</i>
Brand Awareness	-0.201	0.011
Perceived Quality	0.141	0.075
Brand Loyalty	-0.010	0.908
Brand Associations	0.182	0.021
R ²	0.037	0.000
F	3.334	0.000

Table 9 represents the results for the hypotheses that cover the effects of dimensions of brand equity on branding low quality products, that is “H_{XD}: [Brand Awareness (H_{1D}) / Perceived Quality (H_{2D}) / Brand Loyalty (H_{3D}) / Brand Associations (H_{4D})] of the FMCG retailer has an effect on branding private label products with Low Quality”. The result of the analysis revealed that none of the dimensions of perceived brand equity of FMCG retailer “M” have positive effects on branding a private label product of low quality ($R^2=0.017$). Thus, H_{1D}, H_{2D}, H_{3D}, and H_{4D} were rejected.

Table 9. Branding Low Quality Products – Regression Analysis

Independent Variables	<i>B</i>	<i>P</i>
Brand Awareness	0.064	0.420
Perceived Quality	0.045	0.570
Brand Loyalty	-0.207	0.019
Brand Associations	0.069	0.386
R ²	0.017	0.000
F	1.466	0.000

To test the group of hypotheses “H_{5X}” that examine the relations between the perceived brand equity of FMCG retailer “M” with customers acceptance of branding private label products according to their product categories, correlation analysis was conducted. Table 10 depicts the results of the correlation analysis.

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Table 10. Perceived Brand Equity & Product Category – Correlation Analysis

Perceived Brand Equity	Vegetable&Fruit	Meat&Fish	Milk	Breakfast
	0.284**	0.158**	0.135*	0.087
	Food	Snacks	Beverages	Detergent
	0.120*	0.228**	0.210**	0.151**
	Paper	Cosmetics	Health	Baby
	0.132*	0.174**	0.147**	0.195**
	Home Appliances	Textile	Electronics	Pet
	0.203**	0.113*	0.089	0.066

**p<0.01; *p<0.05

According to the results of the correlation analysis, the relations between the perceived brand equity of FMCG retailer “M” and product categories vary in terms of both effect and significance. It’s understood that the customers of FMCG retailer “M” most likely related the retailer brand put on product categories like vegetable and fruit ($r=0.284$; $p<0.01$), snacks ($r=0.228$; $p<0.01$), and beverages ($r=0.210$; $p<0.01$). But, no significant correlation was found between product groups like pet food or electronics and the retailer brand.

Table 10. Perceived Brand Equity & Product Category – Correlation Analysis

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	0.284**	0.158**	0.135*	0.087
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	0.132*	0.174**	0.147**	0.195**
	Home Appliances	Textile	Electronics	Pet
	0.203**	0.113*	0.089	0.066

CONCLUSION

The market share of private label products is increasing day by day. Accordingly, national FMCG retailers allocate more shelf share to private label products. However, it has been observed that retailers may follow different approaches in branding private label products. Despite this, there is a lack of clear models and process maps that should be followed by retail brands. This research addresses two major issues: (1) the

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effects of perceived brand equity of the FMCG retailers on their branding decisions regarding private label products according to product quality, (2) the relationship between product categories and branding decisions of private label products. An empirical study was conducted by collecting data from a sample of 353 participants.

As a result of the study, a significant effect was observed between the FMCG retailers' perceived brand equity and the branding decision of private label products based on product quality. This result can be interpreted as that, customers who participated in the research view the given FMCG retailers' brand more suitable for branding premium quality products. Therefore, customers' perceptions regarding the brand of the retailer come to the fore in the branding of private label products. Retail brands with low brand perception shouldn't name high-quality products, or conversely, retailers with high brand perception should avoid putting their names onto low-quality products. Retailers should create the marketing mix, keeping in mind the principles of an integrated marketing approach. The strategies implemented by FMCG retailers for private label products will also be in line with the companies' general strategies.

Another finding of the study is that the acceptance rate of the consumers regarding the branding of private label products with the retailer name changes according to the product categories. The result of the research has shown that there is a relationship between product categories and the branding of private label products. Thus, FMCG retailers must determine how their customers will react to which product groups by evaluating their private label product portfolio.

The research has shown that firstly, consumer research is required to reveal the relationship between the actual quality of the product and the brand equity of the retailer. The actual quality of the product, FMCGretailer's brand equity, and product categories should be analyzed, and the decision to expand the product in the future should be taken into account when making a branding decision. On the other hand, as an external analysis; It should be analyzed whether the category in which the product is located is suitable for private label products. Consumer research should be consulted to determine suitability. However, the expectations of consumers from private label products should also be taken into consideration. Again, competitors' products and prices should be analyzed. Issues like "do competitors have products in the same category, how many types, and at what price are they offered" need to be considered.

As a result of the research, considering the branding of private label products the authors suggest the model below.

1. Internal Analyses: FMCG retailer brand equity, actual product quality, product categories.
2. External Analyses: Product category private label perceptions, customer expectations, competitor analysis
3. Branding Decision: The house of brands strategy, endorsed brands strategy, sub-brand strategy, and branded house strategy

According to the model, the branding strategy of private label products should rely on both internal and external analyses. These analyses should be made mostly by making use of consumer research. In terms of internal analyses, first, the perceived brand equity of the retailer should be determined. At the same time, the relationship between brand perception and product categories should be investigated, and category

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expansion cases should be considered. Throughout the external analysis, the categories in which the consumers want to see more private label products and the expectations of the consumers from the private label products should be investigated and analyzed. Before the branding decision, both national and other private label competitors should be taken into account. Finally, the branding decision could be realized by choosing the brand name by considering all factors. Considering the expansion opportunities of the brand in the branding decision, branding can be done by choosing one of the strategies from the house of brands strategy, endorsed brands strategy, sub-brand strategy, and branded house strategy.

The most important constraint of the research is that the application was made in only one province and across a single retail brand. Since convenience sampling was preferred, generalizing the research results should be taken with care. It is recommended to conduct studies addressing different retailers and different sectors in wider geography in future research. Another suggestion is to test the brand equity and private label product quality of different retailers comparatively.

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**WHO SWITCHED YOU? DIFFERENCES BETWEEN THE MAIN
DEMOGRAPHIC FEATURES OF LOST CUSTOMERS AND THEIR
SWITCHING BACK INTENTIONS**

Mustafa Sehirli¹

Abstract

The main goal of this research is to consider one of the most significant facts of business life; the customer switching behavior in the demographical domain. Also, to understand the role of human differentiations on this switching behavior and the customers' intention of returning to their old supplier. By this way; the customers who have been in the behavior of switching will be able to categorized according to their demographic features. An area that the rate of switching behaviour is quite high, the automotive industry in Turkey, has the market share of more than 20 percent. Among the best seller brands in Turkey considering six different demographic features (age, education level, level of income, the region and gender), between switching behavior and the customer's intention of returning to the previous supplier, there have been found meaningful differentiations. In a research that was done with a considerably high amount of people as 1092 customers who has been in a switching behavior; the highest differentiation has been seen in the level of income variable. In addition to this, age and education level are also effective variables. Elderly has shown more dependence and loyalty compared to the youngsters in this variable and their possibility of returning to their previous supplier is higher. On the other hand, by the increasing level of education; satisfaction and perception of service quality of people had also shown an increase. Even though the differentiations depending on the region and brand has not been so high; two regions have shown significant differences. Women are less satisfied compared to men. Also, as one of the determinants of the switching behavior; the results of search for variability, attitude towards switching and subjective norms according to the demographical domain has brought out interesting outcomes. The results of this research will be a guideline to the company managers who will be creating marketing activities. Furthermore, this research is an example for an area that has been increasingly more important in modern-day business world; human factors and humane differentiations.

Keywords: Automotive industry, customer switching behavior, lost customers.

JEL classification: Z00

INTRODUCTION

First of all, it should be mentioned that this article was derived from the writer's doctoral thesis called "Determinants of Customers Switching Their Service Company in Automotive Sector and Their Repurchase Intention, a Sample of Multi-branded Company" which was approved on 31.03.2016 at Maltepe University.

In the modern-day marketing, it is incredibly important to keep the current customers within the company and having their loyalty. Our research's main proposition is the customers' disloyalty. It is to understand the demographic features of their switching and from that, to come up with solutions to prevent this behavior. The

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method is to research the connections between the demographic features and the reason for switching of the customers whom have shown disloyalty and then switching through questionnaires. Thus, ideas about exclusive service and product development to prevent customer lost will be improved through demographic features in marketing .

Almost all of researches have shown the profit raising and cost decreasing effects of customer loyalty (Mittal and Lassar 1998, 177; Reicheld and Sasser, 1990, 105; Peppers and Rogers, 1993, 25). The more customers repeat their action the more successful the company gets in the long term. Customers start to have a continuous switching among the brands with the increasing competition. In fact, customers are able to leave a brand even though they are satisfied of the supplier (Oliver, 1999, 33). According to Sambandan and Lord (1995, 57) some customers' switching behavior might even effect the destiny of the companies. However, some customers will continue being disloyal and start thinking they have no reason to be loyal (Mittal and Lassar 1998, 177). According to Zeithaml, Berry and Parasuraman (1996, 31) avoiding the loss of customers is a more profitable way than to decrease the costs or to make new customers. Reicheld and Sasser (1990, 105) says that companies that accomplishes this, will double their growth rate.

While holding on to current customers is very significant, analyzing and trying to understand the opposite tendency, the switching behavior, will be beneficial for researchers and managements. While the market share, financial turnover and profitability of the company are affected negatively by the switching behavior of the customers, costs also increase. Furthermore, because it is possible for customers who left the company to talk badly behind its back, there is also an indirect cost for the company and this might avoid the company to gain new customers. That's why it is necessary to make a scientific research about this topic to decrease these negative effects. (Keaveney, 1995, 71).

Also, since this is a topic hasn't been studied a lot, there is a variety of subtopics to be researched. On the other hand, there are a few deficiencies in the researches that had been done. For instance; most of the researches done about switching behavior only focused on the product qualities or topics like promotion in the marketing area. (Carpenter and Lehmann, 1985, 318). Most of the researches had been done about the intentions and this caused another problem since intentions might not reflect the real behavior (Keaveney 1995, 71 ; Roos 1999, 68). Also it is important to point out that, the numbers of the samples have not been high and the techniques used has shown differentiations. At this point, a research that had been done in the automotive after-sales services sector, an industry that the customer service stands out as much as the product qualities, based on behaviors not intentions makes this research valuable. Especially switching behavior data not based on customer's will and arising from necessity (death, relocation etc.) being excluded from evaluation and having a rather high sampling rate (1092) makes this research more valuable.

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1. LITERATURE

1.1. SWITCHING BEHAVIOR:

McCarthy, Kannan, Chandrasekharan and Wright (1992, 1371) state that research into brand loyalty and switching behavior has progressed in two main areas: studies over the relation of product variety and switching behavior (Carpenter and Lehman, 1985, 318) and the studies done about customer types (Colombo and Morrison, 1989, 89). Thus, meanwhile some studies about the switching behavior investigate the roots of this behavior others are concerned about the classification of the customers. As mentioned above, in this study the differentiations between the switching behavior and the demographic characteristics of the customers had been investigated. Also, it would be beneficial to have some information about the roots of the switching behavior.

Switching behavior also can be defined as an end of a relation, an exit or a dissociation. (Michalski, 2004, 977). The biggest factor that triggers the switching behavior is the competitors. Competitors play all the possible games to take a customer from another company (Mittal ve Lasar 1998, 177).

Even though there are a lot of well-known variables changing frequently (service, satisfaction, price etc.) roots of the switching behavior goes beyond a wide range, these variables have a variety of interrelated definitions and dissections.

In one of the first studies done about this topic, Hirschman (1970) points out that while a generally unsatisfied customer is more likely to leave the brand there are six main factors as a reason of the switching behavior. These factors can be listed as; quality, attractiveness and availability of the alternatives, the probable success of the complaints' resolve, switching costs and customer loyalty.

In his analysis called SPAT (Switching Path Analysis Technique), Roos (1999, 68) managed to categorize the reasons of the switching behavior. According to Roos (1999, 70), there are three main reasons of the switching behavior; pushing determinants, pulling determinants and swayer (factors either strengthens or weakens the decision of ending the relation). The most significant pushing factor is the customer communication mistakes, the second is the pricing and the third is basic service mistakes. Similarly, Keaveney (2005, 374) also managed to categorize the reasons of switching behavior.

Bansal, Taylor and James (2005, 102), also similar to the classification of Roos (1999, 68), creating a similarity between the switching behavior of the customers and migration behavior of the communities, arranged 3 different categories of switching variables. Since this research is the most wide ranged, its components have been used in this article. However, the variables have been created with making similarities with other literature studies and adapting those according to the occurred behaviors as; service quality, satisfaction, loyalty, prices, variability, subjective norms, switching costs, search for variability and attractiveness of the alternatives. Like most researchers, Bansal, Taylor and James (2005,96) also have considered the switching intentions of the customers. However, since this research has been done over switching behavior and not on intentions, as an additional variable to the research the intention of returning has been added. According to Fleming (2015) switching behavior happens under these four categories: employee performance, necessities like death or moving, change in the

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customer needs and change of customer habits.

1.2. SOME RESEARCHES ABOUT DEMOGRAPHICAL QUALITIES:

According to Mittal and Lassar (1998, 177) it is especially harder to take into consideration the behavior of customers' switching behavior in the service industry because this behavior substantially alters depending on the mood of the customers and sellers. The effects that Ross (1999,70) calls as "swayers" are one of the most important causes of customer switching behavior. For instance, a customer might change her mind of going to a grocery store because of the cold behavior of a cashier. On the other hand, Ross (1999, 80) points out that older customers complain more than younger customers. Also, the author separates the customers into two groups saying customers who have lower loyalty shows their emotions, gives stronger reactions and complains more.

According to McAlister and Pessemier (1982, 311) the customers who have high motivation for discovering different brands and searching for new varieties to make their passions real, have a higher possibility of switching between brands.

Keavaney and Parthasarathy (2001) emphasize two different types of people: the "loyal" individual who never want to change their supplier and the "movers" whom change their supplier very often. Giudicati, Riccaboni and Romiti (2013, 409) have found that the customers who are more social than others have been in a switching behavior less.

Even though the number of researches in this area is limited, as can be seen from the researches that had been done, the switching behavior varies depending on the customer characteristics. In this research, demographical qualities had been chosen as customer characteristics. These characteristics can be listed as; age, education Level, income level, the area that customer lives and gender.

The variables of the switching behavior can be listed as; service quality, satisfaction, commitment, perception of price, the attitude towards switching, subjective norms, switching costs, variety seeking, attractiveness of the alternatives and switching back intention. Making short explanations about these variables would be beneficial to understand this research and creating its hypotheses.

1.3. SERVICE QUALITY

According to Parasuraman, Zeithalm and Berry (1985, 41), quality is the comparison of the customers' expectations and their perception of the occurred performance. As a result, these hypotheses can be formed based on the differences between the six demographic qualities of this research and the service quality:

H1: There is a significant difference between the age of the customer who leaves the supplier and their perception of the service quality.

H2: There is a significant difference between the education level of the customer who leaves the supplier and their perception of the service quality.

H3: There is a significant difference between the income level of the customer who leaves the supplier and their perception of the service quality.

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H4: There is a significant difference between the living area of the customer who leaves the supplier and their perception of the service quality.

H5: There is a significant difference between the gender of the customer who leaves the supplier and their perception of the service quality.

1.4. SATISFACTION

Satisfaction is one of the most researched and mentioned topics in the area of switching behavior. Oliver (1999, 33) describes satisfaction as the pleasure or the discomfort that the customers get from the supplier.

H6: There is a significant difference between the age of the customer who leaves the supplier and their level of satisfaction.

H7: There is a significant difference between the education level of the customer who leaves the supplier and their level of satisfaction.

H8: There is a significant difference between the income level of the customer who leaves the supplier and their level of satisfaction.

H9: There is a significant difference between the living area of the customer who leaves the supplier and their level of satisfaction.

H10: There is a significant difference between the gender of the customer who leaves the supplier and their level of satisfaction.

1.5. COMMITMENT

According to Morgan and Hunt (1994, 20), to maintain the relation with the customers, maximum effort is required. However, according to Athanassopoulos (2000, 192) the first researches that had been done about customer commitment pointed out the factors based on the customers' demographic qualities.

H11: There is a significant difference between the age of the customer who leaves the supplier and their level of commitment.

H12: There is a significant difference between the education level of the customer who leaves the supplier and their level of commitment.

H13: There is a significant difference between the income level of the customer who leaves the supplier and their level of commitment.

H14: There is a significant difference between the living area of the customer who leaves the supplier and their level of commitment.

H15: There is a significant difference between the gender of the customer who leaves the supplier and their level of commitment.

1.6. PERCEPTION OF PRICE

As you can see clearly by the title, the perception of price is customers' idea of the price of a product or a service. That is to say that they either think the price that they pay is low or high, cheap or expensive. Even though lots of theories have been developed about this topic, the researches done on this field are less formal than the ones done on other methodological fields (Weyl 2019, 329). On the other hand, according to Zeithaml (1988, 2) pricing is also a perceptual term like the service quality.

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H16: There is a significant difference between the age of the customer who leaves the supplier and their perception of price.

H17: There is a significant difference between the education level of the customer who leaves the supplier and their perception of price.

H18: There is a significant difference between the income level of the customer who leaves the supplier and their perception of price.

H19: There is a significant difference between the living area of the customer who leaves the supplier and their perception of price.

H20: There is a significant difference between the gender of the customer who leaves the supplier and their perception of price.

1.7. THE ATTITUDE TOWARDS SWITCHING

According to Roos (1999, 68) customers who show a switching behavior might be in that behavior in order to remove their need for change. This variable has more psychological and personal reasons behind it. What this means is that, while some people are more focused on innovation and change some are more closed up. This characteristic is totally personal.

H21: There is a significant difference between the age of the customer who leaves the supplier and their attitude towards switching.

H22: There is a significant difference between the education level of the customer who leaves the supplier and their attitude towards switching.

H23: There is a significant difference between the income level of the customer who leaves the supplier and their attitude towards switching.

H24: There is a significant difference between the living area of the customer who leaves the supplier and their attitude towards switching.

H25: There is a significant difference between the gender of the customer who leaves the supplier and their attitude towards switching.

1.8. SUBJECTIVE NORMS

Subjective norms can be defined as the variables that show the effect of the customers' ideas that are not taken into consideration on other customers. According to the results of the Bansal and Taylor's (1999, 210) researches, subjective norms affect the customers attitude. The customers' intention to switch might be directly affected by their personal traits.

H26: There is a significant difference between the age of the customer who leaves the supplier and the subjective norms.

H27: There is a significant difference between the education level of the customer who leaves the supplier and the subjective norms.

H28: There is a significant difference between the income level of the customer who leaves the supplier and the subjective norms.

H29: There is a significant difference between the living area of the customer who leaves the supplier and the subjective norms.

H30: There is a significant difference between the gender of the customer who

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leaves the supplier and the subjective norms.

1.9. SWITCHING COSTS

According to Brush, Dangol and O'brien (2012, 1499) switching costs are defined as time, effort and research cost that the customer spends in order to find a product/service of their needs. A customer having difficulties while leaving a brand might make this change difficult.

H31: There is a significant difference between the age of the customer who leaves the supplier and the switching costs.

H32: There is a significant difference between the education level of the customer who leaves the supplier and the switching costs.

H33: There is a significant difference between the income level of the customer who leaves the supplier and the switching costs.

H34: There is a significant difference between the living area of the customer who leaves the supplier and the switching costs.

H35: There is a significant difference between the gender of the customer who leaves the supplier and the switching costs.

1.10. VARIETY SEEKING

Hemetsberger, Kittinger-Rosanelli, and Freidmann (2009, 430) define variety seeking as customers' behavior of getting bored from one supplier and switching to one another. This variable is a personal feature and can differ from person to person like the attitude towards change. So while some people are searching for variety, some don't have a need like this.

H36: There is a significant difference between the age of the customer who leaves the supplier and their variety seeking.

H37: There is a significant difference between the education level of the customer who leaves the supplier and their variety seeking.

H38: There is a significant difference between the income level of the customer who leaves the supplier and their variety seeking.

H39: There is a significant difference between the living area of the customer who leaves the supplier and their variety seeking.

H40: There is a significant difference between the gender of the customer who leaves the supplier and their variety seeking.

1.11. ATTRACTIVENESS OF THE ALTERNATIVES

When a new firm enters the market, loyalty of the customers might switch (Kim and Son, 2009, 49). Thus, the more attractive the alternatives are the loyalty of the customers decrease in the same level (Chen and Wang, 2009, 1105). According to Calvo-Porrall and Levy-Mangin (2015, 532), the attractiveness of the alternatives affect the loyalty of the customers directly.

H41: There is a significant difference between the age of the customer who leaves

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the supplier and the attractiveness of the alternatives.

H42: There is a significant difference between the education level of the customer who leaves the supplier and the attractiveness of the alternatives.

H43: There is a significant difference between the income level of the customer who leaves the supplier and the attractiveness of the alternatives.

H44: There is a significant difference between the living area of the customer who leaves the supplier and the attractiveness of the alternatives.

H45: There is a significant difference between the gender of the customer who leaves the supplier and the attractiveness of the alternatives.

1.12. SWITCHING BACK INTENTION

This variable states whether a customer who has left a brand is thinking of returning back or not. According to Garbarino and Johnson (1999, 70) there is an interaction between a very personal qualification as the extent of the relationship and buying from the old supplier again.

H46: There is a significant difference between the age of the customer who leaves the supplier and their intention of returning to the old supplier.

H47: There is a significant difference between the education level of the customer who leaves the supplier and their intention of returning to the old supplier.

H48: There is a significant difference between the income level of the customer who leaves the supplier and their intention of returning to the old supplier.

H49: There is a significant difference between the living area of the customer who leaves the supplier and their intention of returning to the old supplier.

H50: There is a significant difference between the gender of the customer who leaves the supplier and their intention of returning to the old supplier.

2. METHODOLOGY

The major contributors of this research are the 1.2 million customers of a company in Turkey. This company is the Turkey distributor of a world group brands (4 different brands). These brands will not be shared because of brand privacy, instead they will be called as A, B, C and D. Firstly, the magnitude of the sample had been specified. According to the highest population, for 95% trust gap with the ± 0.03 sampling error the lowest sample number is 1067 (Yazıcıoğlu and Erdoğan, 2004). In this direction, the 1092 customers are in the %trust gap and has a ± 0.03 error margin. In the sample only the customers who had help from the authorized service distributors (dealer) and then left this distributor for another unauthorized distributor are included. (The customers who has been calling an unauthorized service distributor for 18 months and has reported that had been included). For this purpose, the advanced database of the firm had been used. So while picking a sample, the selection was done by listing them by date, all the customers were searched from most recent to least. Thus, the data had been made goal oriented and in a fashion that is beneficial to measure the required information.

The calculations had been made with a 13 person under a performance system

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which is a digital out calling program and has taken 1 month to complete. All the voice recordings had been recorded digitally. The scales below had been used in the survey. During this process, since this research is based on occurred behaviors rather than intentions, the scale form regarded that all the questions have a negative phrase in it. Thus, similar questions had been measured according to the Likert 5 scale. The survey that includes all of these scales is included in the Appendix 1.

In the research, the scales that Bansal et al. (2005) used had been put into use by decreasing the number of variables. (Some of the interrelated variables had been ruled down to only one. For instance; the trust and commitment variables had been gathered up in satisfaction variable). The questions first had translated to Turkish, converted to past tense and had been reformed according to 1 to 5 Likert scale. The scales of the research are these; Service Quality: Taler and Baker (1994), Parasuraman et al. (1985, 41), Satisfaction: Oliver and Swan (1989, 21), Patterson and Spereng (1997, 414), Larzelere and Huston (1980, 595), Devotion (“Commitment” in our article): Meyer and Allen (1991, 538), Perception of Price: Bansal, et al. (2005), Attitude Towards Switching: Bansal and Taylor (1999), Subjective Norms: Taylor and Todd (1995, 144), Switching Costs: Colgate and Lang (2001, 332), Search for Vairety: Trijp, Hoyer and Inman (1996, 281) and Easts (1993), Attractiveness of the Alternatives: Ping (1993, 320), Intention of Coming Back Scale: Oliver and Swan (1989, 21).

In total, inside of the 2134 completed surveys; the customers who left 7 or more questions blank had been eliminated from the evaluation and the final survey number has become 1092. The optimal interview duration had been 20 minutes 9 seconds. It had been hard to reach the number 1092 and taking information from a customer whom already left the previous supplier had not been easy.

After the completion of surveys, with exploratory and confirmatory factor analysis; and reliability analysis; the validity and reliability of the scales had been confirmed: First of all, with the IBM SPSS 17 program the exploratory factor analysis had been made. According to Büyüköztürk (2016) the KMO value should be higher than 0.60 and the Barlett test should be significant.

Table 1. KMO and Barlett's Test

KMO and Bartlett's Test		
	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,935
Bartlett's Test of Sphericity	Approx. Chi-Square	29789,990
	df	1176
	Sig.	,000

In this survey, KMO value is 0.93 and Sig. (p) value is lower than 0.001. Thus, these data are convenient for factor analysis. In the factor analysis 10 components had been found to have Eigen values over 1.00 and these components explain %69.54 of the total variance.

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Table 2. Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	11,818	24,117	24,17
2	4,407	8,994	33,112
3	3,546	7,237	40,349
4	2,57	5,245	45,594
5	2,405	4,909	50,503
6	2,306	4,706	55,21
7	2,16	4,408	59,618
8	1,913	3,903	63,521
9	1,812	3,699	67,219
10	1,138	2,323	69,543

Extraction Method: Principal Component Analysis

After the exploratory factor analysis that has 10 factors had been revealed, with the Partial Least Squares (PLS) method, the confirmatory factor analysis had been made. For this purpose, Smart PLS 3 program had been used. (Ringle, Wende and Becker, 2015). Since the scales are in a reflective fashion, models had been created accordingly. (Becker, Klein ve Wetzels, 2012, 359; Hair, Hult, Ringle ve Sarstedt, 2014; Hair, Ringle ve Sarstedt, 2011, 139). By PLS putting algorithm into work, factor loadings had been controlled. According to Hair et al (2014), the factor loading over 0.60 is required. Because of not being in accordance with this condition, 4 questions inside the “Service Quality” scale and 1 question inside “Search for Variey” scale had been removed. After a revised analysis, the results below in the Table 3 had been created.

Table 3. Factor Loads Table

	COM	ALT	VAR. SEEK	PRICE	SWI. COST	SAT	SER QOUL	SUB NORM	REP. INT.	AT. SWITC.	
COMMITMENT	I did not have an emotional bond with that service provider.	0,76	0,23	0,2	0,20	0,25	0,37	0,29	0,16	0,15	0,20
	I could not establish an intimate bond with that service provider.	0,84	0,38	0,12	0,15	0,19	0,60	0,47	0,22	0,23	0,29
	I did not feel strongly connected with the service provider.	0,90	0,36	0,15	0,22	0,22	0,56	0,42	0,26	0,26	0,31
	The authorized service provider did not mean	0,81	0,32	0,15	0,21	0,25	0,44	0,31	0,22	0,24	0,31

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	something special for me, personally.										
	When I think about all of them, other service providers were more decent and fair than the one I got service from.	0,31	0,73	0,27	0,18	0,27	0,42	0,34	0,32	0,33	0,38
ALTERNATIVE ATTRACTIVENESS	When I think broadly, competitor service providers were much more beneficial for me.	0,30	0,79	0,35	0,28	0,42	0,27	0,25	0,39	0,29	0,47
	I knew that I could have got more satisfied with the services of the competitors.	0,24	0,74	0,20	0,14	0,26	0,27	0,24	0,31	0,28	0,41
	Generally, my satisfaction with the other service providers was much more than with the one I got service from.	0,38	0,85	0,32	0,17	0,39	0,41	0,35	0,35	0,34	0,48
	Generally, competitors did a better job comparing to that service provider.	0,32	0,82	0,23	0,13	0,30	0,45	0,38	0,33	0,35	0,44
	If got satisfied with a service, I do not usually intend to switch it.	0,20	0,34	0,76	0,17	0,35	0,10	0,10	0,20	0,12	0,26
VARIETY SEEKING	I am not really disposed to switch the service provider I get service from.	0,14	0,31	0,76	0,18	0,34	0,08	0,09	0,20	0,12	0,23
	In the past, I did not switch service providers very much.	0,15	0,26	0,83	0,26	0,48	0,02	0,08	0,24	0,12	0,27
	I did not have much switching experience before.	0,10	0,21	0,80	0,21	0,40	0,01	0,05	0,19	0,08	0,19
P H	The price I have	0,24	0,20	0,27	0,93	0,35	0,12	0,16	0,30	0,12	0,35

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	paid for that service provider was higher than the prices of its competitors.											
	Costs of that service provider were higher than the costs of its competitors.	0,18	0,23	0,22	0,92	0,30	0,12	0,12	0,29	0,11	0,34	
SATISFACTION	When you think generally, how do you feel about the service you got?	0,43	0,38	0,10	0,13	0,14	0,75	0,55	0,19	0,34	0,23	
	I was not pleased with.											
	I have never been satisfied with.	0,49	0,41	0,08	0,15	0,12	0,85	0,59	0,21	0,31	0,25	
	I have always been displeased with.	0,48	0,39	0,09	0,15	0,13	0,86	0,58	0,20	0,31	0,25	
	I think they have done a very bad job.	0,43	0,37	0,01	0,07	0,05	0,81	0,50	0,16	0,29	0,20	
	I was always unhappy.	0,50	0,39	0,06	0,12	0,10	0,85	0,53	0,23	0,32	0,24	
	The service provided was worthless at all.	0,48	0,39	0,07	0,09	0,09	0,80	0,51	0,20	0,26	0,24	
	The service provider did not pay attention to me (It was ignoring me).	0,50	0,40	0,07	0,08	0,10	0,76	0,58	0,20	0,31	0,24	
	I have never trusted in their services.	0,50	0,40	0,06	0,08	0,08	0,84	0,54	0,19	0,33	0,22	
	They have never kept their promises.	0,45	0,30	0,00	0,06	0,02	0,75	0,51	0,14	0,28	0,18	
	They have never been honest and realistic with me.	0,48	0,32	0,02	0,08	0,05	0,80	0,49	0,15	0,28	0,17	
	They have never treated me in a reasonable and fair way.	0,48	0,32	-0,00	0,07	0,02	0,80	0,50	0,16	0,28	0,19	
	I have always felt that they would not help me when I needed.	0,58	0,40	0,07	0,14	0,11	0,79	0,54	0,21	0,29	0,25	
	SWITCHING COST	I did not need to spend much time and money to switch the service provider.	0,24	0,34	0,41	0,31	0,85	0,12	0,10	0,47	0,18	0,37
		If I speak generally, I would say that the cost of the	0,24	0,33	0,38	0,24	0,84	0,08	0,07	0,38	0,17	0,37

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	time, money and effort I have spent and the discomfort I have felt was not high that much.										
	I did not spend much money and waste much time on switching my service provider.	0,21	0,37	0,51	0,30	0,85	0,03	0,06	0,35	0,18	0,37
	If I took every aspects into account, the cost of ending all my relationship with my service provider was lower than the cost of getting service from a new one.	0,17	0,34	0,32	0,28	0,69	0,12	0,12	0,32	0,19	0,32
	Generally, the service of that service provider was not perfect.	0,27	0,27	0,08	0,12	0,11	0,45	0,65	0,12	0,23	0,19
	The quality of the service provider was low in general.	0,33	0,32	0,06	0,08	0,05	0,59	0,75	0,15	0,25	0,20
	Employees were expected to be gentler.	0,30	0,24	0,00	0,04	0,04	0,44	0,70	0,12	0,18	0,14
	That service provider was supposed to provide exclusive attention to the customers.	0,32	0,27	0,10	0,14	0,07	0,41	0,73	0,14	0,16	0,16
	Employees of that service provider were supposed to know the needs of their customers.	0,41	0,30	0,11	0,16	0,09	0,48	0,74	0,14	0,19	0,19
	Most of the people whom I care about have approved my switching behavior.	0,27	0,44	0,26	0,32	0,45	0,23	0,18	0,94	0,19	0,49
	Most of the people whom I care their opinion have recommended me to switch my service provider.	0,21	0,36	0,23	0,28	0,42	0,21	0,17	0,92	0,16	0,39
A T	When I think about the past,	0,35	0,51	0,24	0,41	0,42	0,30	0,26	0,47	0,32	0,76

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the decision of switching from that service provider from a new one was; A quite good idea.											
Quite useful.	0,30	0,45	0,27	0,33	0,35	0,24	0,22	0,38	0,28	0,87	
Beneficial enough.	0,26	0,46	0,31	0,32	0,38	0,23	0,22	0,38	0,26	0,89	
Quite reasonable.	0,28	0,48	0,29	0,31	0,39	0,22	0,19	0,40	0,28	0,90	
Quite satisfactory.	0,27	0,48	0,23	0,25	0,35	0,24	0,21	0,39	0,31	0,89	
Something I have wanted.	0,18	0,35	0,15	0,21	0,30	0,11	0,12	0,32	0,21	0,66	

Afterwards, whether the factor loadings are significant or not had been tested with a bootstrap method. In the Smart PLS 3 program, the sample number had been chosen as 1069 and the analysis had been put to work. (Hair et al., 2014). When the results are analyzed, it had been found that all factors pass ($t > 2.57$, $p < 0.05$) condition and thusly factor loadings had been proved as significant.

Table 4. Factor loadings

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	Original Sample(O)	Std. Deviation (STDEV)	Std. Error (STERR)	T Statistics
COM1<-COM	0,766	0,02	0,02	38,408
COM2<-COM	0,843	0,013	0,013	66,289
COM3<-COM	0,905	0,006	0,006	143,861
COM4<-COM	0,817	0,016	0,016	50,831
ALT1<-ALT	0,737	0,02	0,02	36,984
ALT2<-ALT	0,792	0,014	0,014	56,661
ALT3<-ALT	0,745	0,021	0,021	36,263
ALT4<-ALT	0,859	0,011	0,011	80,689
ALT5<-ALT	0,825	0,012	0,012	67,812
VAR2<-VAR	0,765	0,026	0,026	29,088
VAR3<-VAR	0,767	0,024	0,024	31,943
SAT6<-SAT	0,801	0,016	0,016	49,086
PRI1<-PRI	0,937	0,007	0,007	133,933
PRI2<-PRI	0,922	0,011	0,011	88,167
VAR3<-VAR	0,834	0,017	0,017	49,33
VAR4<-VAR	0,804	0,023	0,023	34,375
SAT7<-SAT	0,769	0,017	0,017	46,559
SAT8<-SAT	0,844	0,013	0,013	67,39
SAT9<-SAT	0,75	0,018	0,018	40,806
SAT10<-SAT	0,808	0,015	0,015	54,86
SAT11<-SAT	0,804	0,015	0,015	54,647
SAT12<-SAT	0,792	0,014	0,014	55,111
SWI1<-SWI	0,85	0,015	0,015	56,948
SWI2<-SWI	0,846	0,016	0,016	51,735
SWI3<-SWI	0,858	0,016	0,016	54,836
SWI4<-SWI	0,693	0,029	0,029	23,718
SAT1<-SAT	0,75	0,02	0,02	37,322
SAT2<-SAT	0,85	0,012	0,012	73,335
SAT3<-SAT	0,86	0,011	0,011	76,1
SAT4<-SAT	0,819	0,014	0,014	60,121
SAT5<-SAT	0,85	0,012	0,012	72,375
QUA1<-QUA	0,655	0,025	0,025	26,095
QUA2<-QUA	0,759	0,016	0,016	46,945
QUA6<-QUA	0,704	0,021	0,021	33,338
QUA7<-QUA	0,734	0,02	0,02	37,618
QUA8<-QUA	0,745	0,018	0,018	42,42
SUB1<-SUB	0,942	0,005	0,005	205,823
SUB2<-SUB	0,92	0,009	0,009	103,267
SBI1<-SBI	0,827	0,015	0,015	56,2
SBI2<-SBI	0,933	0,006	0,006	152,038
SBI3<-SBI	0,927	0,008	0,008	122,512
ATS1<-ATS	0,761	0,019	0,019	39,613
ATS2<-ATS	0,879	0,012	0,012	74,096
ATS3<-ATS	0,896	0,01	0,01	91,106
ATS4<-ATS	0,909	0,009	0,009	105,613
ATS5<-ATS	0,89	0,01	0,01	88,598
ATS6<-ATS	0,661	0,026	0,026	25,456

Also, a confirmatory factor analysis that had been done with the PLS method by Hair et al (2014) showed that the conditions below had been met and convergent validity had been proved.

*In all the factors, the statements are higher than 0.60.

*In Table 3 the statements have been divided upon giving the highest load to the factor they belong.

*In accordance with the criteria of Fornell and Larcker (1981, 39) the variance values that had been explained in the Table 5(AVE: Average Variance Extracted) are

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higher than 0.50.

Table 5. Average Variance

	AVE
Com- Commitment	0,696
Alt- Alternatives attractiveness	0,629
Var-Variety seeking	0,629
Pri-Price perception	0,864
Swi-Switching cost	0,664
Sat-Satisfaction	0,654
Qua-Service quality	0,519
Sub-Subjective norms	0,867
S.B.I-Switching Back Intention	0,805
A.T.S- Attitude towards switching	0,702

On the other hand, with the confirmatory factor analysis that had been done by PLS according to the Fornell and Larcker (1981, 39), the square root of every optimal variance(AVE) should be quantitatively higher than its correlations with other components. (Hair et al., 2011, 139). In the analysis, this situation and the discriminant validity had been confirmed.

All the factor components have a composite reliability value of 0.70. Also, the Cronbach's Alpha value shown in Table6is higher than 0.70. Thus, the reliability of scales had been confirmed as it is stated by Hair et al. (2014).

Table 6. Correlation Tables

	Mean	Std. Deviation	Com.	Alt.	Var.	Pri.	Swi.C.	Sat.	S.Qua.	Sub.No.	S.B.I	Att.Tw Swi.
Com.-Commitment	3,25	1,16	0,85^a									
Alt.-Alternatives Attractiveness	3,48	0,97	0,4	0,85^a								
Var.-Variety Seeking	4,2	0,75	0,19	0,36	0,80^a							
Pri.-Price Perception	4,18	1,04	0,24	0,23	0,27	0,84^a						
Swi.-Switching Costs	4,09	0,86	0,27	0,43	0,51	0,35	0,82^a					
Sat.-Satisfaction	2,54	1,08	0,6	0,47	0,071	0,13	0,11	0,95^a				
Qua-Service Quality	2,84	1,01	0,46	0,4	0,11	0,16	0,11	0,67	0,76^a			
S.No.-Subjective Normlar	3,77	1,19	0,27	0,44	0,27	0,32	0,47	0,24	0,19	0,84^a		
S.B.I-Switch Back int.	3,06	1,22	0,28	0,41	0,14	0,13	0,23	0,38	0,29	0,2	0,88^a	
A.T.S.-Attitude Towards switching	3,84	0,98	0,34	0,56	0,31	0,38	0,45	0,28	0,25	0,48	0,34	0,91^a

N= 1092 and ^a coefficient alphas.

3. THE DIFFERENCE OF THIS RESEARCH

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There are several discriminator qualifications inside the researches done about the switching behavior that has an increasing significance in today's world:

* While most of the researches that had been done in the past were built on the intentions, this research had been done on the behaviors that had happened. Thus, the accuracy rate had been increased.

* The number of questions and samples of this research are rather higher compared to other articles on this topic.

4. DESCRIPTIVE STATISTICS / RESULTS

To be able to analyze the data of this research that aims to understand whether there is a correlation between customer qualifications and the switching behavior, t-test and ANOVA in the SPSS 17 program had been carried out. To be reliable with the hypothesis test that shows there is a difference, the Sheffe test was chosen. From the 6 information that was taken from the customers and/or included in the information system (age, education level, income level, region and gender), for the first four variables Anova used. And for being a two category variable t-test had been used for gender variable (Büyükoztürk, 2016).

To make it more understandable and for the easiness of presentation, the demographic variants was shown in order. Starting from age, for each demographic information the 10 variables was listed. While the tables show relevance, to be able to make the results more understandable, figure projections had been made. In this angle, since the direction of the scales are negative, it should be pointed out that the heights in the graphs was created as an obstacle for the suppliers. That is to say that the high rates are not positive, rather negative. For example in the satisfaction scale "5" rating expresses a state of dissatisfaction. The comments on the statistics and figures held into account in the discussion section and in this section only the visuals of the statistics and the figures was shown.

4.1. AGE

Table 7. Age and Switching Variables Table

	F	Sig.
COMMITMENT	4,708	,000
ALTERNATIVES' ATTRACTIVNESS	1,758	,119
VARIETY SEEKING	1,277	,271
PRICE PERCEPTION	1,091	,364
SATISFACTION	2,162	,056
SWICTHING COSTS	1,960	,082
SERVICE QUALITY	1,104	,356
SUBJECTIVE NORMS	5,682	,000
SWITCHING BACK INTENTION	3,426	,004
ATTITUDE TOWARDS SWICTHING	2,590	,024

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There are significant differences between the ages of the customers and the variables of Commitment, Subjective Norms, Switching Back Intentions and Attitude Towards Switching with the Sig values of 0,05 and lower, F values, F_{∞} , higher than n-k meaning F_{∞} , higher than $10-6= 2.37$ (Büyükoztürk, 2016). The statistical values of these differentiations and their commentaries are shown in the figures below.

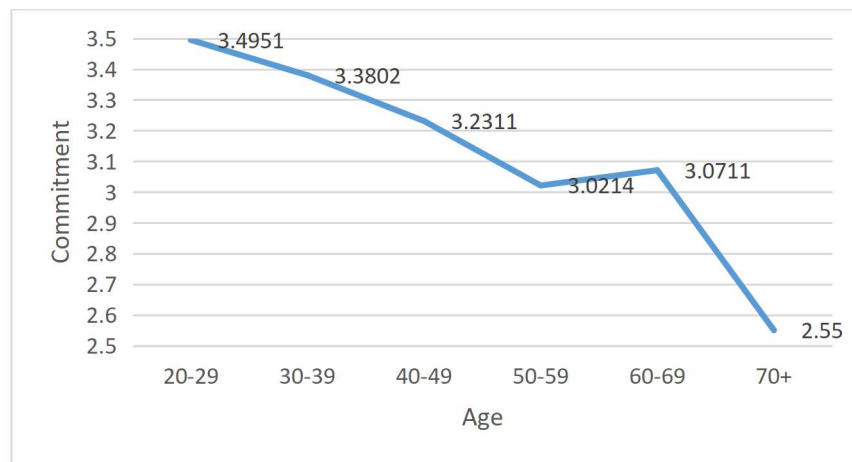


Figure 1. Age and Commitment

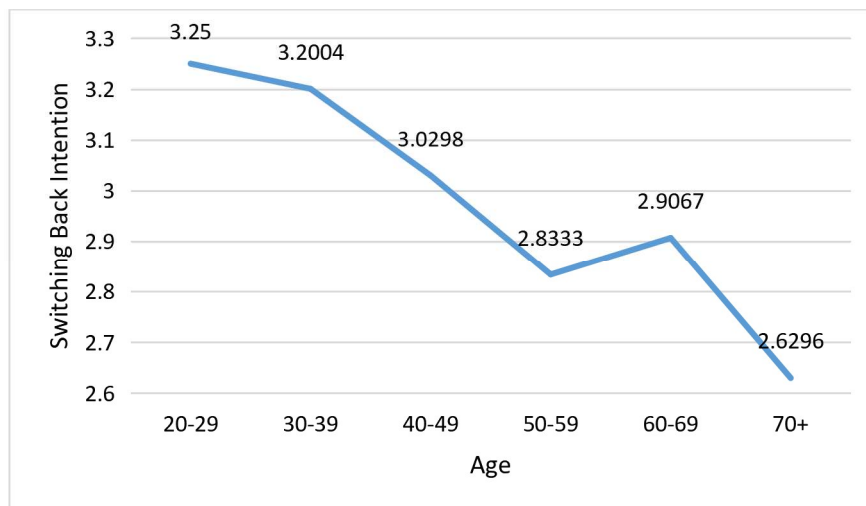


Figure2. Age and Subjective Norms

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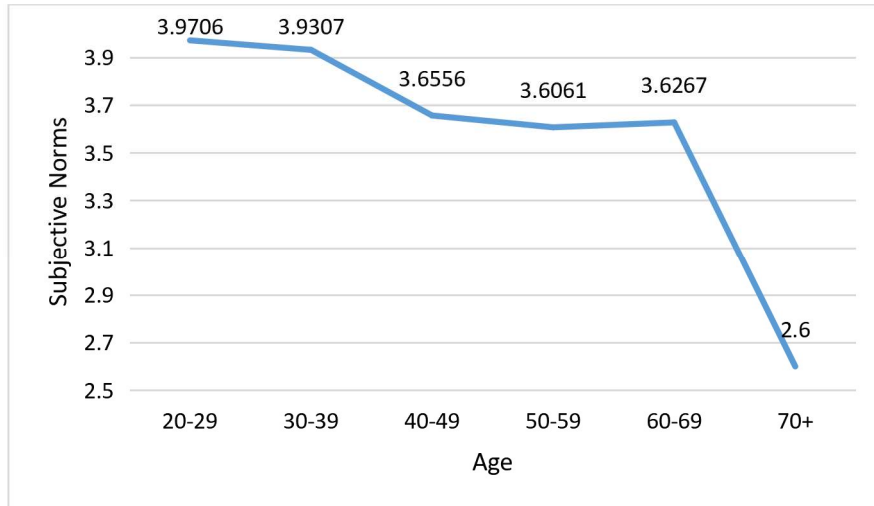


Figure 3. Age and Switching Back Intentions

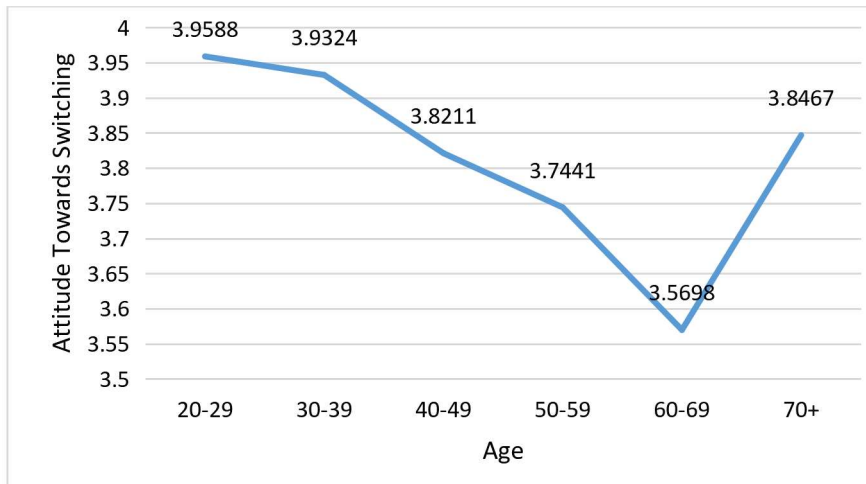


Figure 4. Age and Attitude Towards Switching

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4.2. EDUCATION LEVEL

Table 8. Education Level and Switching Variables Relation Table

	F	Sig.
COMMITMENT	1,706	,130
ALTERNATIVES' ATTRACTIVNESS	,609	,693
VARIETY SEEKING	1,371	,233
PRICE PERCEPTION	,934	,458
SATISFACTION	3,870	,002
SWICTHING COSTS	2,704	,019
SERVICE QUALITY	2,397	,036
SUBJECTIVE NORMS	,962	,440
SWITCHING BACK INTENTION	2,898	,013
ATTITUDE TOWARDS SWICTHING	,633	,674

There are significant differences between the education levels of the customers and the variables of Satisfaction, Switching Costs, Service Quality and Switching Back Intention with the Sig values of 0,05 and lower, F values, F_{∞} , higher than $n-k$ meaning F_{∞} , higher than $10-6= 2.37$ (Büyüköztürk, 2016). According to these variables, the evaluation of customers' education levels are shown below:

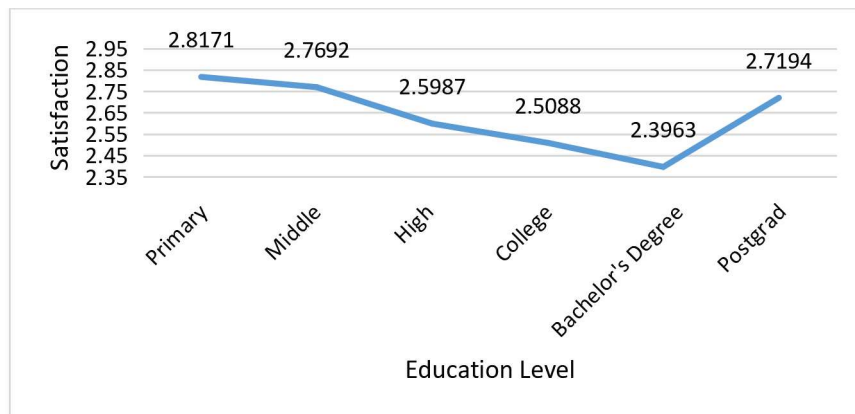


Figure 5. Education Level and Level of Satisfaction

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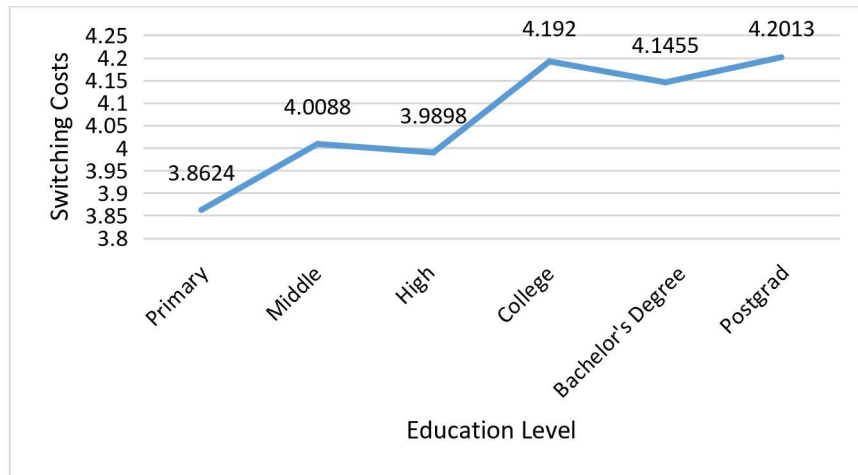


Figure 6. Education Level and Switching Costs

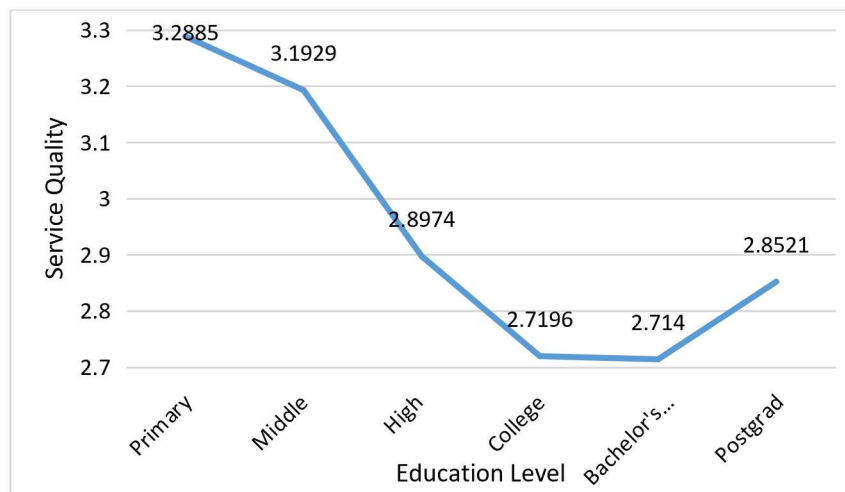


Figure 7. Education Level and Service Quality

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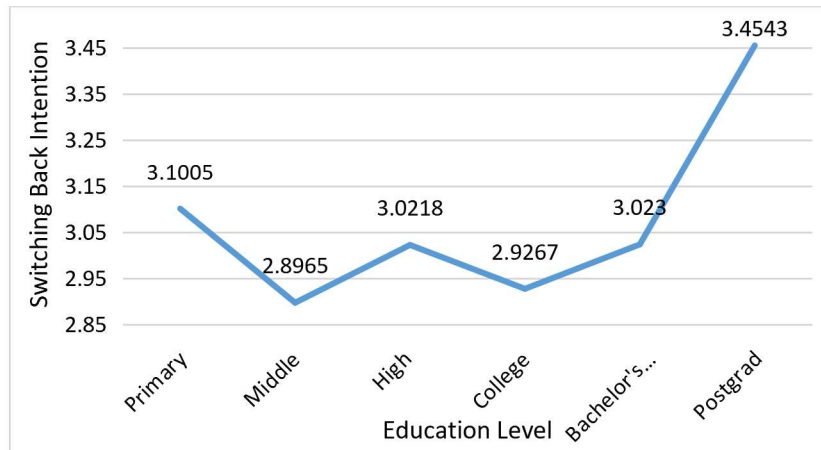


Figure 8. Education Level and Switching Back Intention

4.3. INCOME LEVEL

Table 9. Income Level and Switching Variables Relation Table

	F	Sig.
COMMITMENT	6,416	,000
ALTERNATIVES' ATTRACTIVNESS	7,611	,000
VARIETY SEEKING	2,781	,040
PRICE PERCEPTION	,721	,540
SATISFACTION	4,349	,005
SWITCHING COSTS	5,610	,001
SERVICE QUALITY	4,299	,005
SUBJECTIVE NORMS	3,586	,013
SWITCHING BACK INTENTION	3,290	,020
ATTITUDE TOWARDS SWITCHING	5,964	,001

There are significant differences between the income level of the customers and the variables of Commitment, Attractiveness of the Alternatives, Subjective Norms, Service Quality, Search for Variability, Satisfaction, Subjective Norms, Switching Back Intention and Attitude Towards Switching with the Sig values of 0,05 and lower, F values, F_{α} , higher than $n-k$ meaning F_{α} , higher than $10-6= 2.37$ (Büyüköztürk, 2016). All the variables except perception of price has a significant differentiation according to the income level of customers.

There had been more significant outputs found out for the income level variable than all other demographical variables. The reason of this situation might be the fact that materiality creates structural and unintentional differences among people.

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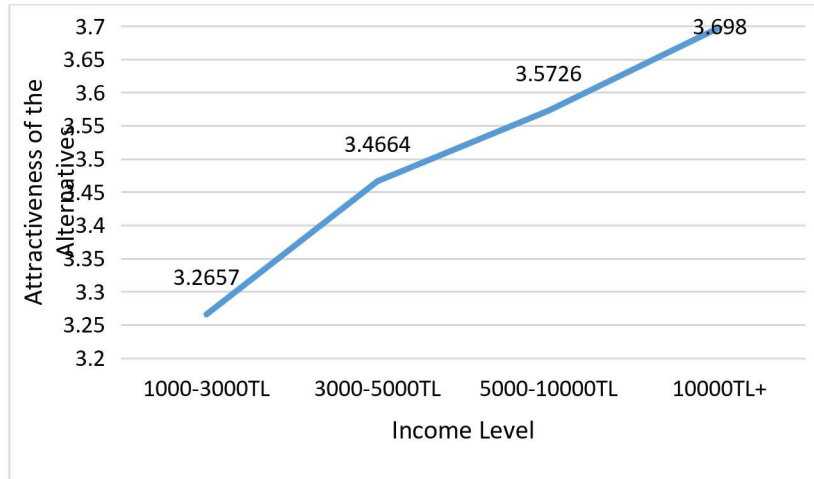


Figure 9. Income Level and Attractiveness of the Alternatives

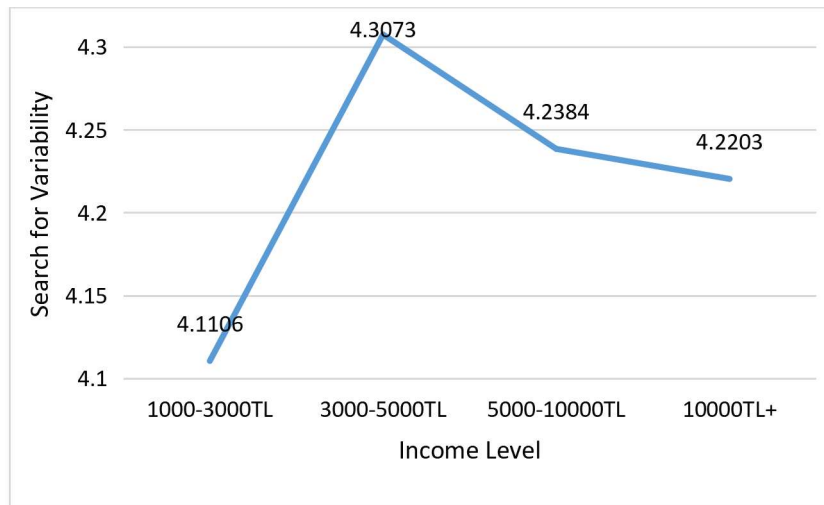


Figure 10. Income Level and Search For Variability

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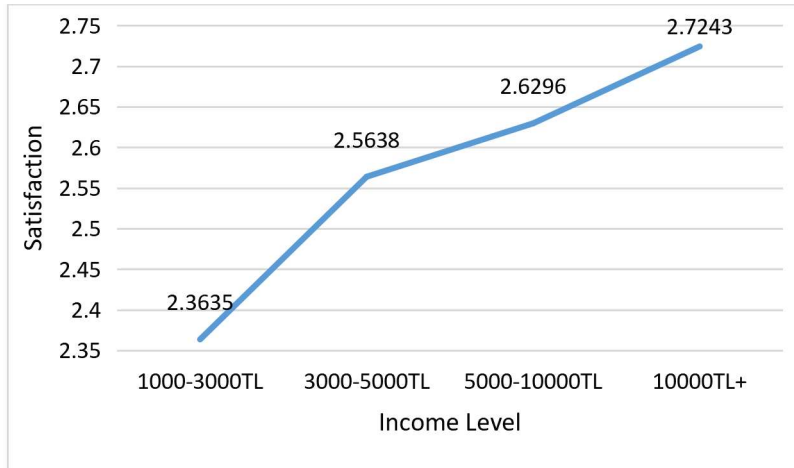


Figure 11. Income Level and Level of Satisfaction

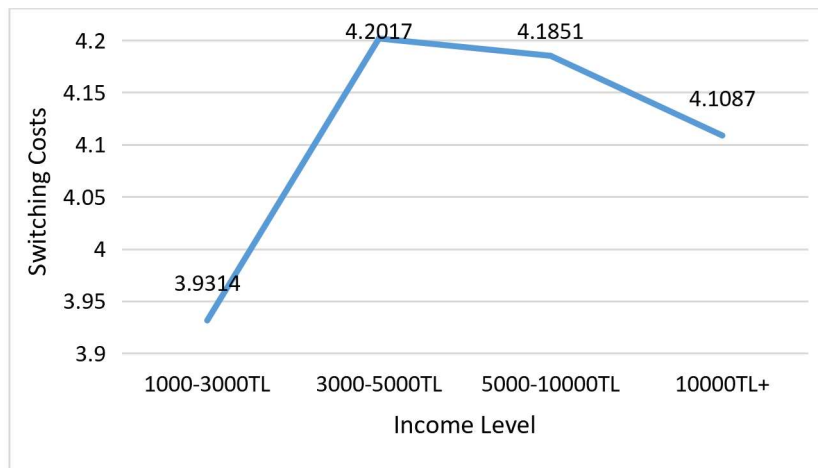


Figure 12. Income Level and Switching Costs

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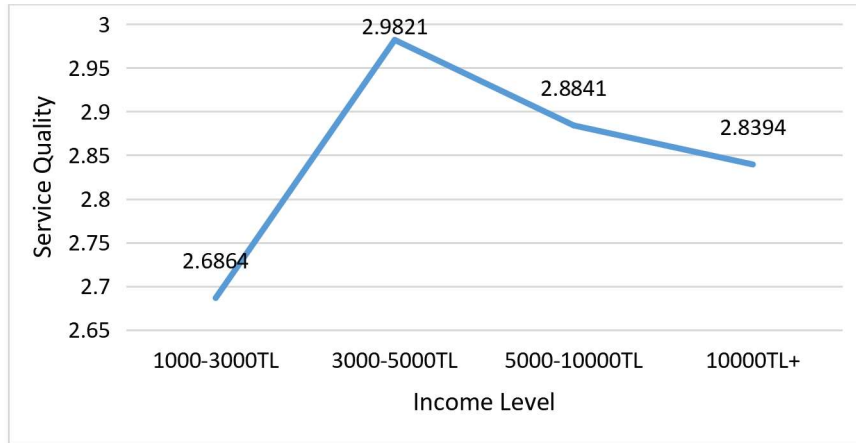


Figure 13. Income Level and Service Quality

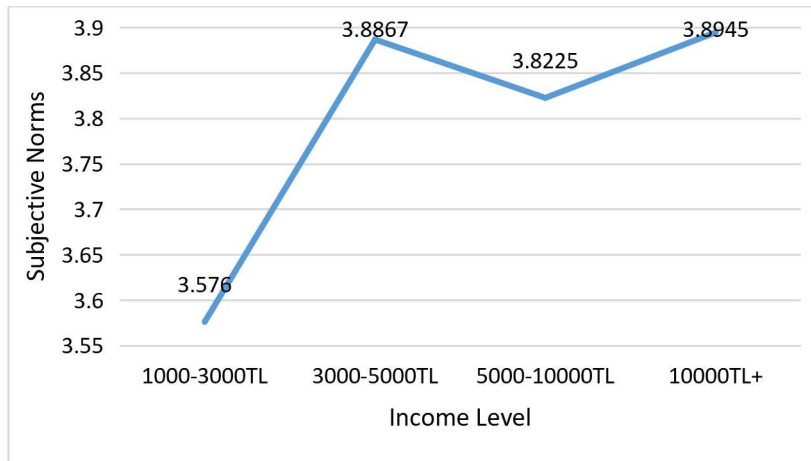


Figure 14 . Income Level and Subjective Norms

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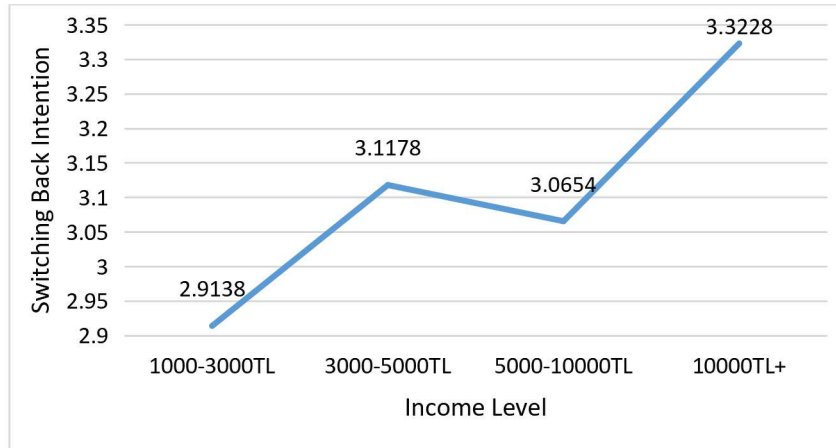


Figure 15. Income Level and Switching Back Intention

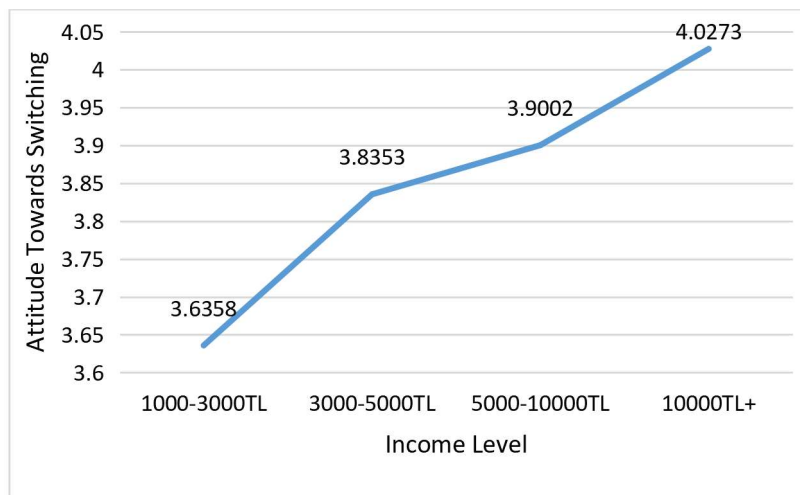


Figure 16. Income Level and Attitude Towards Switching

4.4 THE REGION

Table10. The Region and Switching Variables Relation Table

Variable	F	Sig.
COMMITMENT	1,632	,135
ALTERNATIVES' ATTRACTIVENESS	2,128	,048
VARIETY SEEKING	1,418	,204

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PRICE PERCEPTION	,401	,879
SATISFACTION	6,505	,000
SWITCHING COSTS	,601	,730
SERVICE QUALITY	10,271	,000
SUBJECTIVE NORMS	1,214	,296
SWITCHING BACK INTENTION	,982	,436
ATTITUDE TOWARDS SWITCHING	,731	,625

There are significant differences between the region the customers live and the variables of Satisfaction and Service Quality with the Sig values of 0,05 and lower, F values, F_{∞} , higher than n-k meaning F_{∞} , higher than $10-6= 2.37$ (Büyüköztürk, 2016). According to these variables, the evaluation of the region that customers live in is shown below:

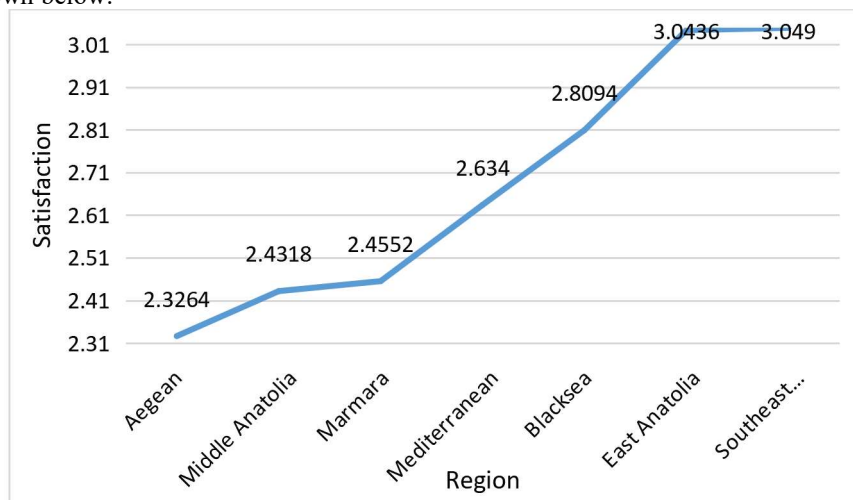


Figure 17. The Region and Level of Satisfaction

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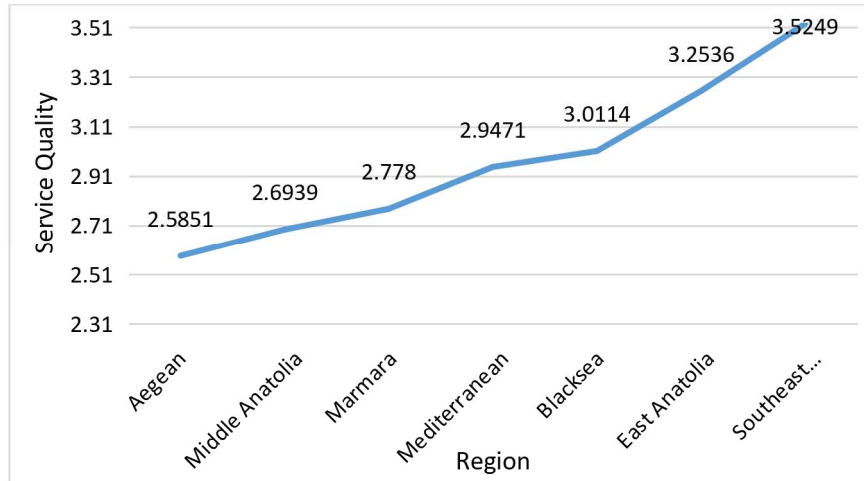


Figure 18. The Region and Service Quality

4.5. GENDER

In order to test if there is a significant difference between two variables or not t-test is used. In this case, for the differences to be significant according to the gender variable, p value should be lower than 0,05 and t value should be higher than the table value (Büyükoztürk, 2016). In this direction, for this research, t-test had been used to see if there are significant differences or not according to the customers' gender.

Table11. T Test Results

		F	Sig.	t	Sig. (2-tailed)
COMMITMENT	Equal var.assumed	1,291	,256	1,028	,304
	Equal var.not assumed			,968	,335
ALTER. ATTRACTIVENESS	Equal var.assumed	,144	,705	-,862	,389
	Equal var.not assumed			-,849	,397
VARIETY SEEKING	Equal var.assumed	,029	,866	-1,884	,060
	Equal var.not assumed			-1,981	,050
PRICE PERCEPTION	Equal var.assumed	6,198	,013	-3,169	,002
	Equal vr.not assumed			-3,856	,000
SATISFACTION	Equal var.assumed	,132	,717	2,634	,009
	Equal var.not assumed			2,512	,013
SWITCHING COSTS	Equal var.assumed	,325	,569	-1,620	,105
	Equal var.not assumed			-1,633	,105
SERVICE QUALITY	Equal var.assumed	,751	,386	2,615	,009
	Equal var.not assumed			2,521	,013
SUBJECTIVE NORMS	Equal var.assumed	1,344	,247	-1,737	,083

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	Equal var.not assumed			-1,744	,084
SWITCHING BACK INTENTION	Equal var.assumed	,335	,563	1,212	,226
	Equal var.not assumed			1,149	,253
ATTITUDE TOWARDS SWITCHING	Equal var.assumed	,163	,687	-2,977	,003
	Equal var.not assumed			-2,986	,003

When we examined the table, the only variable that is Sig<0,05, with the unequal variances, is the Price Perception variable. In that variable “Equal Variances not Assumed” value, and for other variables, “Equal variances Assumed” variable should be controlled to see if there is a significant difference between the average values (Büyükoğdemir, 2016). In this direction, there are four variables Price Perception, Satisfaction, Service Quality and Attitude Towards Switching.

Table 12. The Relevance of Variable Averages According to Gender

	Gender	Number of Samples	Average
PERCEPTION OF PRICE	male	988	4,1447
	female	97	4,4948
SATISFACTION	male	994	2,5674
	female	98	2,2669
QUALITY OF SERVICE	male	994	2,8664
	female	98	2,5886
THE ATTITUDE TOWARDS CHANGE	male	994	3,8153
	female	98	4,1241

Judging the variables on the chart, we can say that women are more likely to think that the YS's they've left are more expensive. Videlicet their perception of price is higher. At the same time their satisfaction rate is lower and they are more confident in the decision of leaving. On the other hand, they believe the quality of service is much higher compared to men. All results of the research with the test (hypotheses) results are in the table below:

Table13. Hypotheses Table

HYPOTHESIS (if Sig < 0,05 ve F>2,37; H is accepted, if not it is rejected.)	ACCEPT/REJECT
HYPOTHESES ABOUT AGE	
H1: There is a significant difference between the age of the customer who leaves the supplier and their perception of service quality.	REJECT
H6: There is a significant difference between the age of the customer who leaves the supplier and their level of satisfaction.	REJECT
H11: There is a significant difference between the age of the customer who leaves the supplier and their level of commitment.	ACCEPT
H16: There is a significant difference between the age of the customer who leaves the supplier and their perception of price.	REJECT
H21: There is a significant difference between the age of the customer who leaves the supplier and their attitude towards switching.	ACCEPT
H26: There is a significant difference between the age of the customer who leaves the supplier and the subjective norms.	ACCEPT

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H31: There is a significant difference between the age of the customer who leaves the supplier and the switching costs.	REJECT
H36: There is a significant difference between the age of the customer who leaves the supplier and their variety seeking.	REJECT
H41: There is a significant difference between the age of the customer who leaves the supplier and the attractiveness of the alternatives.	REJECT
H46: There is a significant difference between the age of the customer who leaves the supplier and their intention of returning to the old supplier.	ACCEPT
<hr/>	
HYPOTHESES ABOUT EDUCATION	
<hr/>	
H2: There is a significant difference between the education level of the customer who leaves the supplier and their perception of the service quality.	ACCEPT
H7: There is a significant difference between the education level of the customer who leaves the supplier and their level of satisfaction.	ACCEPT
H12: There is a significant difference between the education level of the customer who leaves the supplier and their level of commitment.	REJECT
H17: There is a significant difference between the education level of the customer who leaves the supplier and their perception of price.	REJECT
H22: There is a significant difference between the education level of the customer who leaves the supplier and their attitude towards switching.	REJECT
H27: There is a significant difference between the education level of the customer who leaves the supplier and the subjective norms.	REJECT
H32: There is a significant difference between the education level of the customer who leaves the supplier and the switching costs.	ACCEPT
H37: There is a significant difference between the education level of the customer who leaves the supplier and their variety seeking.	REJECT
H42: There is a significant difference between the education level of the customer who leaves the supplier and the attractiveness of the alternatives.	REJECT
H47: There is a significant difference between the education level of the customer who leaves the supplier and their intention of returning to the old supplier.	ACCEPT
<hr/>	
HYPOTHESES ABOUT INCOME LEVEL	
<hr/>	
H3: There is a significant difference between the income level of the customer who leaves the supplier and their perception of the service quality.	ACCEPT
H8: There is a significant difference between the income level of the customer who leaves the supplier and their level of satisfaction.	ACCEPT
H13: There is a significant difference between the income level of the customer who leaves the supplier and their level of commitment.	ACCEPT
H18: There is a significant difference between the income level of the customer who leaves the supplier and their perception of price.	REJECT
H23: There is a significant difference between the income level of the customer who leaves the supplier and their attitude towards switching.	ACCEPT
H28: There is a significant difference between the income level of the customer who leaves the supplier and the subjective norms.	ACCEPT
H33: There is a significant difference between the income level of the customer who leaves the supplier and the switching costs.	ACCEPT
H38: There is a significant difference between the income level of the customer who leaves the supplier and their variety seeking.	ACCEPT
H43: There is a significant difference between the income level of the customer who leaves the supplier and the attractiveness of the alternatives.	ACCEPT
H48: There is a significant difference between the income level of the customer who leaves the supplier and their intention of returning to the old supplier.	ACCEPT
<hr/>	
HYPOTHESES ABOUT REGION	
<hr/>	
H4: There is a significant difference between the living area of the customer who leaves the supplier and their perception of the service quality.	ACCEPT
H9: There is a significant difference between the living area of the customer who leaves the supplier and their level of satisfaction.	ACCEPT

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H14: There is a significant difference between the living area of the customer who leaves the supplier and their level of devotion.	REJECT
H19: There is a significant difference between the living area of the customer who leaves the supplier and their perception of price.	REJECT
H24: There is a significant difference between the living area of the customer who leaves the supplier and their attitude towards switching.	REJECT
H29: There is a significant difference between the living area of the customer who leaves the supplier and the subjective norms.	REJECT
H34: There is a significant difference between the living area of the customer who leaves the supplier and the switching costs.	REJECT
H39: There is a significant difference between the living area of the customer who leaves the supplier and their variety seeking.	REJECT
H44: There is a significant difference between the living area of the customer who leaves the supplier and the attractiveness of the alternatives.	REJECT
H49: There is a significant difference between the living area of the customer who leaves the supplier and their intention of returning to the old supplier.	REJECT

HYPOTHESES ABOUT GENDER

H5: There is a significant difference between the gender of the customer who leaves the supplier and their perception of the service quality.	ACCEPT
H10: There is a significant difference between the gender of the customer who leaves the supplier and their level of satisfaction.	ACCEPT
H15: There is a significant difference between the gender of the customer who leaves the supplier and their level of commitment.	REJECT
H20: There is a significant difference between the gender of the customer who leaves the supplier and their perception of price.	ACCEPT
H25: There is a significant difference between the gender of the customer who leaves the supplier and their attitude towards switching.	ACCEPT
H30: There is a significant difference between the gender of the customer who leaves the supplier and the subjective norms.	REJECT
H35: There is a significant difference between the gender of the customer who leaves the supplier and the switching costs.	REJECT
H40: There is a significant difference between the gender of the customer who leaves the supplier and their variety seeking.	REJECT
H45: There is a significant difference between the gender of the customer who leaves the supplier and the attractiveness of the alternatives.	REJECT
H50: There is a significant difference between the gender of the customer who leaves the supplier and their intention of returning to the old supplier.	REJECT

5. RESEARCH'S RESTRICTION AND FUTURE AREAS

It's that it was done solely in the automotive sector. It will be beneficial that similar studies are done regarding other sectors. But in that case, a difficulty surfaces as in the privacy of the customer data.

On the other hand, there are some areas to investigate in the future:

* The part of the research that had been done on the switching intentions of the satisfied customers with high perception of service quality and loyalty will be helpful to gain new insights on testing the knowledge that the average satisfied customers are in a switching behavior. Thus, just as it is not necessary for the customer to be dissatisfied for switching, it is not correct to say that a customer that is satisfied will never switch between services.

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* A research that is done with the customers who turned back to their old service, with the same topic (switching behavior and its effects) will also be able to create positive hints for future researches.

* It would be very beneficial to undertake a model study that can singularize the power of switching behavior and a performance indicator criterion that might be effectual worldwide (eg. a criterion called “the power of switching”).

* A research about the differences of the variables that causes switching behavior in service industry between women and men should be conducted.

6. DISCUSSIONS AND SUGGESTIONS

These results hold similarities with the switching literature. Thus, the opinions which will provide convince so that companies will segment their customers to keep them and can provide customized service that will contribute to modern marketing mentality are as the following:

- The fact that the elderly who have shown switching behavior had higher level of satisfaction, perception of quality and meaningful loyalty compared to younger people who have shown switching behavior can be interpreted as it is easier to keep them. This is also supported by them not being affected by other people’s opinions. So it will be more purposeful for companies to develop services and products towards the elderly, also considering the rise of the global average age. On the other hand, even though the younger people may seem harder to keep, the fact that other’s opinions are important to them may show their need for self-expression and validation. With this situation supporting the reality of social media’s spread, companies should develop programmes that will affect their friends. For example, programmes like “bring a friend and get a discount” will be useful.

- Generally it can be said from the results above that higher educated people research and compare easier and act more consciously and rationally. But it is interesting that the post grades have a contrasting result compared to this. Customers with post grade have less satisfaction and perception of service quality and they have a very little desire for returning. This can be explained like the income variable, resulting in the correlation reversing after a certain point. Or the fewness of the post grade customers may have caused this statistical difference.

- The correlation between the income variable and the switching behavior is more complex than other variables. To make a more general comment about the income level, it can be claimed that with the increase of the income level, the customers have the privilege of comfortness and freedom. Also the middle class’ search for diversity which may result in switching is significantly different and higher than the people of other income levels. This can be interpreted as the people of the low income and high income having narrow shopping swing while the people of average income always having a wider swing. In that case, diversifying products and services will decrease customers’ switching behavior for the companies that specifically aim for the people of average income.

- It is hard to comment on the customers from the Southeast Region since their

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satisfaction and perception of quality is low. There have to be separate studies done. The result came from our research shows that it is necessary for this region to increase the emphasis on quality.

- The reason that there's a significant difference between female and male customers who have left the company that they got a service from is the fact that automobile is a product that usually interests men. Because normally perception of quality and satisfaction are variables that are parallel but it seems to have been reversed when it comes to women. This situation which contrasts the general tendency can be interpreted as women having less interest and expectation in the automotive sector, also less experience to compare different companies. That's why companies should develop a service mentality that is more explanatory and informative for women. With that, not only their levels of satisfaction but also their perception of price can turn out to be positive.

CONCLUSION

As a result of this research on the switching behavior of customers in the automotive industry with a large sample size, it has been revealed that customers who switched behave according to different demographic characteristics. In this direction, it will be beneficial for managers to segment their customers and offer personalized products and services so that they do not lose their customers and regain the customers they have lost.

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THE IMPACT OF INTEGRATED MARKETING COMMUNICATION ON CUSTOMERS BEHAVIOR

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Abstract

The application of integrated marketing communications has become an imperative nowadays. Companies try to impose themselves on the market and win over customers and also keep them. The influence of the mass media, their power and the availability of information at any time and place, impose the need for implementation of integrated marketing communications. Integrated marketing communications are a key element in the company's modern efforts to build long-term customer relationships. Major changes in information technology have had an impact on the appearance of segmented marketing, which has led to modern marketing communication to small segments of customers with a customized message. The company estimates which tools and forms of the promotional mix it will use before delivering adequate messages to its customers. In fact, integrated marketing communications are the answer to how companies can be competitive in their operations by establishing good communication relationships with customers in the long run. In this paper, special emphasis is placed on the research of how Macedonian companies are aware of the impact of integrated marketing communications on customer behavior. From the research we can see that it is necessary to approach the use of a larger number of communication tools, using a sophisticated coordination mechanism. IMC strives to cover all the communication tools of the company for the target audience to receive a consistent message that will influence customers behavior.

Keywords: Integrated marketing communications, customers behavior, companies, competitive advantage.

JEL classification: M30; M13

INTRODUCTION

The competition between the companies is drastically increasing, as in the domestic market, as well as in the international market. Today, the central problem that companies deal with is not the lack of products or services, but the lack of consumers. It is in these conditions that integrated marketing communications are the ones that can make companies competitive in their operations by establishing long-term relationships with consumers (Descotes, and Delassus 2015). Companies do not wonder whether to

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communicate with consumers but how to communicate, how to differentiate themselves from others and how often to communicate with the target group.

To differentiate themselves from other companies they have to create messages that will target the target group. The main purpose of communication is to convey the message and to gain and retain consumers (Malthouse et al. 2004).

Communication is a complex process, and the quality of the communication largely depends on the quality of the business relationship between the company and the consumers. The goal of the company is to build long-term relationships with consumers, and for that it needs clear communication, both in the traditional way and in the electronic product. The concept of the IMC helps managers to cope with the demands imposed on them by the environment.

1. CONCEPT OF INTEGRATED MARKETING COMMUNICATIONS TO BUILD CUSTOMER RELATIONSHIPS

The concept of integrated marketing communications represents different forms of communications with existing and potential customers over a period of time. The aim is to influence the behavior of the selected audience, using all forms of communication that are considered acceptable (Mikolon, et al. 2015).

Features of this concept are (Calvert 2008):

- Influence on consumer behavior
- Need to combine messages and media in order to achieve the goals
- Building long-term relationships with consumers

The effective concept of integrated marketing communications requires the conception and implementation of a set of coordinated and synchronized action on most of the forms of IMC.

The basic forms of IMC are (Fulgoni, and Lipsman 2014):

- Economic propaganda
- Sales promotion
- Public relations and publicity
- Personal sales and
- Direct marketing.

It is characteristic that the company can control them (with the exception of publicity which is an unpaid form of promotion). In addition to the new ones, there are secondary forms of IMC, such as: shaping, packaging, additional services that can not be programmed and controlled by the company (Pozzi 2012).

IMCs are the basis for establishing contacts and creating business relationships with consumers. The company should apply different marketing strategies by communicating with its customers in order to build a positive attitude towards them, which leads to loyal consumers (Susskind, et al 2000).

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2. CREATIVITY OF INTEGRATED MARKETING CONCEPT

Creativity means the best way to convey the message to consumers. Creativity is a quality possessed by individuals, which enables them to create new approaches in certain situations, new, better and more perfect solutions to the problem. The role of creativity in integrated marketing communications is crucial for gaining an advantage over a company in the market, and thus greater sales of its products.

Creativity in communication is recognized by (Meyer, Gremler, and Hogreve 2014):

- the interesting content of the message that is aimed at the target group;
- presenting the messages that should be original, recognizable, inspiring, unusual, impressive;
- the impact on the change of attitude among consumers;
- increasing sales effects.

3. PROCESS FOR CREATING EFFECTIVE IMC STRATEGIES DEPENDING ON CONSUMER BEHAVIOR

To create effective IMC strategies, the following should be approached (Amenc, Goltz, and Lodh 2012):

- **Identification of the target audience.** The company should start its activities after it has clearly identified the target audience. The target audience can be potential buyers, existing users, those who make the purchasing decision and those who have a say in the impact (Koushiki 2015). The target audience has a great influence on the company's decisions about the forms of the IMC, the creation of the message and its frequency.
- **Determining the goals of communication.** Since the target audience has already been defined, the reaction of consumers to the purchase should be seen. The purchase itself is a consequence of the process of making a decision on the part of the consumer. The marketing manager needs to see if the consumer is willing to buy or not.
- **Determining the stages of the purchasing decision process.** This includes the stages through which the consumer goes through the process of purchasing a particular product, including knowledge, preferences, approvals, persuasions and purchases.
- **Creating the message.** After the marketing manager defines the desired and expected reactions of the consumers, he will focus on creating a message on the table. The ideal created message should attract attention, retain interest, provoke desire and encourage action - a frame that is known as AIDA (Attention, Interest, Desire, Action). When they start composing the message, the marketing manager has to decide what to say (content of the message) and how to convey it.

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- **Media selection.** The marketing manager has the task of selecting the communication channels (Lewes 2010). Personal communication channels include mutual communication of two or more people in person, by phone, by mail, Viber etc. These channels of communication are efficient because the reaction of the consumer is immediately visible. We have impersonal communication channels when messages are transmitted without direct or personal contact and in this case we have no feedback. These channels include the following media: print media (newspapers, magazines, direct mail); broadcast media (radio, television); display media (billboards, graffiti, posters) and online media (online services, websites).

4. IMC MEDIA AND FUNDS

When choosing the most suitable medium for placing the promotional message from the decisive influence we need to focus on the budget planned for marketing, choosing the right place and time, the characteristics of the message. You should also have a clear understanding of the visibility or readability of certain media, which depends on the success of marketing communications.

The factors that influence the choice of the optimal medium are usually numerous, diverse and changeable, so the rational choice is based on (Lipsman et al. 2012):

- Types of media that are available,
- The types of products that are promoted through the media,
- Characteristics of consumers,
- Distribution of media in the internal and external environment,
- The quality, the image, that is, the reputation of the media among the consumers,
- Marketing opportunities and segmentation of markets,
- Promotional offer by competitors,
- The goals that are planned for realization,
- Existing marketing goals and their compliance with the promotional mix, etc.

The trend „media multitaskers“ is widely known – where consumers use different medias at the same time. In that way, the modern consumer more and more reads a newspaper or listens to a radio, or reads a newspaper and watches TV, or even, surfs the Net, listens to the radio and watches promotional messages on TV. Exactly for those reasons, a choice is made and a combination of several media with which the maximizing effect of marketing communication is maximized (Fulgoni, and Lipsman 2014).

Marketing communications enable the communication process between the company and the consumers through the physical shape that they have and the visual-aesthetic content (Coviello, Winklhofer, and Hamilton 2006). Therefore, it is of great importance for the communication to be a properly formed message. The message should be short, interesting, attractive, friendly, communicative to draw the attention of the consumer (Papasolomou, and Yioula 2012).

The means for marketing communication are divided into (Ries, and Ries 2004):

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Graphic means for promotion:

- Poster
- Flyer and prospectus (catalog, brochure)
- Photography: postcard, photo album and photo monograph
- Report and article
- Other means of external promotion (bulletin board-billboard, light advertising, wall painting, canopy, shop window, movable means).

Arrangements for promotion:

- Fair
- Exhibition
- Manifestation

Contact means for promotion:

- Propaganda lecture
- Press conference

Interactive means of promotion:

- Website
- Social networks
- Web advertising
- Referral system
- Smartphone application
- Other interactive means of promotion (chat, carrying technology, etc.).

7. REASERCH

In order to perceive the impact of integrated marketing communications on consumer behavior, a survey was conducted which included 75 companies from small and medium business in the Republic of Northern Macedonia from different areas. The aim of the research was to understand the use of integrated marketing communications and the forms of integrated marketing communications that they use. The sample included 90 respondents, employees in managerial positions - marketing managers. Data collection was done based on a survey questionnaire.

Only a part of the questions that are crucial for this research are singled out from the conducted survey.

One of the key questions was: Do integrated marketing communications influence consumer behavior? According to the answers, the following data were obtained:

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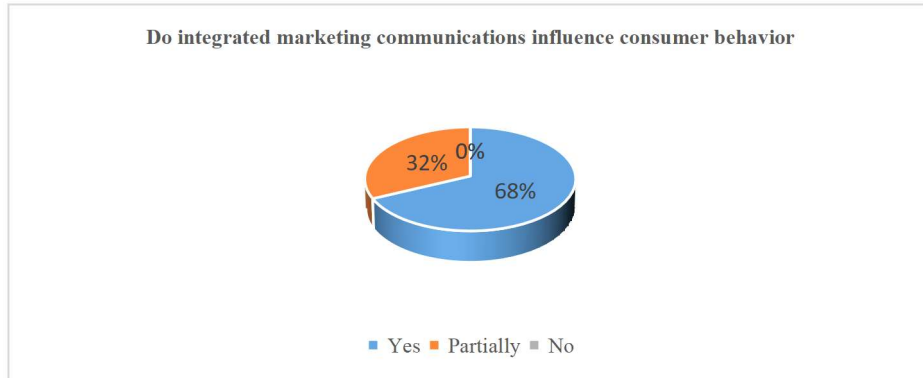


Chart 1. Percentage overview of the impact of integrated marketing communications on the behavior of consumers

According to the obtained taxes, 68% of the respondents think that integrated marketing communications have an impact on the behavior of consumers and 32% of the respondents believe that they partially have an impact on the behavior of consumers. This shows that a large number of respondents face the need to use integrated marketing communications and establish communication with their consumers. When asked which types of integrated marketing communications you most often use to communicate with consumers, the following taxes are obtained:

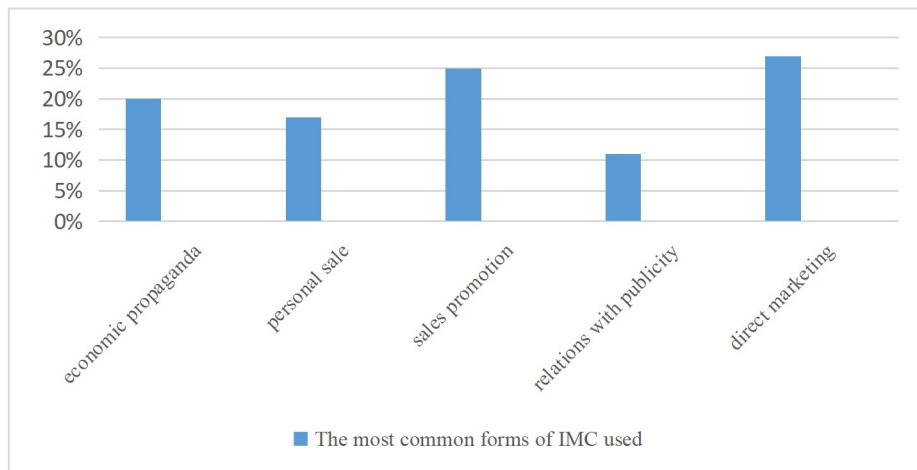


Chart 2. Percentage view of the most frequently used faces of IMC with consumers

Based on the obtained taxes, we can see that the most useful image of IMC is direct marketing with 27%, then sales promotion with 25%, economic propaganda with

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20%, personal birth with 17%, public relations with 11%. The survey found that companies use a combination of several IMC features.

When asked what types of integrated marketing communications do you have the most influence on the behavior of consumers, the following taxes are obtained:

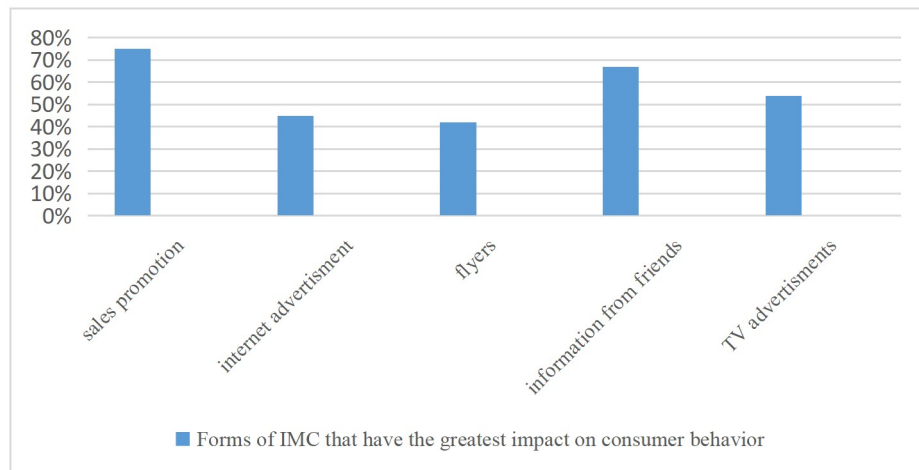


Chart 3. Percentage overview of the forms of integrated marketing communications that most affect consumers

According to the obtained data, the biggest influence on the behavior of the consumers has the promotion of the sale and 75% of the respondents stated about this form of IMC, more precisely the discounts that are given to the consumers and encourage them to buy. The research shows that other forms of IMC that affect consumer behavior are: 67% of respondents answered that it is information from friends, 54% of respondents said that the form that affects consumer behavior is TV commercials, 45% of respondents opted for online ads and 42% of respondents opted for flyers.

When asked which products are most often purchased with integrated marketing communication ads, the following data were obtained:

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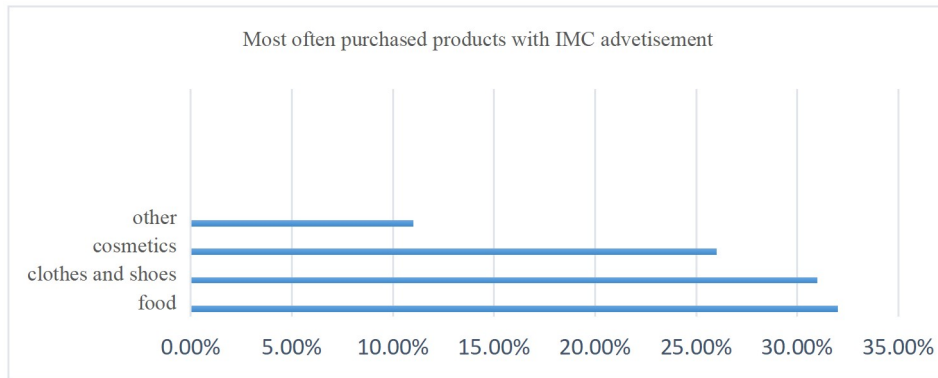


Chart 4. Percentage view of the most frequently purchased products with IMC advertisement

Based on the obtained data, it can be noticed that the most purchased products as a result of IMC advertisements are food products, 32% of the respondents answered food products, then with 31% of the respondents answered that they are clothes and shoes, 26% of the respondents think that these are cosmetic products and 11% of respondents answered that they are other products. From these gifts we can conclude that IMC ads have the greatest effect on food products and clothing and footwear, where consumers use the discounts that are given over a period of time. However, this does not mean that other products should not be subjected to forms of advertising that will inform consumers about the existence of a product and encourage and persuade them to buy it. When asked what are the reasons why consumers buy products for which IMC ads are used, the following data were obtained:

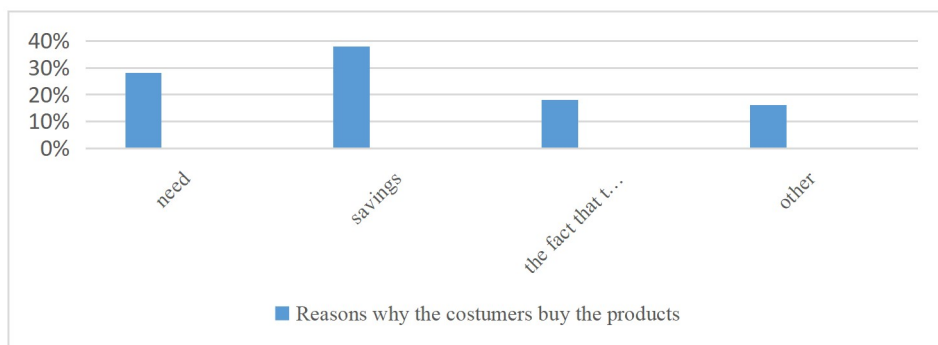


Chart 5. Percentage overview of the reasons why consumers buy products for which IMC advertisements apply

Based on the processed data, 38% of the respondents make the purchase for savings, 28% of the respondents make the purchase of the products to satisfy their needs, 18% of the respondents make the purchase of the products due to the fact that those products will be needed at a certain time in the future and 16% of respondents

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make the purchase for other reasons. Other reasons include the brand, product packaging and additional value offered by the company.

When asked if your company is building effective customer relationships through IMC, the following data were obtained:

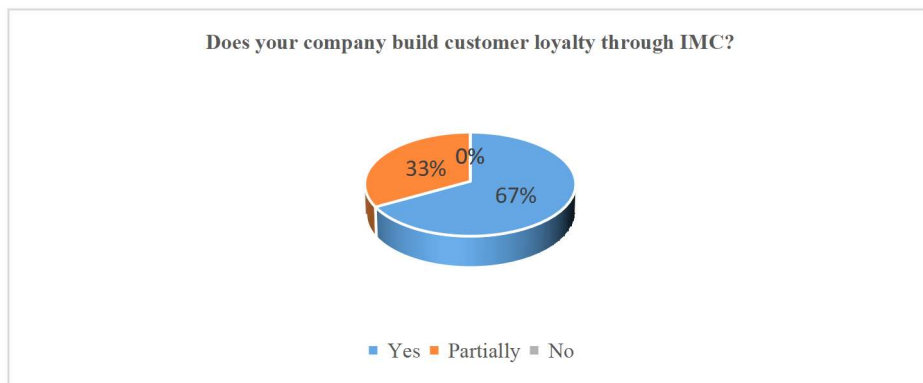


Chart 6. Percentage overview of building effective customer relationships through IMC

According to the obtained data, 67% of the respondents believe that integrated marketing communications build effective relationships with consumers and 33% of respondents believe that they have a partial impact on building effective relationships with consumers.

When asked what are the most important components of an IMC for building effective customer relationships:

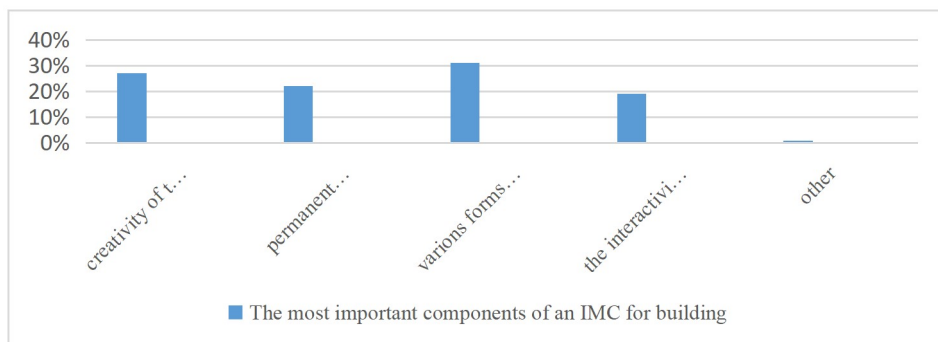


Chart 7. Percentage overview of the most important components of the IMC for building effective customer relationships

Based on the processed data, 31% of respondents believe that the most important component for building effective customer relationships are the various forms of sales promotion, 27% of respondents believe that the creativity of the promotional message is an important component, 22% of respondents consider it important component is

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permanent communication, 19% of respondents think that the interactivity of direct marketing is an important component and 1% of respondents answered with something else.

CONCLUSION

The companies in the Republic of Northern Macedonia are aware of the opportunities offered by the integrated marketing communications. In conditions when the competition is expressed on the market, the main factor for the success of the companies is the use of a combined model of communication. IMCs are a combination of forms that are used to inform consumers about the existence of the product, to remind them of their existence and to make them buy the product. The communication of the companies with the market should be part of a carefully planned and controlled communication program. With the correct combination of the forms of IMC, the company should create and permanently maintain communication with the final consumer. In order to be able to develop communication with consumers, the first thing that needs to be done is to determine for whom the message is intended. Once the target group to which we are targeting is determined, it is necessary to create a promotional message.

Some costumers when deciding what to buy, worry about the brend, some about the price, the color or the package, some react instantly and buy the product right at that time and some want lower prices and sales, some compare the product with the competitors, everything is important for making a right profile to the communication activities. It should be known that consumers are exposed to a large number of promotional messages, so the messages that are created should be long-lasting.

Based on the research, it is recommended to take full advantage of the possibilities for the application of IMC to establish long-term relationships with consumers. Each company, depending on the budget, should prepare a combination of different forms of IMC in order to be able to successfully target its target group.

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THE IMPORTANCE OF DIGITAL MARKETING FOR THE NON-PROFIT ORGANIZATION

Slavche Temelkovska Gjorgievska¹
Marijana Radevska

Abstract

Efficiency, consistency and speed are the foundations of the new digital age in which we live. This digital age is crucial for any small or large business organization, including for-profit organizations. The world is changing at a pace that does not allow it to fall behind the new trends it brings. The non-profit organization's humanity, confidence, effort and goals cannot be overstated and achieved without a proper marketing strategy. If traditional marketing has been a tool of success in the past, the 21st Century is more rigorous, bringing a new trend that requires a new strategy that targets every organization, especially non-profit, charities, to digitalisation. In the last few years, digital marketing has taken the throne of successful marketing, which has proven to be far more effective in properly targeting the invested funds, and the ROI is proof of return. Proper selection of people to whom nonprofits want to target their messages and goals, rather than wasting their resources makes digital marketing more of an important tool for any organization, emphasizing unprofitable organizations in a more cost effective way to reach out to your audience.

Keywords: Digital marketing, nonprofit organization, traditional, target, strategy, leads.

JEL classification: M30; M13

INTRODUCTION

Online marketing costs much less than, say, a direct campaign or a TV or radio ad, but low-cost is not same free. This may cause your your organization to focus on lower-cost marketing methods, maybe even forgoing traditional marketing methods for the most cost-effective online tactics. Digital marketing is more cost-effective than traditional marketing tactics. Non-profit organization, marketers are focused more on social causes rather than financial gain, and implementing digital marketing strategies will be essential to growing their organization. Non-profits are starting to realize the power of digital marketing methods to accomplish their goals and get the most mileage from their marketing budgets

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1. WHAT IS A NON-PROFIT ORGANIZATION?

A non-profit organization, as the name implies, is a special organization whose primary purpose is to promote a social, charitable cause before making a profit. cruelty, disaster relief, incite social cause and are often of public benefit. This type of organization is made up of a group of people who aim to provide services and common goods in a charitable, non-refundable way. Examples of such organizations are: hospitals, church universities, or other religious institutions, NGOs foundations, and ect.myth that follows these organizations is profit, ie the opinion that these organizations do not make a profit, which is completely wrong. Not-for-profit organizations make a profit, but the way they make it, the profit and purpose of that profit is different from the profits that profitable organizations use. Often this type of organization is also known as foundations. Examples of successful non-profit organizations around the world are: The Bill and Melinda Gates Foundation, The Nature Conservancy, GGIP, Red Cross, Unesco, Global Givings, and here we have the Red Cross of the Republic of Northern Macedonia.

Profitable organization

Every business community, an entity whose primary purpose is to generate profits from regular activity, or regular business, and the primary goal is to increase the wealth of the organization's owners is called a profitable organization. The profits gained from such business are either retained for business or are used for future purposes by the owners themselves.

The difference between a profitable and a not-for-profit organization

While profits are what make the difference between organizations at first glance, there are other differences that are best illustrated in the table below.

PARAMETER OF COMPARISON	PROFIT ORGANIZATION	NON-PROFIT ORGANIZATION
Meaning	A legal entity, which operates for earning profit for the owner, is known as For-profit or Profit organization.	A non-profit organization is a legal entity, which operates for serving the society as a whole.
Motive	Profit motive	Service Motive
Form of organization	Sole proprietorship, Partnership firm or company	Club, Trust, Public hospitals, society, etc.

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PARAMETER OF COMPARISON	PROFIT ORGANIZATION	NON-PROFIT ORGANIZATION
Management	Sole proprietor, partners or directors, as the case may be.	Trustees, committees or governing bodies.
Source of revenue	Sale of goods and services.	Donation, subscription, membership fee etc.
Commenced through	Capital contributed by the owners.	Funds from donation, subscription, government grant and so on.
Financial Statement	Income statement, Balance Sheet and Cash flow statement	Receipt & Payment A/c, Income & Expenditure A/c and Balance Sheet.
Money earned over and above	Profit, is transferred to capital account.	Surplus is transferred to capital fund.

1

2. DIGITAL MARKETING IN A NONPROFIT ORGANIZATION

To promote a non-profit organization you need branding and marketing that reaches your target audience, with the right message at the right time. . When it comes to marketing the first idea any organization comes up with is traditional marketing, printing billboards, radio and TV commercials.

In the age of digitalization, this type of (traditional) marketing is increasingly moving away from the ta²rget audience, and the message that an organization wants to convey is not always sure to reach the target audience. Traditional marketing requires resources that are unattainable for nonprofits, and the result is immeasurable, which is why more and more of these types of organizations are moving away from traditional marketing and starting to take advantage of digital marketing. There are many channels

¹ Table 1 Digital marketing strategies for Non-Profit Organizations Guideigital marketing strategies for Non-Profit Organizations Guide

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where you can properly transfer marketing content including print ads, video campaigns, emails, online ads, social media organic and paid content and much more. Proper use of digital marketing in a non-profit organization is actually a combination of social media, promotional material, the right target group, and of course choosing the simplest way of passing the message to the audience.

3. DIGITAL MARKETING TOOLS IN A NONPROFIT ORGANIZATION

Email Marketing - The best way to reach as many supporters and potential donors for your organization as possible is this kind of marketing. Whether it's donations, maintaining your newsletter, letting your volunteers know about the latest events or getting started fundraising campaign this type of marketing is the easiest and simplest. Proper content and CTA button is the golden rule for this type of marketing. Such messages are not sent more than four times a month. In the process of email marketing automated emails sent through MailChimp, the platform / service makes our job much easier and faster.

Social media The world has completely changed since the advent of social media. A great tool for charity and non-profit activities, not only because we can communicate with the audience much easier but also to convey our message, reach more people and at the same time the same platforms (platforms such as Facebook, Twitter, Instagram and Pinterest), we can add buttons to collect donations, or we can bring the same audience to our website, etc. If our organization offers activities, we can't offer them on social media, but we can present those activities to audiences and make it easier for them to search.

Website. The site is what is essential for any one business or even a kind of organization. The site should be clear, fast and easy to navigate, as well as any of the above materials. Certainly this site should be mobile optimized.

Landing page Special web pages dedicated to a single campaign or a single donation purpose. A site without much information, short, clear and concise for a given purpose. Parallel to each donation on the site we collect links (potential users of our service).

Content

The quality of the content through which the message is transmitted is most important. Content is not just text but also relevant images that best represent the purpose of your organization. Image is one of the ways in which you can positively influence your audience. If your goal is to tell the story of how your nonprofit is doing well, do it the right way, so well that others will want to be part of that story. Digital marketing involves optimizing mobile content. Every single activity you do through digital marketing brings you more and more quickly to your audience as well as raising confidence in the organization.

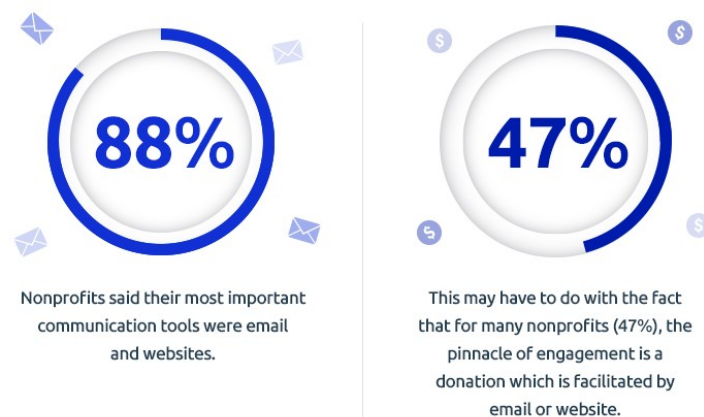
An example of digital marketing in a profitable organization

In a survey conducted in the US, the main purpose was to determine whether nonprofits should approach people, showing more about them and the activities they

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undertake, or whether they needed to be digitized. The results of the survey showed that people want to know more about the activities undertaken by the organizations, and as an example of such a humanitarian organization the people most interested in are the Red Cross.

Email and websites still rule:



1

Chart1

Source: [https://buffer.com/library/social-media-nonprofits/#:~:text=Nonprofits%20overwhelmingly%20\(88%25\)%20said,is%20a%20donation%20\(47%25\).](https://buffer.com/library/social-media-nonprofits/#:~:text=Nonprofits%20overwhelmingly%20(88%25)%20said,is%20a%20donation%20(47%25).)

A successful example of using digital marketing in a non-profit organization is the American Red Cross. That's why the American Red Cross, as a nonprofit charity, has shifted all its marketing from traditional to digital, and the results have proved impressive. Every activity they undertake, every campaign that follows, has digitized graphics and statistics that not only keep their followers up but also increase them daily, while subconsciously educating their audiences. Their example of digital marketing is a great example of how a marketing campaign helps a variety of topics covered by the Red Cross. The American Red Cross has used all of the above tools as a combination of social media, Internet communications, advertising and promotional material clearly targeted at a specific audience.

¹ [https://buffer.com/library/social-media-nonprofits/#:~:text=Nonprofits%20overwhelmingly%20\(88%25\)%20said,is%20a%20donation%20\(47%25\).](https://buffer.com/library/social-media-nonprofits/#:~:text=Nonprofits%20overwhelmingly%20(88%25)%20said,is%20a%20donation%20(47%25).)

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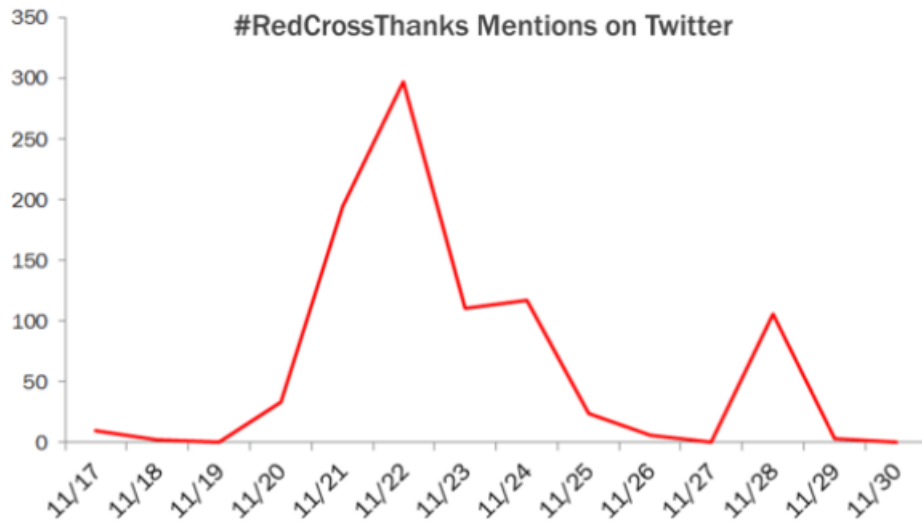


Chart 2

Source : <https://growthhackers.com/articles/digital-marketing-strategies-for-non-profit-organizations-guide>

Apart from all these tools, the most notable in every marketing activity of the American Red Cross is the use of a hashtag, which attracts the attention of the audience, especially on social media, and at the same time raises awareness of certain topics, holidays, etc. The celebration of #NationalIceCreamDay, how to bring awareness to #FireSafety. This digital "trap" called #ChooseYourDay has helped thousands of people find a day to donate to specific locations. At the same time, every year the American Red Cross creates a catalog of digital holidays.

The US Red Cross uses this catalog with the sole purpose of encouraging people to donate and volunteer. It is made in an inspiring, well-designed way for every single activity with an informative piece about it that gives an explanation of what the campaign is about, what the funds are intended for, and so on. 'Give something meaningful', an effective marketing campaign that besides the core component of an effective marketing campaign has an educational purpose, to inform people about the activities and goals, while making people donate to know how to help in disasters and how to prepare for emergencies.

This tool helps people to be sure in the Red Cross that the funds they donate have been reassigned. The catalog also includes multiple calls to action, allows donors to send holiday greetings to announce their gifts, and so on.

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4. DIGITAL MARKETING IN A NON-PROFIT ORGANIZATION IN THE REPUBLIC OF NORTHERN MACEDONIA

In the Republic of Northern Macedonia, digitization is taking a big toll. Most often it is for larger profitable organizations, but slowly the unprofitable are beginning to digitalize. One such example is the Macedonian Red Cross. The Macedonian Red Cross is at the very beginning of effective digitalisation. Its assets are far smaller than the American ones, but the impact it builds on social networks slowly but surely raises public awareness and at the same time alters the perception of it. which means the Red Cross and the activities it undertakes.

Most of the tools that are characteristic of digital marketing Red Cross first used this year in a digital marketing campaign to raise awareness among drivers. It is impressive that with a minimal budget, it succeeds in slowly imposing on its audience, and is also using it carefully. elements of the American Red Cross as the hashtag #yourignorancemeanslife. Every activity she sets out to raise awareness, be closer and transparent to her audience, but also educational.

With the optimization of its website, the constant unpaid posts on social networks, the magazine's web publishing with daily activities, the younger generation understands the importance of the Red Cross, is educated and becomes active. Successful World Digital Campaigns UNICEF's "Likes Don't Save Lives" campaign that has raised awareness and increased the number of vaccinated children to 637,000

Charity Water

Charity Water has achieved success with powerful content and video. They have built a brand and at the same time initiated an initiative to preserve water quality and its importance.

St. Jude Children's Research Hospital An organization with a lot of research and inspirational content on their site that helps and what their goals are.

CONCLUSION

The world is changing today at a fast pace that requires a unique digital marketing strategy different from the traditional one that was the definition of marketing for any type of organization. The world today is completely tech-savvy so every single business, no matter its size, needs brand aversion, global richer and of course performance reporting. The effect that digital marketing gives is more effective than traditional, implementing specific tactics that are more effective, and perhaps cheaper. With basic use of email marketing, social media, or some other elements of digital marketing we can much more easily and quickly reach our target audience. Digital marketing in the age of technology is the easiest and fastest tool for faster delivery of the organization's message to the target audience. Initiatives like SEO, blog, social media, landing page, Google ads, Google analytics are among the many tools that help in effectively delivering information to non-profit organizations to the public. Nonprofit organizations are the ones who face directly the huge opportunity, the challenge that digital marketing offers them away from traditional marketing, directing their budget to be used properly in digital, and expecting the results of their investments.

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The last few years the funds that we have invested in are increasingly focused on digital marketing because it gives us faster access to the target group our goals are focused on and of course - return on funds Smaller barriers to entry, easier access to audiences, and message delivery digital marketing has proven to be more successful than traditional marketing.

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**BUSINESS EDUCATION AND QUALITY ASSURANCE,
POLITICS AND LEGAL ASPECTS OF EDUCATION,
INFORMATION TECHNOLOGY, OPEN TOPICS RELATED TO
BUSINESS EDUCATION**

**NEW TECHNOLOGIES AND THE GROWTH OF INFORMATION:
ALTERNATIVE PATHS TO EDUCATION IN DEVELOPING
COUNTRIES**

**Ana Sekulovska – Jovkovska¹
Elizabeta Tosheva**

Abstract

During the COVID-19 outbreak, when all human activities have moved from physical to virtual society, Western Balkan countries (WB6) had seen tremendous success with online learning platforms. The way forward was to promote remote learning and the use of online learning platforms, to continue supporting students to gain access to the necessary equipment for remote learning, and to provide teachers with digital learning opportunities on how to teach online, to share their resources and to give and receive feedback. A structural challenge that gains significance is the fact that two-thirds of people with a higher education level have no previous experience with teleworking, only about one third of individuals aged 25-64 with higher formal education have worked from home at least once in 2018, and only one-fifth used the Internet for the job when working from home.

The pandemic hit the WB6 in the midst of reacceleration of economic activity and promising economic outlook for 2020. The outbreak “enforced” the WB6 countries to work from home, for jobs where this is applicable. Hopefully, these countries will learn something from this and will transition to virtual universities to protect the continuity and the integrity of our students' education and degree requirements.

The objective of this paper is to analyze alternative paths to education through the prism of online learning readiness. Student attributes required to engage in distance learning (e.g. knowledge of technology in use, time management, organization, selfmotivation, online technology interactions, etc.) vary greatly from student to student, so that large institutions are implementing efforts to address varying levels of readiness and preparedness that may influence student success. As central and local governments in developing countries continue to work on the implementation of educational policies and programs for the integration of information and communication technologies (ICT) in education, the need to assess and evaluate the extent to which such technologies are effective is increasing.

Keywords: online education, education, educational technology, universities, developing countries, online learning readiness.

JEL classification: I21; I28; O32

INTRODUCTION

E-learning has become one of the main factors for revolution, during the first decade of the 21st century, in the process of learning. That is because the process of e-learning

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can offer an approach for flexible and effective learning. Information and Communication Technology (ICT) is a potent force in driving economic, social, political and educational reforms (Lustigova and Lustig, 2008). Developing countries, cannot afford to stay passive to ICT if they are to compete and strive in the global economy. The health of the economy of any country, poor or rich, developed or developing, depends substantially on the level and quality of the education it provides to its workforce. Education reform is occurring throughout the world and one of the tenets of the reform is the introduction and integration of ICT in the education system. The successful integration of any technology, like ICT, into the classroom warrants careful planning and depends largely on how well policy makers understand and appreciate the dynamics of such integration. This paper analyzes alternative paths to education through the prism of online learning readiness. As distance education and online learning continue to grow in precedence and popularity in institutions of higher education (IHE), researchers continue to study how to ensure online learning is effective. Although many studies continue to focus on mode comparison of online and traditional courses, attention should be refocused on predecessor variables, such as student characteristics, that can be influenced through intervention to increase online learning success.

One important area of analysis is students' readiness to be successful in an online learning environment, which is often mentioned as online learning readiness. Online learning provides students with flexibility in where and when they learn.

Students are afforded more control in when and how they complete course learning activities, which benefits students who are unable to attend traditional programs because of external influences.

However, the online medium and this elasticity requires different attributes of students such as knowledge of technology use, time management and organization, and interaction using online technologies.

1. HOW EDUCATION SYSTEMS IN THE WESTERN BALKANS RESPOND TO COVID-19?

The impact of the pandemic stems mainly from school closures and the transition towards distance learning. School closures affect over 91 percent of students in the world and as a result 1.6 billion students do not go to school. The current closure of schools will result in learning losses for all students, although disproportionately hit students in a worse position who are more likely to give up or take it leave school early. These negative impacts will have both short-term and long-term implications. Economic growth may slow, human capital growth is likely to reduce or stop and most importantly, the existing gaps in learning equality will widen. The Western Balkan countries have combined preventive measures to limit spread of the virus with

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mitigation measures to ensure continuity of education. All countries in the region, they quickly started closing schools and adopting other preventive measures since the first cases of COVID-19 were confirmed (March 9-13, 2020). All Higher education institutions in the Western Balkans are closed and thus directly affected 2.7 million students from lower levels of education. To ensure continuity of learning while schools are closed, countries have introduced various ways of teaching and learning distance learning in emergencies. Distance learning measures cover a whole range of teaching mechanisms: TV or radio shows, resources placed on special websites, online classes and mobile student contacts phones. Most often, countries chose a combination of methods. In the region, to reach most students, the authorities relied heavily on television broadcasts of recorded lectures. However, in order to be able to offer more TV lectures, the number of subjects and teaching time. On special platforms and teachers' websites they were provided with resources to adapt to distance learning. Some countries do equipping the online learning system has accelerated these efforts to better respond to current circumstances. Countries have taken steps to mitigate non-compliance and losses in learning for the most vulnerable students (The Government of the Republic of Serbia, 2019), and consider proposals for changing the school calendar, adjusting the days off and providing information equipment for students. Despite the quick actions through the whole region, the closure of schools and less effective forms of learning at a distance will inevitably lead to learning losses and will increase inequality. The transition to online learning in large scale is very difficult because very complex even in the best of circumstances (World Bank, 2020). In pandemic, the transition to learning at a distance in emergency conditions was sudden. Readiness of countries to provide quality education for all using the modalities of distance learning and online learning is central to assess how the Covid-19 response will affect the accumulation of human medium-term capital.

Students in the Western Balkans have less access to a high-speed internet connection than their peers in the EU, and regional data show a clear challenge to equality. On average, in the Western Balkans, about 60 percent of households have sufficient high-speed internet, which satisfies the requirements for online learning defined as 10 Mbps or higher (National Electronic Communications, 2020). However, it should be noted that 10 Mbps is lower than the standards acceptable in US (25 Mbps) and EU (30 Mbps). Using these higher conditions, most households in the region are not equipped with high speed internet. Even at 10 Mbps, there are big differences within the region; only 35 percent of households in Bosnia and Herzegovina have that much internet speed, compared to 48 percent in North Macedonia and 64 % in Serbia. There are also a large number of students in the Western Balkans, about 22 %, who say they have a small, or no internet access at home, compared to just 11 % in the EU.

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2. ONLINE LEARNING READINESS IN WESTERN BALKANS COUNTRIES

Largely, instructional and institutional practices are implemented at IHEs to promote student success in online courses and programs. Students who enroll in online courses have varying levels of readiness and preparedness (e.g., online work skills proficiency, selfdirectedness) that likely influence their success (grade, course completion).

Motivated by the prospect of greater economic, social, educational and technological gains, both developing and developed countries, are bringing about education reform, with a clear focus on ICT integration in education. Countries have been investing considerably in terms of money, expertise, resources and research to integrate technology in education as smoothly as possible so that the classroom environment is made more conducive for enhanced teaching and learning. Nations have recognised not only the positive effects of technology in education, but also the pivotal roles that it plays in securing jobs in the competitive job market of the 21st century. Few statistics are available from developing countries. Much research in the area of technology integration in education has been conducted in technologically advanced countries, but little in the so-called developing or third world countries.

Maintaining effective learning through distance and online means, especially in the months as long as the pandemic lasts, it will also depend on whether households have information resources available for educational purposes. On average, one in ten households in the Western Balkans with students does not own a computer; in Albania it is almost a third more, 28 percent. Possession of information resources is very different from their use for education. Although on average 86 percent of students say they have access to a computer they could use for school work, the percentage is likely to be lower in conditions of limited mobility (ETF, 2017).

There is competition in using those resources (for example, working from home, education of siblings). It is more significant that the socio-economic gap in access to ICT can be large. Apart from the limited connectivity, the availability and quality of digital contents are also at stake for country readiness. Although there is no country data, there are clear indications that teachers in the Western Balkans do not have long been willing to support distance learning and online learning. All Western Balkans countries recognize the importance of digital skills even though they have taken different approaches towards building these skills in teachers. Serbia, for example, has a specific curriculum digital skills program for teachers and checks their ability to use digital technologies for student assessment (European Commission, 2019). In Montenegro and North Macedonia, digital skills for teachers are part of the general criteria for competencies of teachers, while this is not the case in Albania and Bosnia and Herzegovina. Even in the EU, where digital connectivity is more common in schools than in the Western Balkans, only 20-25 percent of students are taught by teachers they are confident in work with technology.

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The Network Readiness Index (NRI) (Portulans Institute, 2020) is one of the leading global indices on the application and impact of information and communication technology (ICT) in economies around the world. In its latest version of 2020 the NRI Report maps the network-based readiness landscape of 134 economies based on their performances in four different pillars: Technology, People, Governance, and Impact. According to Portulans Institute, the rank of North Macedonia in Network Readiness Index is 67th out of the 134 economies included in the NRI 2020. Its main strength relates to Governance. The greatest scope for improvement, meanwhile, concerns Impact (Figure 1).

To study the readiness and preparedness of students, instrumentation was developed from a review of previous instruments with the goal of developing a reliable, valid, and comprehensive instrument. Three areas were derived from the research based on the nature of online learning: (1) online, requiring technology access, skills, and efficacy; (2) flexible, requiring the students be able to self-manage their learning through discipline and control; and, (3) mediated, requiring students to be able to interact and communicate online with others. Within these three general areas of online learning, six (6) measures were developed, including online work skills, social technology familiarity, online learning efficacy, self-directedness, organization skills, and socialization.

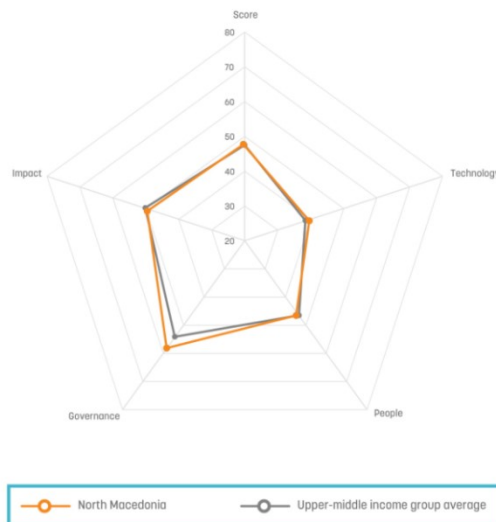


Figure 1. Performance of North Macedonia against its income group and region, overall and by pillar

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The correlation analysis of the Network Readiness Index (NRI) and the Online Learning Readiness of WB6 countries shows that countries that have adopted ICT to a larger extent, better perform in Online Learning Readiness.

CONCLUSION

Which student characteristics of online learning readiness predict student outcomes in an online course? Online students' learning, satisfaction, and academic performance are positively associated with their online learning readiness (online work skills, social tech skills, online learning efficacy, self-directedness, organization, and socialization) (Joosten & Cusatis, 2020).

E-learning is a good opportunity for Universities to up-skill their employees and students to meet the demands of lifelong learning but the implementation of it needs to be well prepared and managed because it takes often high investment costs. That is why it is important for an academic to know if it is e-ready. The paper shows that e-readiness is a helpful measure for organisations to determine their state-of-readiness to employ the benefits of technology enhanced learning for their employees.

Interventions should be identified to increase student preparedness and readiness in these areas to increase student success in online courses. Also, organizational skills and self-directedness should be further investigated.

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**MODELS FOR SOFTWARE VERIFICATION: PROVING
PROGRAM CORRECTNESS**

**Boro Sitnikovski¹
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Biljana Stojcevska**

Abstract

The accuracy of these systems represents the property that they are working as the users expect. Very often, these computer systems give inaccurate or wrong results. However, designing correct computer systems is a complex and expensive task.

There are several ways to deal with this problem. In practice, the most common approach is to design and perform tests. However, these tests can only detect a specific set of problems. Another (more expensive) approach is to do a formal proof of correctness for a given code. This proof of correctness is, in fact, mathematical proof that the software works according to given specifications. Mathematical evidence covers all possible cases, and it is this evidence that confirms that code does exactly what it is intended to do.

There are several platforms and mathematical models for software verification. Formal verification is based on mathematical proofs, and these platforms are divided into manual and automatic. Among the manual proof verification software, some of the most known ones are the programming languages Coq (based on type theory), Idris, etc. These are manual theorem provers, as the proof must be handwritten. Another family of theorem provers is the so-called automatic provers, which use algorithms to automatically deduce a given theorem. The programming language Dafny is one of their best representatives.

This paper aims to show the state-of-the-art tools used today.

Keywords: software verification, software verification models, software verification platforms.

JEL classification: I21; I28; O32

INTRODUCTION

Software is getting more complex and it's become a crucial part of everyday life. Users expect the systems to function at all times, according to their needs. However, in some cases the software may not function properly - this is called a software bug. Therefore, software bugs represent a fault in a computer system. As software grows every day in complexity, the probability that it will have bugs increases. Software bugs, depending

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on the problem that the software addresses, can cost millions. Therefore it remains a crucial part to find and address most bugs before the software is pushed into production.

Manual testing of software to find bugs is one major area for testing. Another major area of software testing is formal verification – testing for correctness. Formal verification itself can be partially automated, but the bulk of the work remains manual.

In terms of formal verification, there is already a lot of research done by various institutions such as Microsoft Research and the French Institute for Research in Computer Science and Automation(INRIA). More specifically, the programming language Dafny is developed by Microsoft Research, and the programming language Coq is developed by INRIA. These two programming languages have one goal – to make it easier to detect bugs in software by using formal verification methods.

Several formal systems are usable for formal verification. One of them is known as Hoare logic, which the programming language is Dafny is based upon. Another commonly used formal system is type theory, which the programming language Coq is based upon.

1. THEORETICAL BACKGROUND

Formal verification's roots come from mathematics, and they date back to the beginning of the 20th century.

Russell's paradox represents the contradiction of the hypothesis $R \in R$ such that $R \in \{S: S \notin S\}$. In both cases $R \in R$ and $R \notin R$ – thus there is a contradiction.

As a response to Russell's paradox, Bertrand Russell himself proposed type theory as a solution (Russell, B., 1903). Type theory assigns a type to every term, ensuring that the problem of self-referencing sets is resolved with the usage of type hierarchies. This can be seen as the birth of type theory.

While working on discovering new foundations for mathematics, Alonzo Church introduced the lambda calculus in the 1930s (Church, A., 1936). Independently, a system with a similar power of expressiveness, the Turing machine, was introduced by Alan Turing in 1936 (Turing, A.M., 1936).

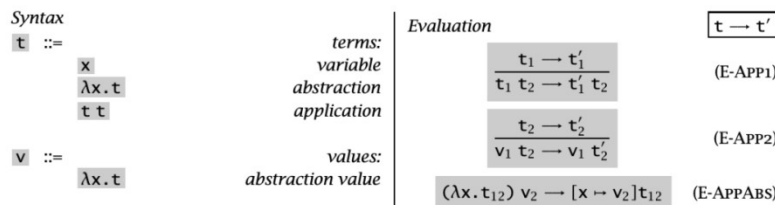


Figure 1. Syntax and evaluation rules of the lambda calculus (Pierce, B.C., 2002)

It was later shown that both lambda calculus and the Turing machine are Turing complete – they have the same computational power. Around the same period, it

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was also shown by Stephen Kleene and Kurt Gödel that general recursive functions have the same power of expressiveness (Kleene, S.C., 1936).

In later years, more advanced type theories were developed. More specifically, in 1940, Alonzo Church formulated the simply-typed lambda calculus (Church, A., 1940). This is a more restricted version of the original lambda calculus, and as such is not Turing complete.

Table 1. Type rules for the simply-typed lambda calculus

Rule Name	Formula
Var	
Lam	$\frac{\Gamma, x: \tau \vdash x: \tau}{\Gamma, x: \tau_p \vdash t: \tau_r}$
App	$\frac{\Gamma \vdash (\lambda x: \tau_p. t): \tau_p \rightarrow \tau_r \quad \Gamma \vdash t_f: \tau_p \rightarrow \tau_r \quad \Gamma \vdash t_p: \tau_p}{\Gamma \vdash t_f t_p: \tau_r}$

Between 1930 and 1970, one of the main developments concerning formal verification was the Curry-Howard correspondence. This correspondence represents the interpretation of proofs-as-programs and formulae-as-types (Wadler, P., 2015). That is, proofs are represented by computer programs, and the formula they prove is represented by their corresponding type. This correspondence shows the connection between computer programs and formal proofs, and as such it represents the building blocks of programming languages such as Coq.

Table 2. The Curry-Howard correspondence

Mathematics	Programming
Theorem	Type
Proof	Program
Correctness verification	Type checking
Cut elimination	Computation

In the meanwhile, in the late 1960s, Hoare logic was developed as a means to reason rigorously about the correctness of computer programs (Hoare, C.A.R. 1969). Hoare logic is independent of type theory and relies purely on mathematical representation – the Hoare triple – which is a triple that describes how a piece of code alters a state before and after its execution.

2. DAFNY/HOARE LOGIC

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Dafny is a programming language that allows the expression of formal proofs with the usage of preconditions, postconditions, and invariants (Leino, K.R.M., 2010). As such, it is based on Hoare logic. It was developed by Microsoft in 2009 and is used in the academy and the industry.

As mentioned, the main component of Hoare logic is the Hoare triple $\{A\} B \{C\}$, in which it describes that before a command B executes, it has the state A – the precondition and that before a command B executes, it has the state C – the postcondition.

Table 3. Rules in the Hoare logic

Rule	Formula
Empty statement	$\{P\} \text{skip} \{P\}$
Assignment	$\{P[E/x]\} x := E \{P\}$
Composition	$\frac{\{P\} S \{Q\} \quad \{Q\} T \{R\}}{\{P\} S; T \{R\}}$
Conditional	$\frac{\{B \wedge P\} S \{Q\} \quad \{\neg B \wedge P\} T \{Q\}}{\{P\} \text{if } B \text{ then } S \text{ else } T \text{ endif } \{Q\}}$
Consequence	$\frac{P_1 \rightarrow P_2 \quad \{P_2\} S \{Q_2\} \quad Q_2 \rightarrow Q_1}{\{P_1\} S \{Q_1\}}$
While	$\frac{\{P \wedge B\} S \{P\}}{\{P\} \text{while } B \text{ do } S \text{ done } \{\neg B \wedge P\}}$

The Hoare rules are based on the Hoare triple. For example, the consequence rule specifies that given two programs, $\{p\} S_1 \{r\}$ and $\{r\} S_2 \{q\}$, we can compose them and conclude $\{p\} S_1; S_2 \{q\}$. As an example, we can consider the following two programs:

$$\{x + 1 = 43\} y := x + 1 \{y = 43\} \quad \text{Eq. 1}$$

$$\{y = 43\} z := y \{z = 43\} \quad \text{Eq. 2}$$

Using the Composition rule on Eq. 1 and Eq. 2, we can conclude the program in Eq. 3:

$$\{x + 1 = 43\} y := x + 1; z := y \{z = 43\} \quad \text{Eq. 3}$$

As we have shown, this pattern of reasoning is crucial to building correct programs. Given that Dafny is based on the same theory, we can construct the example program in Dafny.

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Dafny will automatically verify the proof (See Figure 2: Composition in Dafny). It is sufficient that we only present the preconditions and the postconditions.

```

0 references
method first (x : nat) returns (y : nat)
  requires x + 1 == 43
  ensures y == 43
{
  y := x + 1;
}

0 references
method second (y : nat) returns (z : nat)
  requires y == 43
  ensures z == 43
{
  z := y;
}

0 references
method third (x : nat) returns (y : nat, z : nat)
  requires x + 1 == 43
  ensures z == 43
{
  y := x + 1;
  z := y;
}

```

Figure 2: Composition in Dafny

For automatic verification of proofs, Dafny relies on the Z3 theorem prover (De Moura, L., and Bjørner, N., 2008). Z3 is an efficient theorem prover – an SMT solver, developed by Microsoft in 2012. It has a wide range of applications both in the academy and in the industry.

$$a \wedge b = \neg(\neg a \vee \neg b) \quad \text{Eq. 4}$$

Z3 uses a similar syntax to Lisp, and we will show a brief example of how Z3 can automatically prove the DeMorgan rule from Eq. 4:

```

(declare-const a Bool)
(declare-const b Bool)
(define-fun demorgan () Bool
  (= (and a b) (not (or (not a) (not b)))))
(assert demorgan)

```

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3. COQ/TYPE THEORY

Coq is a programming language that allows the expression of formal proofs with the usage of types (Barras, B. et al., 1997). As such, it is based on type theory. It was developed by INRIA in 1989 and it is heavily used both in the academy and in the industry.

As mentioned, the main component of type theory is that to each term, a type is assigned. For example, 3 belongs to the type of natural numbers Nat , and is represented as $3 : Nat$.

Table 4. The Brouwer–Heyting–Kolmogorov interpretation of mapping proofs to programs

Logic	Programming
Conjunction \wedge	Product type
Disjunction \vee	Sum type
Implication \rightarrow	Function type
Universal quantification \forall	Generalized product type Π
Existential quantification \exists	Generalized sum type Σ
True formula	Unit type
False formula	Bottom type

To understand how type theory may help with the automation of mathematical proofs, we will show an example.

Consider the product type $A \times B$ (the notation \times represents the product type). Next, we will look at what kind of functions we can extract from this type.

One sensible function would be fst (short for “first”), with a corresponding type $A \times B \rightarrow A$.

$$fst : A \times B \rightarrow A, fst(a, b) = a \quad \text{Eq. 5}$$

Similarly, we can construct a function called snd (short for “second”), with a corresponding type $A \times B \rightarrow B$.

$$snd : A \times B \rightarrow B, snd(a, b) = b \quad \text{Eq. 6}$$

Using (composing) Eq. 5 and Eq. 6, we can construct a third function called $swap$ which is of type $A \times B \rightarrow B \times A$. In other words, the function accepts a pair of the form (a, b) where $a : A$ and $b : B$ and returns a pair of the form (b, a) where $a : A$ and $b : B$.

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$$\text{swap} : A \times B \rightarrow B \times A, \text{swap}(e) = (\text{snd}(e), \text{fst}(e)) \quad \text{Eq. 7}$$

Thus, according to the Curry-Howard isomorphism, the function in Eq. 7 has a corresponding mathematical proof. Indeed, the type of *swap* corresponds to the proof of the commutativity of \wedge (Eq. 8).

$$a \wedge b = b \wedge a \quad \text{Eq. 8}$$

The implementation of this proof in Coq is shown in Figure 3: Proof of the commutativity of logical "and".

```
Inductive natprod : Type :=
| pair : nat -> nat -> natprod.

Definition fst ( p : natprod ) :=
  match p with
  | pair x y => x
  end.

Definition snd ( p : natprod ) :=
  match p with
  | pair x y => y
  end.

Definition swap' ( p : natprod ) :=
  match p with
  | pair x y => pair y x
  end.

Notation "( x , y )" := (pair x y).

Theorem snd_fst_is_swap : forall (p : natprod),
(snd p, fst p) = swap' p.
Proof.
  intros p.
  destruct p.
  simpl.
  reflexivity.
Qed.
```

Figure 3: Proof of the commutativity of logical "and"

The commands such as `intros`, `destruct`, `simpl`, `reflexivity` belong to the tactical language of Coq – this is a high-level language that gets translated to lambda calculus terms when the program is executed. The reason for the existence of the tactics language is that lambda terms can sometimes be unreadable. The tactics language can also provide proof automation.

CONCLUSION

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This study summarized the state-of-the-art tools for software verification that are used today. We have shown that there are several theories for formal verification and that they differ in implementation and approach.

In this paper, presented were the programming languages Dafny and Coq, and there are many more that focus on formal verification and program correctness, to name a few: Agda, Idris, Lean.

Current research focuses on discovering new theories, as well as automating the construction of formal proofs and verification.

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MOTIVATIONAL FACTORS AFFECTING ENTERPRISES IN COVID-19 PERIOD

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Abstract

The Covid-19 period has many difficulties for entrepreneurs. Many entrepreneurs may struggle to adapt the emerging uncertain epidemic conditions to their entrepreneurial structure and business strategies. Enterprises are living structures and the importance of motivating employees for entrepreneurial success in Covid-19 epidemic period has become more prominent. In this respect, this study focuses on motivational factors affecting entrepreneurial decisions. In this study, the entrepreneurial facilities that are affected by the economic goals determined in line with their financial interests, factors of motivation that affect these entrepreneurial activities and entrepreneurial motivation theories will be discussed. The contributions of entrepreneurial motivation to overcome the negative effects of the Covid-19 epidemic period will be mentioned. At the end of the study; in this new and unusual Covid-19 period, what kind of business practices and motivational tools should businesses do to facilitate on the purpose of meeting the needs of the entrepreneurial motivation will be presented in the light of some useful suggestions. In summary, in order to meet the new motivational needs in enterprises resulted in the Covid-19 epidemic, entrepreneurs should train their employees based on the performance expectations from them, which will ensure their adaptation to new conditions. Job descriptions should be clear and responsibilities should be well defined. Thus, role conflicts within the enterprise should be reduced as much as possible. Paying attention to the awards should be similar among colleagues who perform at the same level. Employees give fairness rather than the amount of the awards actually given so that entrepreneurs could easily ensure employees' motivation. As a result, fair performance entrepreneurship should be demonstrated within the enterprise to provide entrepreneurial motivation in Covid-19 period. It should not be missed that the employees of the enterprise set different values and give meaning on diversified personal rewards. Finally, entrepreneurs should notify well the employees' perception of the relationship between performance and rewards with a continuous and strict control mechanism in Covid-19 period. Entrepreneurs should make necessary changes in the functioning of the motivation model they apply within the enterprise according to new epidemic conditions and needs.

Keywords: entrepreneurs, Covid-19, business practices

JEL classification: Z00

INTRODUCTION

Everyone has various beliefs about the nature of human behavior. These beliefs include attitudes and valuations about why people work and how they achieve entrepreneurial goals. All beliefs have been learned by others as a result of interaction with the environment. With the satisfaction of human needs, these beliefs become stronger and settled.

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Entrepreneurs direct their attitudes and activities in the workplace according to the behavior of the employees. With their beliefs about employees, entrepreneurs develop strategies that will achieve both personal and entrepreneurial goals and determine rewards or punishments. The beliefs of entrepreneurs about people's behavior have formed the basis of principles and concepts of effective entrepreneurial practices. Employees are also influenced by the activities of entrepreneurship to fulfill these principles and concepts.

Enterprises that have achieved their entrepreneurial goals and entrepreneurial efficiency are those that have satisfied the personal needs of their employees. The effectiveness of their employees' performance often depends on personal motivation. But since people have different backgrounds, it becomes difficult to understand employees' behavior in a enterprise. In other words, as employee behavior will be influenced by the interaction between many employees in enterprises, it is very difficult to determine motivating factors affecting them. In order to achieve both personal and entrepreneurial goals, enterprises aim to satisfy the needs and expectations of their employees and to benefit from them in the most effective way by motivating their employees towards the goals of the enterprise.

1. MOTIVATION AND MOTIVATION PROCESSES

Motivation generally includes various personal and environmental factors that process the human desire to motivation; the more desire having a person the more an enterprise could ensure the continuation of the motivation.

Motivation is a concept comes from the Latin literature means to act or to encourage to act. Motivation derives from the English word: motivated. The term motivated is described as motive, motive of action. Motivation in short is the power that drives one person for a certain purpose. Motivation should be activating, impacting the entrepreneurial movement and human behavior through a positive direction.

A motivated behavior occurs in a more organized, more directed enterprises than the other enterprises. The vitality, energy expended, resistance to change and dispersion in doing this type of behavior shows that these behaviors are motivated by the duration of the continuity. For this reason, motivation is generally accepted as an entrepreneurial process that initiates, directs, maintains and even prevents a series of targeted human behavior. Goal oriented human behavior could be very diverse. This behavior may be daily activities buying food, going to work, training, and so on. Motivated human behavior could include many types of human behavior. Thus, many issues could be included in the scope of the concept of motivation. Besides, the definitions and practices may change accordingly to these diverse areas.

Motivation comprehends values, motives and needs, tensions or expectations of a human. Furthermore, motivation is an entrepreneurial process in which human

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behavior is determined, influenced and explained. In fact, despite the fact that motivation process is very complicated, many researchers try to make motivation process simple and have formed many useful simplified motivation models.

The basic concepts and elements of motivation process commonly consist of needs, expectations, behavior and feedback of people in line with the entrepreneurial goals. Motivation is a process that emerges from the mutual interactions of all these concepts. This process is based on the individual's needs, desires and goals of different severity. By these human factors impacting the human behavior, entrepreneurs could activate individuals and make them concentrate their energy in certain entrepreneurial goals and practices through motivation.

2. THE CONTRIBUTIONS OF MOTIVATION THEORIES TO ENTERPRISES

Among entrepreneurial theories analysing the human factor, human behaviour and human motivation in enterprises, Maslow (1987) with his theory of motivation and Herzberg (2005) with his motivation hygiene theory have significant researches and contributions to literature. Maslow (1987) has classified human needs in his book Motivation and Personality. Maslow has argued that there is a close relationship between human needs and human motivation and desire to work. Herzberg has listed the factors that increase and decrease motivation in an enterprise.

To maintain motivation in enterprises, businesses has a variety of tools such as money, training, appreciation, rewarding, perseverance to success, etc. for employees to behave in line with entrepreneurial goals and business strategies. These motivational tools allow employees to become more enthusiastic and desirable to duties of their job. So that one of the most important issues of human resources entrepreneurship could be regarded as motivation entrepreneurship in enterprises.

In this section, after summarizing the main motivation theories developed by researchers, this study discusses the motivational tools that can be applied to employees in Covid-19 period. This study has emphasized that an entrepreneur who perceives the psychological and social needs of the employees within and outside of the enterprises properly could improve the performance of the enterprise in Covid-19 period. For this reason, it is extremely important for enterprises to learn and practice motivation theories in their business facilities.

According to motivation theories, the entrepreneurs should pay attention to understanding and finding the factors that lead a person to act in certain directions (Deci and Ryan, 2010). Hence, entrepreneurs could increase the added value of these factors based on the goals of the enterprise and manage them better (Ramlall, 2004). Three important motivation theories are Maslow's Hierarchy of Needs Approach, Herzberg's Double Factor Theory, McClelland's Need for Success Theory (Gopalan et al.,2017).

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Maslow (1987) is one of the first research to examine motivation. Maslow (1987) has classified human needs into five categories. The human needs have been grouped hierarchically and after meeting the lowest needs such as eating, sleeping etc., humans have stepped up towards the upper level needs.

Maslow (1987) has mentioned physiological needs which are the basic needs that people are born with a desire. After the physiological and security needs, the social needs of the human have been appeared (Udechukwu, 2009). These social needs could be loving, being loved, belonging to a group, affection, helpfulness, etc. Such needs could be included as an example to social needs category (Cao et al., 2013).

People desire to be respected besides loving and being loved. After people meet their basic physiological and safety needs, and then their needs for love and belonging, recognition, social status and status, achievement, appreciation, respect, etc. they show an interest in needs of the kind (McLeod, 2007). Maslow classifies the needs in this group as needs to be respected which is related with a person self-esteem (Wahba and Bridwell, 1973).

The individual who has met his physiological and security needs and other specified needs, needs to realize his ideals and abilities at the top level (Ozguner and Ozguner, 2014). In this top category, the person places more emphasis on realizing the ideals, achieving and enjoying the ideals (Kaur, 2013). This hierarchy of needs illustrates that meeting these human needs could provide kind of motivation to people (Gambrel and Cianci, 2003). Only the person who meets certain level of needs could be motivated for upper levels of needs and could pass to the other needs category (Taormina and Gao, 2013).

Human needs are endless, unlimited and only depend on human imagination. Imagination differs from one person to another so the motivational needs too. The crucial thing for enterprise success is to get people to work harder by using the right entrepreneurial motivational tools that meet full satisfying needs of people.

Another motivational theory has been developed by Herzberg (Sachau, 2007) called as Motivation Hygiene Theory. There are two factors. Motivational factors could be success, recognition, appreciation, the nature of the work done, having authority and responsibility, opportunities for advancement and promotion, etc. (Ghazi et al., 2013) and hygiene factors could be business strategies and entrepreneurial issues, work environment, salaries, level of serenity in private life, relationships between the top and bottom in the entrepreneurial structure, etc. in this theory (Lundberg et al., 2009). The motivational factors could improve the desire to work. While there is a lack of motivational factors, people become reluctant to work and unwilling to complete their own responsibilities (Bassett-Jones and Lloyd, 2005).

On the other hand, when hygiene factors are enough in working environment, job satisfaction may increase and so hygiene factors could motivate employees to work (Alshmemri et al., 2017). The hygiene factors are not appropriate such that the office is

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not in good condition or the employee has some troubles in his family; motivation may be low and if the hygiene factors would not be regulated, the performance and the efficiency levels could be affected negatively (Dartey-Baah and Amoako, 2011). According to Herzberg argues that if the hygiene factors are appropriate enough for the employees, it will be motivating and have a positive effect on business success as a whole (Smith and Shields, 2013).

The other motivational theory has been developed by McClelland (Ball, 2012). McClelland has argued that people concern with some needs other than Maslow and Herzberg have mentioned in their research models (Fisher, 2009). As long as these needs have been satisfied; employees could be motivated as aimed. Unlike Maslow, McClelland focuses on three types of human needs: Need for success, need to have social relationships and need for power (Rybnicek et. Al, 2019). These self-actualization needs may describe as the needs for social relationships. People desire to be with other people and share their feelings and thoughts with them. People also have needs for self-improvement. They desire to have feeling of achieving success, being recognized and accepted from other people etc.

3. ENTREPRENEURIAL MOTIVATION IN COVID-19 PERIOD

Motivation depends on the expectations of employees about the job. Businesses set some performance goals to their employees in order to make them reach and achieve as a result of expected efforts. Individual performance is closely related with company goals as much as with the expectations of the employees. The performance results to be obtained as a result of their performance. Thus in Covid-19 period, if the expectations about performance results have been reflected the reality personal performance could be as aimed and planned, the consistency of goals will push employees to work more and perform in a most effective manner (Gawronski, 2012). So the consistency and the realizability of performance targets will be a motivating factor in enterprises (Lunenberg, 2011). On the other hand, when companies have over expectations that there is no possibility to their employees could reach due to performance result will be negative, it will be so hard to motivate employees to work more and efficiently after negation especially in Covid-19 epidemic period.

On the other hand, conditioning (Holland, 1984), one of the most practical motivational tools, could be used as a motivation tool in order to enable businesses to perform successful business activities in Covid-19 epidemic period. The manager who has decided to use conditioning as a motivation tool should pay attention to the following matters. Entrepreneurs should define clearly and strictly desired and undesirable behaviors for the enterprises. Such behaviors should be announced by the upper level entrepreneurship. Entrepreneurs also should reward the right performance results whenever possible and necessary. All concerns and demands of employees

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should be responded immediately by entrepreneurs in order to motivate them in Covid-19 obscure environment. A long intervening time should be reduced to increase the impact of the accomplished result on behaviors of employees.

Another motivation tool could be waiting (Darker et al., 2010) in Covid-19 period which has been extensively researched on expectancy theory. Waiting refers to a probability that a person perceives (Chiang and Jang, 2008). This possibility is that a particular effort will be rewarded with a specific reward. If an employee believes that he can get a certain reward by making effort, that is, if he expects it, he will make more effort. Consequently, the situation that the person receives a high value reward that he has expected will cause the employee to make more effort.

Entrepreneurs practice waiting as a motivational tool should pay attention to determine what type and level of results or rewards is important for the employees and what kind of behavior and performance is desirable for the enterprise in Covid-19 period. Moreover, a relationship should be established between performance results and the reward.

CONCLUSION

The Covid-19 period has many difficulties for businesses. Many enterprises may slog to adapt the emerging uncertain epidemic conditions to their entrepreneurial structure and business strategies. Enterprises are living structures and the importance of motivating employees for business success in Covid-19 epidemic period has become more prominent. In this respect, this study focuses on entrepreneurial motivation.

In the study, the concept of motivation is discussed in general and the most widely applied and accepted motivational theories are mentioned. In the continuation of the study, in order to eliminate some uncertainties brought by the Covid-19 epidemic period and to fulfill some of the negative effects on businesses and enterprise employees in Covid-19 epidemic period, motivational tools that are considered to help businesses by providing entrepreneurial motivation are mentioned and useful suggestions for business development and maintaining entrepreneurial motivation are made.

In summary, in order to meet the new motivational needs in enterprises resulted in the Covid-19 epidemic, employees must be subjected to training according to the performance expectations from them, which will ensure their adaptation to new conditions. Job descriptions should be clear and responsibilities should be well defined. Thus, role conflicts within the enterprise should be reduced as much as possible. Paying attention to the awards should be similar among colleagues who perform at the same level. Employees give fairness rather than the amount of the awards actually given so that companies could easily ensure employees' motivation. As a result, fair performance entrepreneurship should be demonstrated within the enterprise to provide

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entrepreneurial motivation in Covid-19 period. It should not be missed that the employees of the enterprise set different values and give meaning on diversified personal rewards. Finally, entrepreneurs should notify well the employees' perception of the relationship between performance and rewards with a continuous and strict control mechanism in Covid-19 period. Entrepreneurs should make necessary changes in the functioning of the motivation model they apply within the enterprise according to new epidemic conditions and needs.

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