



**Republic of Macedonia
University 'St. Kliment Ohridski-Bitola'
Faculty of Economics-Prilep**



**THE IMPACT OF INNOVATION ON SMES GROWTH: THE CASE OF
KOSOVO**

**Candidate:
Lura Rexhepi Mahmutaj
File No. 3010**

**Mentor:
Slavica Roceska**

**Prilep
October, 2017**

ACKNOWLEDGEMENTS

The preparation of the PhD thesis has been a tremendous learning experience. My deepest gratitude to the following individuals and organizations that have provided continuous support guidance and encouragement in this learning journey:

To the supervisor, Dr. Slavica Rocheska, for her invaluable encouragement, assistance, guidance productive criticism and support, who have contributed to my personal and academic development. I would not have achieved the completion of this study without her utmost support.

To the university academic staff, my academic and professional colleagues for their support services, guidance, and constructive comments.

To the organization Business Support Center Kosovo for providing the survey data for 500 SMEs in Kosovo. I would like to express my sincere appreciation and gratitude to Dr. Besnik Krasniqi for the interest in my topic, and his deep insights helped me at various stages of my research.

To the 24 innovative SMEs in Kosovo for their time and participation in providing relevant information and for generating interest in innovation topic.

To the DOCSMES friends who were there to brighten my days during this research.

My deepest appreciation goes to my family, loved ones and friends for their encouragement, support, and patience. Without support from my son, Heron and my life partner, Vigan, fulfilling this dream of mine would have been very difficult. They have been a constant source of strength and inspiration. I also want to convey special thanks and genuine love from my parents and sisters, who never stopped believing in my academic ambition during this remarkable journey.

TABLE OF CONTENTS

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables.....	vii
List of Figures.....	ix
List of Abbreviations.....	xi
CHAPTER 1. INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Definition of the Research Issue.....	1
1.3 The Objective of the Study.....	4
1.4 Research Question.....	4
1.5 Significance of the study.....	4
1.6 Summary.....	5
CHAPTER 2. THEORY AND EVIDENCE ON DETERMINANTS OF SMES GROWTH.....	6
2.1 Introduction.....	6
2.2 The Firm Environment.....	6
2.3 Gibrat’s Law of Proportionate effect.....	7
2.4 The Institutional Theory.....	9
2.5 Human Capital.....	9
2.6 The Theory of the Firm.....	10
2.6.1 The Transaction Costs Theory.....	11
2.6.2 The Behavioural Theory.....	11
2.6.3 Resource-Based View Theory.....	11
2.6.4 The Theory of Innovative Enterprise.....	13
2.7 Summary.....	14
CHAPTER 3. THE CONCEPTUAL FRAMEWORK AND HYPOTHESIS.....	15
3.1 Introduction.....	15
3.2 Background of SMEs Growth.....	15
3.2.1 Characteristics of SMEs.....	16
3.2.2 SMEs Growth.....	19
3.3 Innovation.....	22
3.3.1 Types of Innovation.....	25
3.3.2 Interaction among the innovation types.....	28
3.3.3 Radical and Incremental Innovation.....	29
3.4 The relationship between SMEs growth and Innovation.....	31
3.4.1 Firm internal characteristics.....	31

3.4.2 The impact of innovations in firm growth.....	32
3.5 Innovation through SMEs' networks	34
3.6 R&D activities and subsidies for innovation.....	36
3.7 Innovation development within SMEs.....	37
3.7.1 Driving factors for innovation development	38
3.7.2 Challenges of implementing innovation in SMEs.....	42
CHAPTER 4. THE DEVELOPMENT OF ENTREPRENEURSHIP AND SMEs IN KOSOVO	49
4.1 Introduction	49
4.2 The economy in Kosovo	49
4.3 The history of entrepreneurship development in Kosovo	53
4.4 Private Sector in Kosovo: SMEs and its relationship with Innovation and R&D	58
4.5 Summary	62
CHAPTER 5. EMPIRICAL ANALYSIS	63
5.1 Introduction	63
5.2 Mixed Methods Research.....	63
5.3 Research Questions	63
5.4 Research Philosophy	64
5.5 Research Design	65
5.6 Quantitative research approach	65
5.6.1 Data Collection	66
5.6.2 Data Sampling	66
5.6.3 Model specification and its justification.....	68
5.7 Qualitative research approach	74
5.7.1 Sampling and data collection.....	76
5.7.2 Finding the Participants	76
5.7.3 Interviewing.....	77
5.7.4 Documentary Materials	77
5.7.5 Content and process of interviewing	77
5.7.6 Data processing.....	79
5.7.7 Thematic analysis and coding process.....	80
5.7.8 Problems encountered through interviews	81
5.8 Generalisability, Reliability and Validity.....	81
5.8.1 Quantitative Research Method	81
5.8.2 Qualitative Research Method	82
5.9 Summary	83
CHAPTER 6. INTERPRETATION OF RESULTS AND DISCUSSION –QUANTITATIVE RESEARCH	86

6.1 Introduction	86
6.2 Descriptive Statistics	86
6.3 Logistic Model	90
6.3.1 The entrepreneur	92
6.3.2 The firm	99
6.3.3 Innovation	101
6.3.4 Robustness check	107
6.3.5 Logistic Model – Interaction of product/process innovation across sectors	109
6.4 Summary	111
CHAPTER 7. INTERPRETATION OF RESULTS AND DISCUSSION –QUALITATIVE RESEARCH.....	114
7.1 Introduction	114
7.2 Entrepreneur	116
7.2.1 Gender	117
7.2.2 Age.....	118
7.2.3 Education	118
7.2.4 Work Experience	119
7.2.5 Start-up motivation	121
7.2.6 Position in the Enterprise.....	124
7.3 Firm	124
7.3.1 Location	124
7.3.2 Age of the firm	125
7.3.3 Registration form.....	126
7.3.4 Industry	126
7.3.5 Firm Size.....	127
7.4 Innovation.....	129
7.4.1 Types of innovation	129
7.4.2 Types of Innovation related to market perspective	138
7.4.3 Cooperation for innovation activities	140
7.4.4 Successful innovation	143
7.4.5 Hampering factors of innovation	150
7.4.6 Innovation activities	154
7.4.7 Subsidies for innovation	158
7.4.8 Innovative culture within the firm	160
7.5 Summary	171
CHAPTER 8. CONCLUSIONS AND POLICY IMPLICATIONS	172
8.1 Introduction	172

8.2 Research Questions Analysis	172
8.2.1 Research Question 1	172
8.2.2 Research Question 2	174
8.2.3 Research Question 3	175
8.2.4 Research Question 4	176
8.2.5 Research Question 5	177
8.2.6 Research Question 6	177
8.2.7 Research Question 7	178
8.2.8 Research Question 8	179
8.2.9 Research Question 9	179
8.3 Research Methodology and Design.....	181
8.4 Policy implications	182
8.4.1. Company’s management	182
8.4.2 Government	183
8.5 Limitations of the study.....	184
8.6 Future areas for research	184
8.7 Contribution to the Knowledge.....	185
8.8 Summary	186
REFERENCES	187
APPENDICES	210
Appendix A – Questionnaire from Business Support Center Kosovo	211
Appendix B – Letter of Permission to use survey data from BSCK.....	246
Appendix C – Interview Guide	247
Appendix D - Sample of Completed Interview.....	255
Appendix E – Types of Innovation introduced by Kosovo SMEs.....	263

LIST OF TABLES

Table 2.1 Empirical Investigations on Gibrat’s Law: A review of selected studies.....	7
Table 3.1 EU definition of SMEs	15
Table 3.2 World Bank definition of SMEs	16
Table 3.3 Target returns by investment stages.....	43
Table 4.1 Exports by Sections and Year 2011-2016 in percentage	50
Table 4.2 Participation of GDP by economic activity in percentage in Years 2009-2015.....	51
Table 4.3 Number of private enterprises in Kosovo (1991-2008).....	54
Table 4.4 Annual Turnover according to the Size of Enterprises and of GDP.....	56
Table 4.5 Number of Enterprises in 2016.....	56
Table 4.6 Number of Registered Enterprises by Sector of Economic Activity, and Legal Form of Organization during 2016	57
Table 5.1 Share of enterprises in the population and the sample by size and sector (in %).....	67
Table 5.2 Total sample by sector and size	67
Table 5.3 Independent and Control Variables	73
Table 6.1 Descriptive Statistics.....	87
Table 6.2 Correlation matrix.....	88
Table 6.3 Collinearity Statistics.....	90
Table 6.4 Hosmer and Lemeshow Test with respect to SMEs growth.....	91
Table 6.5 Classification Table with respect to SMEs growth.....	91
Table 6.6 Logit estimates for SMEs growth	92
Table 6.7 Reasons for starting up business	94
Table 6.8 Gender and educational level.....	95
Table 6.9 Experience of SME owners in business prior to start-up.....	96
Table 6.10 Industry vs. Types of Innovation	103
Table 6.11 Source of innovation.....	105
Table 6.12 Various specifications of the Logit model for firm growth in terms of sales.....	108
Table 6.13 Logit estimates - measuring interaction between product/process innovation in SMEs growth across sectors	110
Table 7.1 Demographic information of Interviewees	116
Table 7.2 Matrix Coding Query showing source coded frequency for model parameter Start-up motivation and its constituent variables.....	122
Table 7.3 Interviews’ position in the enterprise.....	124
Table 7.4 Matrix Coding Query showing source coded frequency for model parameter Innovation types and its constituent variables	130
Table 7.5 Matrix Coding Query showing source coded frequency for model parameter Combined Innovation and its constituent variables.....	132
Table 7.6 Combined Innovation	133
Table 7.7 Matrix Coding Query showing source coded frequency for model parameter sales of innovative products and services and its constituent variables.....	135
Table 7.8 Matrix Coding Query showing source coded frequency for model parameter Average time to break-even and its constituent variables	137
Table 7.9 Matrix Coding Query showing source coded frequency for model parameter Types of innovation related to market perspective and its constituent variables.....	139
Table 7.10 Percentage of total turnover in 2016 for the products and services: new to the market, new to the firm and existing products and services	140
Table 7.11 Matrix Coding Query showing source coded frequency for model parameter Cooperation and its constituent variables	142

Table 7.12 Matrix Coding Query showing source coded frequency for model parameter Positive effects of innovation and its constituent variables	145
Table 7.13 Matrix Coding Query showing source coded frequency for model Key success factors for innovation and its constituent variables	147
Table 7.14 Matrix Coding Query showing source coded frequency for model Benefits of innovation and its constituent variables	149
Table 7.15 Matrix Coding Query showing source coded frequency for model parameter Hampering factors of innovation and its constituent variables.....	151
Table 7.16 Matrix Coding Query showing source coded frequency for model Challenges of innovation and its constituent variables	153
Table 7.17 Matrix Coding Query showing source coded frequency for model parameter Innovation activities and its constituent variables	155
Table 7.18 Matrix Coding Query showing source coded frequency for model parameter Information sources and its constituent variables.....	157
Table 7.19 Matrix Coding Query showing source coded frequency for model parameter subsidies for innovation and its constituent variables	159
Table 7.20 Matrix Coding Query showing source coded frequency for model Innovative culture within firm and its constituent variables.....	160
Table 7.21 Matrix Coding Query showing source coded frequency for model Linkage of innovation with organization strategy and its constituent variables	163
Table 7.22 Matrix Coding Query showing source coded frequency for model R&D employees and its constituent variables.....	165
Table 7.23 Matrix Coding Query showing source coded frequency for model Intellectual property rights and its constituent variables	167
Table 7.24 Matrix Coding Query showing source coded frequency for model Patents for innovation and its constituent variables	168
Table 7.25 Matrix Coding Query showing source coded frequency for model ISO Standards and its constituent variable.	170

LIST OF FIGURES

Figure 3.1 Distinction between Patent, Invention and Innovation.....	23
Figure 3.2 Predicted Association for Radical and Incremental Innovation Adoption.....	30
Figure 3.3 Summary of factors having a positive effect on each of the three steps	39
Figure 3.4 Drivers of successful innovation	40
Figure 3.5 The A.T. Kearney House of Innovation	42
Figure 3.6 Valley of Death faced by SMEs	43
Figure 3.7 Conceptual Research Model.....	47
Figure 4.1 Kosovo GDP Annual Growth Rate	50
Figure 6.1 Innovation Degree	102
Figure 7.1 Schematic diagram of tree nodes.....	115
Figure 7.2 Word cloud of innovation.....	116
Figure 7.3 Interviewees’ gender	117
Figure 7.4 Interviewees’ age.....	118
Figure 7.5 Interviewees’ professional qualification.....	119
Figure 7.6 Interviewees’ Previous Employment.....	120
Figure 7.7 Interviewees’ job experience	120
Figure 7.8 Interviewees’ previous job experience in number.....	121
Figure 7.9 Model of the parameter Start-up motivation and its constituent variables.....	121
Figure 7.10 Push & Pull factors	123
Figure 7.11 Firm’s location.....	125
Figure 7.12 Firm’s foundation year	126
Figure 7.13 Firm registration	126
Figure 7.14 Industry sector	127
Figure 7.15 Average number of employees in year 2014 and 2016	128
Figure 7.16 Total turnover in 2016.....	128
Figure 7.17 Changes in Turnover 2014-2016	129
Figure 7.18 Model of the parameter Innovation types and its constituent variables	129
Figure 7.19 Nodes clustered by work similarity – types of innovation	130
Figure 7.20 Types of Innovations	131
Figure 7.21 Model of the parameter Combined Innovation and its constituent variables	132
Figure 7.22 Combined Innovation	133
Figure 7.23 Model of the parameter sales of innovative products and services and its constituent variables	134
Figure 7.24 Sales of innovative products and services	135
Figure 7.25 Model of the parameter Average time to break-even and its constituent variables	136
Figure 7.26 Average break-even.....	137
Figure 7.27 Model of the parameter Types of innovation related to market perspective and its constituent variables.....	138
Figure 7.28 Types of innovation related to market perspective.....	139
Figure 7.29 Innovation Source.....	141
Figure 7.30 Model of the parameter Cooperation and its constituent variables	141
Figure 7.31 Most valuable cooperation partner for innovation activities	143
Figure 7.32 Model of the parameter Positive effects of innovation and its constituent variables	144
Figure 7.33 Positive effects of Innovation.....	145
Figure 7.34 Model of the parameter factors that have Key success factors for innovation and its constituent variables.....	146
Figure 7.35 Key success factors for innovation.....	147

Figure 7.36 Word Cloud of Benefits of innovation	148
Figure 7.37 Model of the parameter Benefits of innovation and its constituent variables	148
Figure 7.38 Benefits of innovations.....	149
Figure 7.39 Ongoing or abandoned innovation activities.....	150
Figure 7.40 Model of the parameter Hampering factors of innovation and its constituent variables	151
Figure 7.41 Hampering factors of innovation.....	152
Figure 7.42 Model of the parameter Challenges of innovation and its constituent variables.....	153
Figure 7.43 Challenges of Innovation.....	154
Figure 7.44 Model of the parameter Innovation activities and its constituent variables	154
Figure 7.45 Innovation activities	155
Figure 7.46 Model of the parameter Information sources and its constituent variables.....	156
Figure 7.47 Information sources for innovation activities.....	157
Figure 7.48 Model of the parameter subsidies for innovation and its constituent variables	158
Figure 7.49 Subsidies for Innovation.....	159
Figure 7.50 Model of the parameter Innovative culture within the firm and its constituent variables	160
Figure 7.51 Innovative culture within a firm	161
Figure 7.52 Model of the parameter Linkage of innovation with organization strategy and its constituent variables.....	163
Figure 7.53 Linkage of innovation with organization strategy.....	164
Figure 7.54 Model of the parameter R&D employees and its constituent variables	164
Figure 7.55 R&D employees	165
Figure 7.56 Model of the parameter Intellectual property rights and its constituent variables ..	166
Figure 7.57 Intellectual property rights	167
Figure 7.58 Model of the parameter Patents for innovation and its constituent variables.....	168
Figure 7.59 Patents for innovation.....	169
Figure 7.60 Model of the parameter ISO Standards and its constituent variable	170
Figure 7.61 ISO Standards.....	170
Figure 8.1 Explanatory Sequential Model	181

LIST OF ABBREVIATIONS

The following abbreviations are used throughout the thesis:

ABRK	Agency for Business Registration Agency
BCKK	Business Support Center Kosovo
CIP	Competitiveness and Innovation
ECIKS	Economic Initiative for Kosovo
EU	European Union
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GPS	Global Positioning System
ICT	Information and Communication Technology
IPR	Intellectual Property Rights
KIESA	Kosovo Investment and Enterprise Support Agency
KOSME	Kosovo SME Promotion Program
MES	Minimum efficient scale
MTI	Ministry of Trade and Industry
NRP	National Research Programme
OECD	Organisation for Economic Co-operation and Development
R	Respondent
R&D	Research and Development
ROA	Return on assets
ROI	Return on investment
RQ	Research Question
RTDI	Research Technology Development and Innovation
SEE	Transnational Cooperation Programme
SBA	Small Business Administration
SCAAK	Society of Certified Accountants and Auditors of Kosovo
SMEs	Small and Medium-Sized Enterprises
SPSS	Statistical Package for the Social Sciences
US	United States
VIF	Variance inflation factor
%	Percentage

CHAPTER 1. INTRODUCTION

1.1 Introduction

Chapter 1 introduces the overall study. It presents the research issue, and explains the rationale for this study. It outlines the research objectives and questions, as well as significance of this study. Finally, the chapter is summarized.

1.2 Definition of the Research Issue

Innovativeness is one of the fundamental instruments of growth strategies that enable firms to enter new markets, increase existing market share, as well as achieve competitive advantage. Because of intense competition in global markets, many enterprises are trying to grasp the importance of different types of innovation in order to enhance the quality of their offerings, improve their performance and survive in the market (Rosli & Sidek, 2013). The importance of innovation topic has been raised among authors due to its practical relevance (Gunday et. al., 2011; Rocheska et al., 2014). Nowadays, firms are introducing innovations to apply more productive manufacturing processes, to perform better in the market, and to ensure positive reputation in customers' perception. All of these factors contribute to overcome problems while striving to achieve competitive position in the market (Gunday et. al., 2011). This is because, nowadays, innovation is one of the most important weapons, and is not considered a luxury, rather a necessity for survival (Rosli & Sidek, 2013). Thus, encouraging innovation in small and medium sized enterprises (SMEs) remains a key initiative in order to stimulate firm growth (Han et al., 1998).

SMEs play a significant role in any country, which contribute to economic growth, employment and reduction of poverty especially in transition countries (Ayyagari *et al.*, 2007). These are some reasons why SMEs are considered as engine of growth, especially in the developing countries. One of the reasons includes the promotion of entrepreneurship and innovation activities which enhance competition and productivity growth. SMEs are more productive because they are more flexible and can adapt to the changes in the market. Furthermore, they contribute mostly to employment growth, even though both, the rate of establishment and bankruptcy of SMEs are high (Tambunan, 2007).

Entrepreneurship and innovation were popularized firstly by the work of Joseph Schumpeter. He defined in 1934 an entrepreneur as a person who initiates innovation, new products, new processes, and identifies new market (Hashi & Krasniqi, 2010). Schumpeter (1934) in the seminal work of entrepreneurship defined five types of innovation, such as making organizational changes by bringing new products, or making changes in the existing ones; using new methods to decrease costs; developing organizational innovations; recognizing a role for market; and higher productivity. Early work in innovation is focused on the idea that only radical change, such as transformation of new technological development into product or process was considered innovation. Nevertheless, North and Smallbone (2000) argue that innovation means new developments that are done within an industry, or new changes within a firm, regardless whether they exist within other firms of the same industry. Innovation activities are about introducing new ways for products, services, production, marketing and administration, which are difficult to imitate, in order to gain competitive advantage in this dynamic environment. Porter (1990, p.45) defined innovation as an attempt “to create competitive advantage by perceiving or discovering new and better ways of competing in an industry, and bringing them to market” (North & Smallbone, 2000). Moreover, innovation is defined as the creation of new wealth or making necessary changes and enhancing the existing resources in order to create new wealth (Rosli & Sidek, 2013). Innovation starts with an idea which in turns results in developing an invention, such as new product, process or service (Thornhill, 2006).

During the early post-war period, there was a belief that the main source of innovation is large enterprises. The increase of firm size leads to higher innovation capabilities; thus, large firms can make greater innovation developments than small ones. This perception is mainly due to the stronger cash flows of large firms, higher assets to use as collateral for loans, higher sales, as well as greater variety of human capital skills (Rogers, 2004). Nevertheless, since 1980, many studies have shown that SMEs are the main contributors in innovation activities. SMEs provide significant proportion of innovation regardless of their size, and their focus is more on the incremental innovation, rather than radical one (Kalantaridis & Pheby, 1999; Rosli & Sidek, 2013). SMEs are more flexible and have less rigid management structures; thus, they can make changes based on the demand and supply conditions. They have more time for innovation tasks (Rogers, 2004). SMEs are known for innovation development because of their behavioral advantages, such as entrepreneurial dynamism, internal flexibility and responsiveness to changes in the market besides the financial restrictions (Salavou & Lioukas, 2003). They encounter many

challenges, as they have limited human capital, technology, production and marketing skills (Biggeri *et al.*, 1999). Therefore, they should have efficient planning of their scarce financial and economic resources available. Thus, it can be concluded that the relationship of innovation and firm size is not obvious (Rogers, 2004).

Attention has been given to large enterprisers' performance in relation to the innovation activities. Nevertheless, in the recent years, there has been a growing awareness among academics about the importance of innovation in SMEs that contribute to firm growth. Although there is much progress in the past few decades, still there is plenty to be understood about entrepreneurship, innovation and their relationship to firm growth. A better understanding of SMEs growth and innovation is necessary due to the fact that SMEs worldwide play significant role on economic growth, and are characterized with resource scarcity, flexibility, and high risk of failure due to the dynamic environment. The impact of different types of innovation that affect firm growth is not conclusive; and many authors have been focused only on one or two dimensions, such as product and process innovations. Moreover, there are not many studies that cover driving and hindering factors on the process of introducing innovative activities in SMEs, especially in developing countries. More research is needed to come up with innovation model for SMEs (Lee *et al.* 2010).

To fill this gap and contribute to knowledge development, this research study aims to examine different types of innovations to support higher business growth performance in a more detail with specific focus on SMEs in the Kosovo market. It strives to provide new insights into innovation development activities in Kosovo market, as a developing country, which is a valuable input for implementing relevant regulations, as well as to gain understanding of SMEs capabilities toward innovation and its impact on firm growth. Developing innovation in SMEs can contribute in improving economic growth. In this context, the researcher will contribute to the SMEs growth, innovation types and innovation through networks and SMEs relation to promoting and deploying entrepreneurial and innovation activities to enhance their performance. The findings in this paper would be useful for theoretical discussion as well as for policy formulation related to introduction of innovation and SMEs development.

1.3 The Objective of the Study

This study aims to empirically investigate innovation at the level of SMEs and their impact on firm growth. It aims to identify the types of innovation used within SMEs in Kosovo, and the impact of innovation in SMEs growth. The sectors for this study include manufacturing, services, and trade.

1.4 Research Question

The following research question has been formulated:

“Is the introduction of different types of innovations associated with the growth of SMEs?”

The following are the sub-research questions that have been formulated to achieve objectives of this study:

RQ1: Which types of innovation (product, process, marketing and organizational) are predominant in SMEs that affect firm growth?

RQ2: What are the entrepreneurs and internal firm characteristics that affect firm growth?

RQ3: What kinds of innovations (incremental or radical) are developed by SMEs to improve firm growth?

RQ4: What are the innovation sources used by SMEs that affect firm growth?

RQ5: What are the driving factors for successful innovation to SMEs that affect firm growth?

RQ6: What are the hampering factors for innovation development that affect firm growth?

RQ7: What kind of innovation activities is developed by SMEs and which are the most important information sources for innovation activities?

RQ8: Do SMEs receive subsidies for introducing innovation that affects firm growth?

RQ9: How innovative is the organizational culture within SMEs?

After understanding firm growth, and innovation in SMEs through existing literature, the researchers will fit the empirical data for SMEs in Kosovo to understand the firm growth that can be achieved through innovation development.

1.5 Significance of the study

The study focuses on SMEs and its growth through innovation capabilities. This study strives to improve the explanation regarding the relationship between innovation and its impact in the firm performance of SMEs. It will make a solid contribution to the business and innovation

management literature by proposing a conceptual model that is original in explaining the entrepreneur and SMEs characteristics as well as innovations development which lead to SMEs growth.

It will help SMEs to improve their internal organization by understanding better the importance of the innovation activities, which can lead to growth. One of our contribution consist in analyzing how those firms can achieve growth by focusing on value creation in customers' eyes by differentiating themselves and offering innovative products and services. This study aims to enhance the applicability of innovation activities within SMEs despite its challenges and specific characteristics of SMEs. It provides empirical evidence of relationship between product, process, marketing and organizational innovations with the growth of SMEs in terms of sales.

This study will add value by finding new empirical evidences on improving the soft aspects of innovation which has to do with organizational culture, as well as ensuring to possess the right resources and capabilities before going to the hard aspects of innovation which has to do with technological innovation. It will serve future studies to extend analysis on types of innovation, and innovation culture that determine the growth of SME sector.

1.6 Summary

Chapter 1 laid the foundations for the study. It provided the introduction and the background of the study, followed by detailed the justification and rationale for this study. The research objectives and questions were introduced that are examined during this research study. The significance of the study was offered.

The next chapter proceeds with a detailed description of the appropriate theoretical foundations for this study in relation to the determinants of SMEs growth.

CHAPTER 2. THEORY AND EVIDENCE ON DETERMINANTS OF SMES GROWTH

2.1 Introduction

This chapter is comprised by the most relevant theories related to SMEs growth and innovation. Firstly, it is captured the firm environment, which is followed by the Gibrat's law, the institutional theory and human capital. Different theories of the firm related to firms and innovation that are reviewed in this section include transactional, behavioural, resource-based view, and innovative theories, in order to find out the determinants of business growth performance with particular emphasis on the resource-based and innovative perspective of the firm.

2.2 The Firm Environment

According to Cravens and Shipp (1991, p.53), "today's turbulent marketplace will require companies to serve their markets or lose out to those who will." Other authors agree that nowadays, there is turbulent firm environment associated with intense competition that leads to uncertainty (Slater, 1997; Aragon-Sanchez & Sanchez-Marin 2005). There are several reasons of dynamic business and market environment, including internationalization of the market, the shifts of demographic and socio-economic in the population, ICT, the changing demand of customers, the need for innovation in continuous basis, as well as economic crisis (Cravens & Shipp 1991; Salavou et al., 2004; Aragon-Sanchez & Sanchez-Marin 2005). These challenges are even higher for SMEs because of their limited resources, as well as lack of economies of scale compared to the larger firms. Nevertheless, it should be highlighted that due to their simple structure and lack of bureaucracy, they are more flexible to respond to changes in market environment (Aragon-Sanchez & Sanchez-Marin 2005; Laforet & Tann 2006). Therefore, firms are trying to maximize their innovation efforts by efficiently serving their new or existing customers with new innovative or modified products and services adding value in customer's eyes (Brem & Voigt, 2009). Executives of the firms are trying to drastically alter their strategies to cope with this uncertain environment. These include adapting to changes of customer needs and preferences that drive customer satisfaction, and despite the high risks and complexity of innovation, the level of innovation strategies should be enhanced within the company (Cravens & Shipp, 1991). It is essential to emphasize that innovation is responsibility of all business units and/or departments, and therefore, everyone should understand their tasks toward achievements

of innovation development (Brem & Voigt, 2009). It is argued that SMEs benefit if they stay small to benefit from the advantages of flexibility, specialization, costs reduction and faster decision making process, while they should create alliances and cooperation to obtain advantages of being large (Aragon- Sanchez & Sanchez-Marin, 2005).

2.3 Gibrat's Law of Proportionate effect

Gibrat's law is the most elaborated framework for policymakers on the determinants of firm growth, predicting that firm growth as purely random effect and independent of firm size (Gibrat 1931). Gibrat's law is a proposition of the firm growth process, which indicates the probability of a given proportionate change in size during a specific period is the same for all firms, no matter their size at the beginning of the period (Mansfield, 1962). Earlier studies tend to confirm this law, while most of the recent research rejects it. More specifically, from early sixties, many authors have conducted empirical studies to examine the validity of this law. In most studies, Gibrat's law is rejected for small firms (Almus & Nerlinger, 2000; Calvo, 2006; Parker et al., 2010). Rejecting Gibrat's law means that firms that grow at faster rate or slower, in one time period will grow faster or slower at another time period (Parker et al., 2010).

There are various empirical investigations which determine whether Gibrat's law holds and if there is dependency between firm growth rates and firm size. Table 2.1 shows a list of empirical studies conducted in different countries within different timeframes, and it can be concluded that the overall impression in most of the studies is that Gibrat's law is not valid (Wagner, 1992).

Table 2.1 Empirical Investigations on Gibrat's Law: A review of selected studies

Author (year of publication)	Country (period)	Sample	Important results	Conclusions and remarks
Hymer and Pashigian (1962)	U.S. (1946–1955)	1000 largest manufacturing firms	Average growth rates not related to firm size; standard deviations of growth rate inversely related to size	GIBRAT's Law not valid
Mansfield (1962)	U.S. (ca. 1916–1957)	Practically all firms in three industries: steel, petroleum, and rubber tire	Smaller firms were more likely than the larger ones to leave the industry; smaller firms often had higher and more variable growth rates	GIBRAT's Law not valid
Singh and Whittington (1975)	U.S. (1948–1960)	All quoted companies in manufacturing, construction, distribution, and miscellaneous services (about 2000)	Weak positive relationship between size and growth; standard deviation of growth rates declines with increasing firm size; definite but relatively small degree of persistence in the growth rates of firms	GIBRAT's Law not valid
Chesher (1979)	U.K. (1960–1969)	183 quoted companies classified as 'commercial and industrial'	Size and growth unrelated, but evidence for 'persistence of chance factors' found	GIBRAT's Law not valid (paper is seminal for method of testing)
Kumar (1985)	U.K. (1960–1976)	Ca. 2000 quoted companies from manufacturing and services	Mild tendency for firm growth to be negatively related to size; some persistency in firm growth over time; larger firms have lower dispersion in growth rates	GIBRAT's Law not valid
Evans (1987a)	U.S. (1976–1982)	Approx. 2000 manufacturing firms	Firm growth decreased with firm age and size	GIBRAT's Law not valid (discusses the following issues, too: – effect of sample selection; – effect of heteroscedasticity)
Evans (1987b)	U.S. (1976–1980)	All firms operating in 100 manufacturing industries; results for separate 4-digit industries (overall sample size: 42339)	Firm growth, variability of firm growth, and the probability of failure decrease with firm age; firm growth decreases at a diminishing rate with firm size (even after controlling for the exit of slow growing firms)	GIBRAT's Law fails although the severity of the failure decreases with firm size
Hall (1987)	U.S. (1972–1983)	1778 publicly traded manufacturing firms (subsamples)	Negative coefficient on firm size in growth rate equation; smaller firms have a larger variance of growth rate	GIBRAT's Law is weakly rejected for smaller firms and accepted for the larger firms (discusses problems of sample selection bias and measurement error, too)
Contini and Revelli (1989)	Italy (1980–86)	Manufacturing firms	(See conclusions)	Departures from GIBRAT's Law are modest; law holds or nearly holds especially among firms with more than 100 employees

Table 1 (Continued)

Author (year of publication)	Country (period)	Sample	Important results	Conclusions and remarks
Dunne, Roberts and Samuelson (1989)	U.S. (1967–1982)	Over 200000 plants that entered manufacturing sector between 1967 and 1977	Plant failure rates decline with size and age as do the growth rates of nonfailing plants; when failure probability is integrated into analysis, relationship between plant growth and size is negative for plants owned by single plant-firms but positive for plants owned by multiplant firms	GIBRAT's Law not valid
Acs and Audretsch (1990a)	U.S. (1976–1980)	Data aggregated at the industry level; four firm-size classes	In about 40 percent of the industries growth rates were significantly different across firm-size classes; pattern varies considerably across sectors	Validity of GIBRAT's Law depends on sectors considered (importance of incorporating the impact of exits is discussed)
Bourlakis (1990)	Greece (1966–1986)	633 manufacturing corporations	Negative growth-size and growth-age relationships	GIBRAT's Law not valid
Dunne and Hughes (1990)	U.K. (1975–1985)	All quoted plus larger unquoted companies in the financial and nonfinancial sectors	Small firms grew faster than large firms; variance of growth rates declined with increasing firm size; younger companies grew faster than old	GIBRAT's Law not valid
FitzRoy and Kraft (1991)	Germany (1977–1979)	51 firms from the metalworking sector	Larger firms display significantly slower growth; younger firms grow faster	GIBRAT's Law not valid (authors argue that results "are not of course in any way representative for the FRG")

However, there are some researchers that argue the validity of Gibrat's law for firms that are greater than the industry minimum efficient scale (MES) of production (Mowery, 1983; Becchetti & Trovato, 2002).

2.4 The Institutional Theory

The institutional theories play important role in organizations, which arise either from external sources, such as state, or from organization itself. Institutionalized rules are classifications which are built within society, and they are taken for granted or are supported by public opinion or laws (Meyer & Rowan, 1977). According to Scott and Meyer (1983, p.149), institutional environments are "characterized by an elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy." This theory emphasize that one of the primary goals of organization is having legitimacy. Thus, institutionalized organizations attempt to integrate their structural arrangements with the frameworks of larger to have support and legitimacy (Bolon, 1998). Institutional theory is criticized as institutions change over time, which have effects that are specific. Thus, institutions not only serve to drive change and shape the nature of change, but also they change themselves over a period of time (Dacin, Goodstein & Scott, 2002).

According to Aidis (2005), institutional theory has been used to explain poor economic growth in transition countries. Based on their model, formal and informal rules are related to the role of state, where formal ones include tax policies and business legislation, while informal rules consist of different practices, such as unofficial acceptable government culture, including various forms of corruption and failure of formal rule development. More specifically, forms of corruption include implementing business regulations and tax inspections that represent obtaining bribes, whereas the failure of formal rule development comprises of late payments by clients and mafia and racketeering activities (Aidis, 2005).

2.5 Human Capital

The human capital is considered fundamental element for company's success because of employees' qualifications and their loyalty to the firm. When measuring contribution of labor to output, it can be concluded that there is greater productive capacity of employees compared to

other forms of wealth taken together. According to Schultz's (1961) view, laborers are capitalists because the acquisition of "knowledge and skill are in great part the product of investment and, combined with other human investment, predominantly account for the productive superiority of technically advanced countries" (p. 314). Fundamentally, "human capital is a concept based on the belief that the role of workers in production is similar to the role of machinery and other forces of production" (Johnson, 1995, p. 133). Human capital is the knowledge retained throughout life, which is applicable in the production of goods, services and ideas. Put in a more positive light, Schultz argues the importance of investing in people in order to enhance their welfare (Oliver, 2004).

It should be emphasized that the human capital theory has been reviewed from 1776 until 1960, when different authors have established theoretical and empirical foundations. Investing on people is crucial as economic benefits are obtained from them. There are different types of human capital investment, such as health and nutrition, but lately empirical analysis show the importance of education as a key human capital investment. The main authors in the field of human capital theory are Theodore W. Schultz and Gary S. Becker, who also received Nobel prizes for their contribution (Sweetland, 1996).

2.6 The Theory of the Firm

The theory of firm has posed a problem for economists, considering that there is a progress on description of market performance, but there is low progress in understanding firm behavior and organization. Nevertheless, this should be changed considering that firms play significant role in economic growth and prosperity (Holmstrom & Tirole 1989).

The theory of the firm has to do with nature of the firm, reasons for its existence, organizational structure, and business performance (Holmstrom & Tirole, 1989; Conner, 1991; Slater, 1997). The theory of the firm comes from economic and organization theories, which deals with different aspects of microeconomics, industrial conditions, managerial economics, and organizational behaviors (Grant, 1996). The firms seek to transform its combination of unique resources into products and services in order to generate revenues. It should be emphasized that theories of firm are concerned mostly to define the firms' behavior in relation to external markets (Grant, 1996).

2.6.1 The Transaction Costs Theory

According to Braendle (n.a), the author Coase in the year of 1937 is the first contributing to the transaction costs in explaining institutions like the firm. His focus was on the comparative transaction costs of alternative organizational structures, including firms and markets. Moreover, this theory was further extended by Williamson and become known as transaction-cost economics. Transaction costs include the incurred costs when making economic exchange. They include subsume contractual relationship between individuals. Transaction costs in firms include costs related to business activity organization, planning the future, as well as risks allocation that may arise in the future. Thus, it includes elements of uncertainty and opportunism. The transaction cost paradigm deals with the question of firms' existence and their optimal size. Costs were incurred by making contracts and purchasing assets and other property in the markets, but they were not accounted for by the price mechanism (Demsetz, 1988).

2.6.2 The Behavioural Theory

The behavioural theory is expressed with the neoclassical assumption of firm access to perfect information with the aim to have profit maximization (Slater, 1997). This theory is about reflection of compromised, weighted outcome between individuals with aspirations and conflicting interest within firms. The organization strives to achieve satisfactory level of profits taking lower risks (Slater 1997). Nevertheless, firms may be required to change their strategic behavior to achieve higher business performance (Greve 2003).

2.6.3 Resource-Based View Theory

The resource-based view theory explores the origins of competitive advantage and superior firms' performance (Clulow et al., 2003; Julienti et al., 2010). It is one of the most important theories in strategic management focusing on costly-to-copy inputs for production and distribution, leading to competitive advantage (Wernerfelt, 1984; Conner, 1991; Galbreath, 2005). Resource-Based Theory originated by the work of Penrose (1959), who defines the firm as a bundle of resources, which are valuable rare, and non-substitutable (Julienti et al., 2010; Capelleras et al., 2010).

The resource-based view provides an assessment of the resources that the firm should possess, as well as development of unique skills and competencies to find out how to extend its current scarce resources in order to achieve competitive advantage (Penrose, 1959; Wernerfelt, 1984;

Grant, 1996; Clulow et al., 2003; Aragon-Sanchez & Sanchez-Marin, 2005; Teece, 2010). In the study of Slater (1997), Barney (1991, p. 101), defines firm resources as “all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc., controlled by a firm that enable a firm to conceive of and implement strategies that improve its efficiency and effectiveness.” Therefore, based on this theory, having specific combination of valuable, rare and difficult to imitate resources is a key factor which leads to superior performance. Aragon-Sanchez & Sanchez-Marin (2005) highlight the importance of resources and capabilities to securing competitive advantage. According to them, resources are defined as intangible and tangible assets linked to firms in the long term, while capabilities are the ways used to accomplish different activities based firm’s limited resources. Moreover, (Riahi-Belkaoui, 2003; Julienti et al., 2010) agrees that firm resources include tangible physical assets and intangible assets that are internalized by the firm, with the purpose of implementing strategies which are competitive and profitable for the firm. Fahy and Smithee (1999) emphasize that the main contribution of resource-based view is related to the sustainable competitive advantage. Achieving sustainable competitive advantage allows the firm to maximize returns. This is achieved by having resources that are characterized by barriers to imitation, appropriability, as well as value. Appropriability describes the ability of owners of the resource to gain returns which equals to the created value from that resource (Grant, 1996).

It is of crucial importance to highlight that this theory suggests that in this changing business environment, firms should capture new market opportunities and threats, as well as meet customer requirements by either transforming existing or creating new ventures (Teece, 2010). Conner (1991, p.122) further argues that “the coronation of strategy as a fit between the internal competences of the firm and external opportunities incorporates a resource-based perspective.” The firm should achieve higher performance by using its scarce resources and strategic assets, which are difficult to imitate, such as intellectual property, knowledge and know-how process, and customer links (Conner 1991; Teece 2010). Nevertheless, it should be emphasized that based on resource-based view theory, firms encounter challenges of heterogeneous and dynamic industry and market demand, imperfect market information, costly information gathering, and strategy and growth performance due to the dynamic market environment (Hunt & Morgan, 1995). Therefore, through innovation efforts and capabilities, firms should nurture and enhance their internal forces to adapt easily to changing external environment (Neely et al. 2001; Xu et al. 2007). Human capital generates innovation and they are driver of capabilities and growth;

therefore, the recognition and value of talented people should be priority for organizations (Riahi-Belkaoui, 2003; Julienti et al., 2010).

However, the resource-based view theory has some shortcomings. It failed to explain the process of development, which lead to some resources becoming valuable contributors to sustainable competitive advantage, to deal effectively with complementarity of resources, to recognize the role of human involvement and their judgments in creating value, and to explain efficient management of resources that bring sustainable competitive advantage (Fahy & Smithee, 1999). Also, it should be stressed out that managers, as decision makers, are working with imperfect information, which is in contrast with the firm conduct model (Slater, 1997).

2.6.4 The Theory of Innovative Enterprise

Slater (1997, p.165) explains that “innovation may be concerned with the creation of new businesses within the existing business or the renewal of ongoing businesses that have become stagnant or in need of transformation”. This shows a need to develop new products and services, improve existing ones, create new manufacturing methods or distribution channels, as well as discover new approaches to competitive strategy (Slater, 1997). Porter (1990) argues that to fight the competition, firms should innovate, rather than change price and quantity of products and service. The transformation of firms’ industrial conditions involves the transformation of organizational conditions of individuals’ cognitive condition (knowledge), behavioral condition (motivation and incentive), and strategic condition in the firm, which in turn depends on the control of the individuals with decision-making power to exploit financial commitments and organizational integrations. Integrating organizational learning within the firm can further help to develop and utilize productive resources and capabilities that are needed for successful implementation of innovation. The innovative firms may encounter challenges related to the design and implementation of opportunities and strategies and mechanisms that bring added value to customers (Teece, 2010). It is crucial to take risks and learn from the mistakes for successful innovation (Slater, 1997). Thus, a framework should be provided to enable managers to identify opportunities for producing values of innovative products and services to customers and delivering them in the market at higher profits. Nevertheless, the theory of firm is still lacking in understanding the innovation process, leading to new product and services and organizational growth (Teece, 2010).

2.7 Summary

This chapter provided a review of the relevant theories related to business and innovation management literature. It included Gibrat's law, the institutional theory and human capital. Theories of firm and innovation were discussed in detail such as behavioural, resource-based view, and innovative theories. All of these were helpful to introduce research questions, hypothesis, and conceptual model, as well as to address research objectives.

CHAPTER 3. THE CONCEPTUAL FRAMEWORK AND HYPOTHESIS

3.1 Introduction

Chapter 3 of the thesis presents a systematic review of literature to be familiar with the topic based on the main contributors in this field. The discussion of the existing literature led to defining research hypothesis, which are tested to answer the main research question. This chapter generates a research framework developed by the researcher based on the derived hypothesis. It identifies and examined the shortcomings in the existing literature review and establishes a foundation for developing research hypothesis and conceptual model upon which this study is based for further investigation. It consists of background of SMEs growth, description and analysis of the innovation, types of innovation, the relationship between SMEs growth and innovation, innovation through SMEs networks, as well as R&D activities and subsidies for innovation development. Driving and hampering factors toward introduction of innovation are also included. Finally, the chapter is summarized.

3.2 Background of SMEs Growth

In the literature, small business is defined differently among authors mainly because of the disagreement on the criteria used to define them. Small business is defined differently across the industries in regards to sales, employment and market share. According to Peterson et al. (1986, p. 64), small business was defined initially by Small Business Administration (SBA) in the US by an Act in 1953 as “A small business concern shall be deemed to be one which is independently owned and operated and which is not dominant in its field of operation.” Only later on was added to this definition the criteria of number of employees (Peterson et al., 1986). Small business is defined today by SBA as an enterprise with no more than 500 employees. On the other hand, in Europe, an SME is considered the one with fewer than 250 employees and annual turnover of 50 million EUR (European Union, 2015). Table 3.1 shows the EU definition of SMEs, which determines the criteria for defining enterprises by European Union: number of employees, annual turnover and annual balance sheet (European Union, 2015).

Table 3.1 EU definition of SMEs

Enterprise category	Headcount Annual Work Unit (AWU)	Annual Turnover	Annual Balance Sheet
Medium-sized	<250	≤ € 50 million	≤ € 43 million

Small	<50	≤ € 10 million	≤ € 10 million
Micro	<10	≤ € 2 million	≤ € 2 million

Source: European Union, 2015

Moreover, World Bank defines SMEs based on quantitative criteria, such as number of employees, total assets in U.S. dollars and annual sales in U.S. dollars as shown in Table 3.2 (Independent Evaluation Group, 2008)

Table 3.2 World Bank definition of SMEs

Enterprise indicators	Number of employees	Total assets	Total annual sales
Medium	>50	>\$ 3,000,000	>\$ 3,000,000
	≤300	≤ \$15,000,000	≤ \$15,000,000
Small	>10	>\$ 100,000	>\$ 100,000
	≤50	≤ \$3,000,000	≤ \$3,000,000
Micro	<10	≤ \$ 100,000	≤ \$ 100,000

Source: Independent Evaluation Group, 2008

These two criteria are different, except on similarity of number of employees, but the definition by European Union is used in most of SMEs studies (Ayyagari *et al.*, 2007).

3.2.1 Characteristics of SMEs

Even though SMEs play significant role in economic growth, they are seen as volatile. SMEs serve a limited number of customers because they do not offer a wide range of products and services. Thus, they have little power to influence market price as they are dependent in these customers for their existence in the market. Other challenges that SMEs deal with include lack of finance, lack of economies of scale, the firm size because of low number of employees, as well as not a wide variety of products offered, which means they cannot compensate the lack of sales with the new products (Aragon-Sanchez & Sanchez-Marin, 2005; Pullen *et al.*, 2009). After the World War II, it was assumed that large organizations are major source of innovation, employment and economic growth. The main reason was because of they have greater capital and resources, use more advanced technology and they spend more money in R&D (OECD, 1996).

Even though these obstacles exist, SMEs are searching new ways to introduce innovation activities in order to achieve growth (Pullen et al., 2009). One of their most important characteristics, which is seen as core competence is their flexibility. SMEs are often depicted as flexible enterprises, meaning that they have the ability to change direction rapidly or the ability to do something else from which was originally intended (Evans, 1991; Storey, 1994). Especially when firms work in turbulent environment, flexibility helps firms to respond to market opportunities and gain competitive advantage. SMEs are more innovative because of their flexibility and speed of response (Evans, 1991; Lin and Chen 2007; Al-Ansari et. al., 2013). Small firms are seen to be significantly more flexible than large firms, as they are able to respond rapidly to customer changing needs and requirements. The following are some reasons related to SMEs flexibility. One of the reasons is that SMEs owners have extensive knowledge about firms' capabilities. The entrepreneurs in small firms play a very active role. There is positive correlation between innovativeness in small firms and entrepreneurs personal characteristics, attitudes and decision making styles (Lefebvre & Lefebvre, 1992). Moreover, the entrepreneur attitude influences the decision of how much effort to put to research and development for innovation development (Lefebvre & Lefebvre, 1993). Another reason of SMEs flexibility is related to flat management structures and lack of bureaucracy considering that there is direct relationship between the owner and employees, and teams are usually small. This shows the importance of organizational culture that needs to be flexible in order to encourage learning rather than control within SMEs (Levy & Powell, 1998). Besides these reasons, SMEs production tends to be small thus, they can respond quickly to the changes in the demand of customers.

The study of entrepreneurship and small business include independence as key theme. Personality and trait theory has highlighted the independence as a crucial factor for entrepreneurial innovation. It is argued that because of entrepreneur independence, SMEs are associated with high degree of creativity, enabling them to exploit new ideas and resources for organizational growth (Wilson & Stokes, 2005). Moreover, SMEs have less formalized governance and management arrangements. It is the owner, which is usually the same as CEO, who is involved in all strategic decisions for the firm (Gao & Hafsi, 2015).

SMEs are characterized with scarce resources, which describe a situation when firm lack minimum resources that stop, postpone or do not start new product development project; thus, it

can interfere with the innovation development. Firm resources can be tangible, such as finances, materials and employees, as well as intangible, which include skills and capabilities. Woschke et al. (2017) have explored the effects on resource scarcity on innovation by reviewing 17 previous studies. They found that some authors have asserted that firms need slack resources for new opportunities, while others state that constraint resources influence their creativity in positive manner to achieve organizational performance. Using the panel data of 302 SMEs, the empirical results indicated that resource scarcity has positive effect only on incremental innovation, compared to radical innovation performance in SMEs (Woschke et al., 2017).

It should be emphasized that innovation can be applied to a whole product, or to some parts of the product. SMEs are specialized in a narrow range of competence and can contribute usually to parts of products. A successful illustration can be Intel as a small company produced memory chips, which allowed the company later to invest in microprocessors, which are a major part of personal computer. Yet, it is important for SMEs to protect intellectual property through patents, which enables them to create barriers to competitors who are ready to copy their innovation activities (Martins & Fernandes, 2015).

SMEs are characterized by three dimensions, which have influence in the decision to adopt innovation as means of strategic orientations and competitive advantage. The first one is environmental uncertainties, including government policies and regulations, competition and inflation and interest rates; the second one comprises of psycho-sociological, where owners have significant role in business strategy, decision making, as well as organizational structure and culture. The third dimension is organizational decision, which explains that SMEs have simple, flexible and centralized management structure and have short timeframes related to decision making process (Al-Ansari et al., 2013).

There are several advantages of SMEs as a source of innovation, such as a greater tolerance for higher risk initiatives; friendly organizational environment that values creativity and originality; greater flexibility to changes and increased cohesion and a sense of collective objective where all may benefit directly from a successful new innovation development. Nevertheless, it is crucial for SMEs to create network in order to succeed in introduction of sustainable innovations (OECD, 1996). It is important for firms to constantly innovate. Innovation is not only about technical advancement, but also making improvement in the current products and services by

adding more quality, anticipating changes based on market needs, as well as controlling costs (European Commission, 1995).

3.2.2 SMEs Growth

The term firm growth was introduced in 1930s, which was known as Law of Proportionate Effect. It is also called Gibrat's rule of proportionate growth, used to determine firm growth, which does not depend on the firm size (Rosli & Sidek, 2013).

Growth is associated with the firm survival and achievement of organizational goals. It is measured in terms of employment, revenue, market share and product development (Pasanen, 2007). Firm growth has gained interest among different academics mainly because it contributes to economy through new job creation. The high growth firms are associated with entrepreneurial orientation, which includes dimensions of innovative, proactive and risk-taking behavior. Growth is considered an indicator of firm performance and it is associated with the achievement of financial goals. It should be emphasized that firms that achieve high growth may experience reduction of profitability only in the short run. The turnover of the firm is the most frequent measure of growth, which addresses taxation concerns, whereas the number of employees is another measure of growth, which addresses the job concerns and has to do with the working capacity. There is interconnection between these two growth indicators within the context of SMEs, and they are used because of their visibility and simplicity to obtain within organizations (Storey, 1994). Many firms use financial indicators, such as return on assets (ROA), return average annual occupancy rate, net profit after tax and return on investment (ROI) to measure growth (Rosli & Sidek, 2013).

Some factors that lead to the firm growth include entrepreneur's growth orientation, adequate firm resources for growth and the existence of market opportunity for growth. The main influences of SMEs growth are the background and access to resources of the entrepreneur(s), the firm itself, and the strategic decisions taken by the firm once it is trading. These three influential factors should be interrelated to ensure SMEs growth (Pasanen, 2007).

The first influential factor is entrepreneurs' characteristics, which has to do with the attributes of the person who establishes the firm and the key resources provided for firm creation. Personal characteristics of the business owners may contribute to the growth of the firm, such as

motivation, education, and ownership/management experience, number of founders, ethnicity, age and gender. Motivation can influence on the strategic choices made by the business owners (Storey, 1994). Moreover, Woodward (2006) distinguishes “necessity” and “opportunity” entrepreneurs. Necessity entrepreneurs are those who decide for start-up in order to make a living as they don’t find other opportunity choices for work. They are considered survival oriented entrepreneurs. On the other hand, opportunity entrepreneurs are those that are more closely to classical idea of Schumpeter entrepreneurs, characterized by inventiveness, vision and perception to discover opportunities in the market. They are considered growth-oriented entrepreneurs. Another personal characteristic, as described by Storey (1994), is education, where educated business owners usually establish a firm in the discipline they have been educated and use a number of skills for business management. The business owners, who have prior experience, are likely to observe better growth-related opportunities and avoid pitfalls. When there is more than one business owner, it leads to a diversity of experience, skills and resources which complement each other. Ethnicity is another factor which is connected to the socio-cultural attributes of the owners. Also, middle-aged owners have more potential to succeed because of the experience, credibility, energy and availability of resources. Lastly, most studies have concluded that the gender of business owner is not a significant factor for the growth behavior of the firm (Storey, 1994). **Therefore, the discussion leads to these hypotheses:**

Hypothesis 1: Entrepreneurs tend to establish an SME by catching opportunity rather than a need to achieve firm’s growth.

Hypothesis 2: The type of education level of entrepreneurs has an influence in the firm growth.

Hypothesis 3: The work experience of entrepreneurs has positive influence in the firm growth.

Hypothesis 4: The age of entrepreneurs has negative influence on the firm’s growth.

Hypothesis 5: The gender of entrepreneurs influences the firm growth.

The second influential factor to growth in SMEs is firms’ characteristics, which is related to the decisions made when starting a business. This is linked to the stages-of-growth model based on the intention and capabilities of business owners to grow. Some of the factors include age, sector, location, size and ownership form. The finding that younger small firms grow faster than old ones is not conclusive due to the fact that in a population analysis of US firms, there was a similar proportion of an increase in employment rate when comparing new and established firms. Firms operating in one sector may grow faster than in firms operating in another; therefore, it

influences firm growth rates. Location of the business is another factor, depending whether it is placed in urban or rural area; although, there are benefits and restrictions in both cases. Size is related to the employment levels of the firm, where small firms grow faster than larger ones, with the exception of the sole proprietorships. Lastly, ownership form shows legal status of the organization, where limited liability firms grow faster than the partnerships and sole proprietorships (Storey, 1994). **Therefore, the discussion leads to these hypotheses:**

Hypothesis 6: The age of the firm has positive influence on firm's growth.

Hypothesis 7: The sector (manufacturing, service and trade) has positive influence on firm growth.

To have a clear overview of each sector, three sub-hypotheses have been developed, such as:

Hypothesis 7a: Manufacturing sector has positive influence on firm growth.

Hypothesis 7b: Service sector has positive influence on firm growth.

Hypothesis 7c: Trade sector has positive influence on firm growth.

The third influential factor that contributed to firm growth is business management practices/strategies, which is linked to the managerial actions within organization. Key factors involve workforce training, management training, marketing strategy, internationalization, technical resources, planning, external advice and support, as well as financial resources. Analysis should be done to compare how much training the firm can afford to provide to its employees in relation to the firms' propensity to grow. The impact of management training in the firm growth is not conclusive, but firms may require new skills and competencies. Development of marketing strategy requires best use of resources to approach differently in the market. SMEs also make choices to internationalize their operations through exporting, despite the constraints they encounter. To overcome obstacles of size and lack of experience, the possession of technical resources is a valuable tool to achieve the growth objectives of a firm. Formal planning in SMEs can increase propensity of growth behavior. Moreover, firms that acquire external advice and support from individuals or consultancies may help to solve problems contributing to the growth. Finally, access to external finance affects implementation of growth opportunities (Storey, 1994).

Other considerations contributing to firm growth are environmental factors. Small firms encounter greater uncertainty and dependence on their environment because of their size leading to small scale and market share. Nevertheless, through their flexibility and innovation development, small firms tend to overcome these obstacles (Fadahunsi, 2012). Pasanen (2007)

highlights other factors that influence growth, including organizations with more than one owner, as well as the entrepreneurs' characteristics, such being middle-aged, as well as their motivation and education level. In order to achieve growth, there should a combination of strategic factors, such as shared ownership, identification of market niches and introduction of new products, as well as development of efficient management team. The firm growth does not depend only on market opportunities, but also in the decision making and choice of management team. Therefore, the entrepreneurs' behavior plays a crucial role. Growth objectives in SMEs should be bound up with owner-manager goals. The reason why SMEs stagnate is the lack of resources for growth and the expected business risks.

Innovation, growth and employment

According to European Commission (1995), the driving forces of growth are the know-how and technological change, rather than capital that company has. Facilitating the interaction between firms, as well as firms with other institutions, including universities can help develop the know-how and skills that affect economic growth.

There exist complex relationship between employment and innovation. For instance, process innovation is used to improve the production and lower the costs. This can lead to an increase in purchasing power, meaning more demand for the products, which results in employment. Nevertheless, because of the use of technology, it can lead to job losses as well. In general, there will be job losses in some sectors which may offset by the job creation in service sectors.

3.3 Innovation

Innovation is seen as the core entrepreneurial initiative according to European Commission (1995). Innovations are considered global motor for economic growth, which aim to increase competitiveness (Vives, 2008). Moreover, innovation is useful to predict and satisfy market needs, offer higher quality and more valuable products and services, as well as meeting deadlines, and controlling costs efficiently (European Commission, 1995).

In 1911, Joseph Alois Schumpeter wrote his book “Theorie der wirtschaftlichen Entwicklung” (Schumpeter, 2002), which later on in 1934 was published in the United States as “The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle”, where he elaborates on “the doing of new things or the doing of things that are already

done, in a new way” (Schumpeter, 1982). In the book, he didn’t use the term innovation explicitly, but wrote its meaning, so he is considered one of the founders of innovation research.

There are different definitions of the term innovation among the authors, and this is mainly because of different dimensions that innovation may affect. According to (Rogers, 2003), “Innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption.” In this definition of innovation, a criteria of newness and change is included, emphasizing that innovation is more than just an idea; it is about extracting value from ideas. This definition agrees with the general opinion for the new product development research (Koen et. al., 2001; Koen et. al., 2002).

Figure 3.1 shows the relationship between patenting, invention and innovation on the basis of Blasberg’s research work (Basberg, 1987).

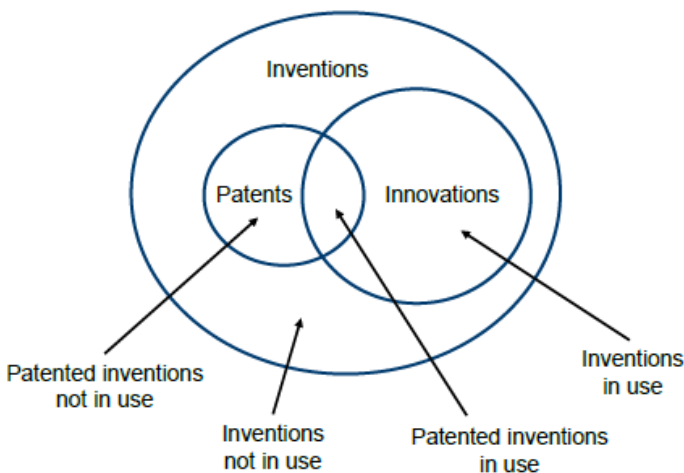


Figure 3.1 Distinction between Patent, Invention and Innovation

Source: Basberg, 1987

Figure 3.1 discusses that the terms invention and innovation, which do not mean the same thing (Nagel, 1993; Specht & Beckmann, 1996). Therefore, invention is about the first technical realization of a new problem solution developed as a result of research activities, which leads to legal basis for utilization of the results. In this case, the innovation means utilization, integration and marketing of new solutions in usable products and services, going beyond the actual invention. Innovation is about development of R&D with the aim to gain new knowledge and to discover new technical solutions to a problem (Specht & Beckmann, 1996).

Innovation is defined differently among authors. Drucker (1985) defined innovation as the process of equipping in new, improved capabilities or increased utility. Innovation is about doing something different from others in order to be more effective and efficient by changing existing methods or techniques. It is important that changes are perceived differently in the eyes of customers, adding value to existing products and services (Crumpton, 2012). According to Lesáková (2014), innovation means transformation of organizations by incorporating positive change, which improves customers' expectations. Innovation is about creative ideas, and SMEs are trying to encourage innovative culture in order to possess creativity of human potential in their organizations. Szeto (2000) defines innovation as a tool that improves the internal capabilities and resources, which serve for exploring opportunities, such as development of new or improved products and services to meet customers' needs. Innovation capacity is continuous improvement of the firms' capability to develop innovations either incrementally or radically (Szeto, 2000). Innovation capacity can be measured by the R&D activities and the output of innovation from new products and services within an enterprise (Kirner *et al.*, 2009). Nevertheless, the innovation from small enterprises is not primary a result of R&D activities, but it includes daily business development, customer collaboration or optimization of processes (Hirsch-Kreinsen, 2008). Santamaria *et al.* (2009) supports this by emphasizing that innovation in small enterprises results with informal R&D activities, including experimentation, evaluation and technology adaptation. Indeed, innovation leads to economic success, increased competition or achieving growth by developing new products and services and technology advancement (Schumpeter, 1934).

Entrepreneurship is also conceptualized differently based on the review of literature. It is about starting a new venture and being competitive in marketplace. In general, entrepreneurship is described in terms of innovation, creativity, flexibility, risk-taking and growth (Stevenson & Gumpert, 1985). It is a challenge to recognize new opportunities, such as products and services, in order to be differentiated from competitors (Wolcott & Lippitz, 2007). There are various roles of entrepreneurship, such as a person who exploits an opportunity to start new business, a risk taker, supplier of financial capital, decision maker, and coordinator of economic resources (Hébert & Link, 1989, adapted from Wennekers & Thurik, 1999). It is worth emphasizing that entrepreneurship is linked to economic growth through innovation and competition (Wennekers & Thurik, 1999). According to Hashi and Krasniqi (2010), the Schumpeterian entrepreneurs are responsible to make organizational changes, by bringing new products, or making changes in the

existing ones, as well as by using new methods to decrease costs and ensure higher productivity. Entrepreneurs are flexible to adapt to business environment changes in order to meet market needs. Business environment changes may include changes in regulations, taste, demand, and technology. It should be emphasized that entrepreneurial activities should be developed in the long term to ensure firm growth.

3.3.1 Types of Innovation

According to the OECD (2005), innovation is “the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations.” Many studies classify innovation differently. Nevertheless, most of the authors classify innovations as follows: products, processes, marketing and organizational innovation (OECD, 2005; Oke *et al.*, 2007; Chetty & Stangl, 2010).

3.3.1.1 Product innovation

Product innovation is about new or significantly improved products and services which lead to higher sales or enhancing customers’ satisfaction. It means new product offerings (Oke *et al.*, 2007; Chetty & Stangl, 2010). Depending on the nature of the firm, some firms choose to implement a single innovation leading to a significant change, while other implement a series of smaller incremental changes that in the end lead to a significant change (OECD, 2005). The term new products cover both goods and services. An example of product innovation can be improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics. A more specific example of new products using new technologies include the first microprocessors and digital cameras, while an example of new product using existing technologies is the first portable MP3 player that combined existing software standards with miniaturized hard-drive technology. Moreover, introducing minor changes to a product, such as a new detergent using an existing chemical composition that was used before as an intermediary for coating production, is also considered a product innovation. In addition to these examples, improvements in cars, such as the introduction of ABS braking, Global Positioning System (GPS) navigational systems are considered significant improvements in existing products. Moreover, product innovation in services include significant improvement on these services are offered to customers, including their efficiency and speed; the addition of new functions or characteristics to existing services, or the development of completely new

services. A particular example can be improved speed and ease of use of internet banking services or the home pick-up and drop-off services for rental cars that improve customer access (OECD, 2005). Nevertheless, firms are encounter challenges while introducing innovative products due to the advancing technologies, changing customer needs and wants and increased competition. Thus, many firms are trying to cooperate continuously with customers and suppliers to achieve growth (Gunday et. al., 2011).

3.3.1.2 Process innovation

Process innovation has to do with the new methods of production or delivery which leads to lower costs of production or delivery, higher quality and better services. It is about the improvements made within the production, service and administrative operations (Oke et al., 2007; Chetty & Stangl, 2010). Thus, process innovation refers to the degree that firms develop and perform activities based on imaginative methods, a competence that they need to cope with dynamic environment (Yang, 2010). The following are some specific cases of process innovation in terms of new production methods and delivery methods. Examples of new production methods include the implementation of new automation equipment on a production line or the implementation of computer-assisted design for product development. On the other hand, delivery methods have do with the firm logistics that covers equipment, software and various techniques to source inputs, allocate supplies or deliver final products. In addition, process innovation encompasses also new or significantly improved techniques, equipment and software in support services, including purchasing, accounting, computing and maintenance (OECD, 2005).

3.3.1.3 Organizational innovation

Organizational innovation has to do with the implementation of new organizational methods in the business practices, workplace organization or external relations, with the purpose to reduce administrative costs and increase employees' satisfaction leading to labour productivity. It refers to innovation at firm level in management initiatives (Oke et al., 2007; Chetty & Stangl, 2010). Organizational innovation in business practices encompasses new methods for organizing routines and procedures for the work conduct, such as first implementation of practices for codifying knowledge by establishing databases of best practices, lessons and other knowledge, which would be accessible to others. Besides that, an innovation in workplace organization has to do with introducing new methods for distributing responsibilities and decision making among

employees, as well as new concepts for the integration of various business activities. Introduction of organizational model to provide employees greater autonomy in decision making and creative ideas is an example of organizational innovation in workplace organization. Also, an example of organizational innovation to structure business activities is build-to-order production systems, which means efficient integration of sales and production. In addition, firm's external relations as an organizational innovation involves the implementation of new ways of organizing relations with other firms or public institutions, such as the establishment of new types of collaborations with research organizations or customers, new methods of integration with suppliers, as well as first time outsourcing or subcontracting business activities in different fields, such as production, procuring, distribution, recruiting and ancillary services (OECD, 2005).

A common characteristic of innovation types is that they must have been implemented. A new or improved product innovation is implemented at the time when it is introduced on the market, while other types of innovations, such as new processes, marketing methods or organizational methods are implemented when the firm start to use them within its (OECD, 2005).

3.3.1.4 Marketing innovation

Marketing innovations lead to positive changes in product design or packaging, placement, pricing, promotion or positioning strategies, which results to an increased sales volume (Oke *et al.*, 2007; Chetty & Stangl, 2010). New marketing methods can be implemented not only for new products, but also for existing ones. For example, significant changes in product design means changes in product appearance, without changing the products functional or user characteristics. An example can be change in design of a furniture line to contribute to a new appearance and broaden its appeal. Another illustration of marketing innovation in packaging can be new bottle design for a body lotion, which gives a distinctive look to a product with the aim to appeal it to a new market segment. In addition, new marketing methods in product placement include new methods of sales channels used to sell goods and services to customers, such as introduction for the firms time of franchising system. Moreover, the use of new concepts for promotion of goods and services comprise of product placements in movies or television programmes, as well as the introduction of new brand symbol with the aim to position firm's product into new market or only to provide to the product a new image. Last, but not least is the innovation in pricing, which involves new pricing strategies to firms' goods and services. An

example can be when customers possess the opportunity to choose desired product specifications on the firm's Web site and then the price for the specified product will be calculated (OECD, 2005).

3.3.2 Interaction among the innovation types

In this study are also analyzed the relationships among the four types of innovations, and examples when several types of innovations are introduced simultaneously.

It should be emphasized that product and process innovations are interrelated. This is because often development of product innovations leads to changes in process structures (OECD, 2005; Hirsch-Kreinsen, 2008). Product innovation is about changes that are incorporated in the end products or services, with the aim to create new markets. On the other hand, process innovation means changes that are done in the methods used in the processes or technologies by the firm to generate products and services, with the aim to reduce costs of production processes. Both of these innovations are considered to be sources of strategic advantage within an enterprise (Dibrell *et al.*, 2008). In the study on Chinese firms, product and process innovations very highly correlated (Li *et al.* 2007). Also, a study on British firms concludes that while developing formal implementation processes, it was necessary to pursue incremental product or service innovations (Oke, 2007).

There are some cases, when innovation can be considered both product and marketing innovations, as well. An example is when the firm introduces changes in existing products that involve not only changes in the functions or uses of the product, but also significant changes in the appearance and packaging (OECD, 2005). Nevertheless, Gunday *et al.* (2011) state that there are no explicit findings related to marketing and product innovations. Similarly, an example of process and marketing innovation is when a firm implements new sales channel, that involve also new logistics methods, such as transport, storage and handling of products (OECD, 2005). Moreover, the first introduction of a total quality management system, as organizational innovation, may involve significant improvements in production methods, such as new production logistic systems, which is an example of the development of organizational and process innovations (OECD, 2005). Damanpour *et al.* (1989) emphasize that administrative innovations led to introducing technical innovations in public libraries. Also, Walker (2008)

stated the interrelation between organizational, marketing and product innovations in a study on public organizations.

3.3.3 Radical and Incremental Innovation

Previous studies did not analyze the degree of innovation. As long as a new product was introduced, it was considered an innovation. Nevertheless, the latest research differentiates product innovation by adopting incremental or radical changes (Salavou & Lioukas, 2003). Therefore, the impact of innovation can be radical or incremental, depending on the degree of change to innovation, as well as its perceived risks. The difference is that radical innovation produces fundamental changes within organization, while incremental one has to do with improvement in the existing methods, practices, and capabilities of organizations (North & Smallbone, 2000; Chetty & Stangl, 2010). Radical innovation is characterized by high uncertainty, knowledge intensity and high returns. These innovations are completely new. On the other hand, incremental innovation has to do with improvements in the existing products and services (Oke *et al.*, 2007). Other authors have similar views about these types of innovation. The incremental innovation includes minor modification performed within products and services, such as improved quality, reduced costs, increased the effectiveness of operations, (Dewar & Dutton, 1986) or new features and benefits to existing market (Garcia & Calantone, 2002). On the other hand, the radical innovation includes totally new offerings of products and services, often characterized with advancement of technology. They often create demand not recognized by customers, which may cultivate new competitors (Garcia & Calantone, 2002). Both of these innovations strive to improve quality and variety of products offered on the market (Morone & Testa, 2008). Moreover, OECD (2005) stress out the degree of novelty in terms of new to the firm, new to the market and new to the world. A minimum entry level of innovation is that it should be new to the firm, which means when an innovation has been implemented by other firms, but it is new to the firm. Moreover, new to the market innovations are when a firm is the first to introduce an innovation to the market, which may include both domestic and international firms. New to the world innovations have the greatest degree of novelty, which involve innovation first implemented in all markets and industries, either domestic or international (OECD, 2005). According to the Woschke *et al.* (2016), innovation in SMEs are usually incremental, or new to the firm, as they are characterized with limited resources in capital, personnel, and technology.

Therefore, the discussion leads to this hypothesis:

Hypothesis 8: SMEs tend to introduce new products to the firm, rather than to the market to achieve firm growth.

The Figure 3.2 by Dewar and Dutton (1986) shows the main differences between radical and incremental innovations in terms of external exposure, complexity, depth of knowledge, management attitudes favoring change, centralization. It shows that complexity, depth of knowledge, management attitudes favoring change and centralization have positive association with adoption of fundamental innovation, while the external exposure has no association with this kind of innovation. On the other hand, external exposure has a positive association with adoption of incremental innovations. There is no association with adoption of incremental innovation in terms of complexity, depth of knowledge and management attitudes favoring change. In addition, centralization has a negative association with adoption this innovation.

A. Fundamental Innovations	
1	External Exposure-no association with adoption of fundamental innovations
2	Complexity-a positive association with adoption of fundamental innovations
3	Depth of Knowledge-a positive association with adoption of fundamental innovations
4	Management attitudes favoring change-a positive association with adoption of fundamental innovations
5	Centralization-a positive association with adoption of fundamental innovations
6	Centralization also accelerates the positive association between management attitudes favoring change and the adoption of fundamental innovations
B. Incremental Innovations	
1	Complexity-no association with adoption of fundamental innovations
2	Depth of Knowledge-no association with adoption of fundamental innovations
3	Management attitudes favoring change-no association with adoption of fundamental innovations
4	Centralization-a negative association with adoption of fundamental innovations
5	External Exposure- a positive association with adoption of fundamental innovations

Figure 3.2 Predicted Association for Radical and Incremental Innovation Adoption

Source: Dewar and Dutton (1986)

There are mixed results of literature about which kind of innovation are adopted by enterprises. Damanpour and Wischnevsky (2006) highlight that small firms usually generate radical innovations, while the large firms focus more on incremental innovations. Contrary, according to Forsman (2011), de Jong and Marsili (2006), Oke *et al.*, (2007), small firms are the ones who develop more incremental innovations because of lack of capital, and they are focused more on process innovation rather than product one. The number of radical innovations begins to increase at an enterprise usually after developing at least three different innovations. The mixed results can be explained probably as innovation is perceived differently in various markets and economies. A product or service which is considered new to one market, is not necessarily new to other markets (GEM, 2011).

3.4 The relationship between SMEs growth and Innovation

In this dynamic environment, there is a need to be differentiated, and many organizations are doing this by embracing innovation culture. SMEs that focus on innovation development play a crucial role in the enterprise growth. They have advantage of their small size associated with the lack of bureaucracy, which enables them to interact with market by responding quickly and adapting to business environmental changes. Indeed, innovative behavior should be developed within SMEs in order to turn obstacles into learning opportunities (Mahemba & Bruijn, 2003).

The following section include firm internal characteristics that impact firms' growth through innovation, as well as the review of literature on the empirical studies developed to find out the impact of different types of innovations in firm growth.

3.4.1 Firm internal characteristics

Many studies have concluded that internal characteristics are crucial on achieving high firm performance through innovation. It depends whether the organization develops a radical or incremental innovation, for which different strategies and structures are needed. According to Pullen *et al.*, (2009), the internal characteristics, which involve strategy, process and organization, play a significant role to make decision on the development of innovation types. Traditional strategy is focused more on incremental innovation through improvement or enhancement of existing products and services, while technology strategy promotes radical innovation by focusing on emerging trends. Another internal characteristic of SMEs include process made up of formalization and marketing-R&D integration. Formalization is a system of

procedures dealing with product innovation. A formal process is needed when developing incremental innovation, while less formalized process is used for radical product development. Also, the integration of marketing and R&D is crucial to ensure effective communication and cooperative relationship. For radical innovation, market information is less relevant as it has to do with the emergence of new products and services, whereas this relationship is important for incremental innovation. The third internal characteristic is organization, which comprises of climate, culture and team structure. The firm climate is linked to firms' policies, practices and procedures, as well as to the employees' attitudes, such as trust, conflict, rewards equity and resistance to change. For example, an entrepreneurial climate is developed when employees have time to dedicate for new and creative ideas. Organizational culture has to do with the beliefs and values embedded in the organization, inheriting innovation within employees. Also, team structure means the cross-functional product development teams, composed of individuals with various skills and capabilities. It can be concluded that incremental innovation requires an entrepreneurial climate, hierarchical culture, and a lightweight team structure, while radical innovation is achieved when there is entrepreneurial climate with adhocracy culture and autonomous team structure (Pullen *et al.*, 2009).

A firm can either generate or adopt innovations based on the internal capabilities and strategic orientation. The process of generating innovation comprises of high technological capabilities, strong R&D and multidisciplinary skills, which means higher investment. On the other hand, the process of adopting innovations that have been generated by others is an easier process. An illustration can be technological transfer through technological centers that facilitate the promotion of innovation culture by providing services to perform R&D and information on innovation management. This type of innovation is appropriate for developing countries considering their difficulties on access to finance (Mahemba & Bruijn, 2003).

3.4.2 The impact of innovations in firm growth

A large number of studies have been focused relationship between innovativeness and firm performance, which conclude that innovative firms achieve superior performance and competitive advantage (Damanpour and Evan, 1984; Deshpande *et al.*, 1993; McGrath *et al.*, 1996; Han *et al.*, 1998; Hult & Ketchen, 2001; Calantone *et al.*, 2002; Garg *et al.*, 2003). Nevertheless, these studies focus on only one type of innovation, and it can be concluded that process and product innovation have been mostly examined. The studies by Ittner and Larcker

(1997), Knott (2001), Baer and Frese (2003) and Yang (2010) focus merely on process innovations while studies of Atuahene-Gima (1996), Subramanian and Nilakanta (1996), Han et al., (1998) and Li and Atuahene-Gima (2001) report on product innovations. Nevertheless, there are some studies that indicate negative relationship or no link at all between innovations and firm performance (Chandler & Hanks, 1994; Subramanian & Nilakanta, 1996). Hence, there are not many studies related to marketing and organizational innovations which are essential to firm growth (Gunday et. al., 2011).

The influence of product innovation on business performance has gain interest among the authors in recent literature. Several studies conclude that product innovation has positive relationship with organizational performance. Rosli & Sidek (2013) confirm that product and process innovation have an impact in organizational performance. Bayus *et al.*, (2003) proved that product innovation has significant link with business performance based on the study of personal computer industry, being one of the most innovative sectors. Another empirical study introduced by manufacturers in the United Kingdom between 1945-1983 of Geroski, Machin and Van Reenen (1993) concludes that product, process and material innovation have positive effect on profit margins. Moreover, Hernandez-Espallardo and Delgado-Ballester (2009) in a study conducted with manufacturing Spanish SMEs confirmed a positive and significant relationship of innovation on organizational performance. The study performed with SMEs in Finland also concludes a positive relationship between product, process and market innovations with organizational growth, but interestingly there was no relationship found between organizational innovation and organizational growth. This can happen because of intangible nature of organizational innovation (Varis & Littunen, 2010). Most SMEs develop product innovation because of higher profitability (Oke et al., 2007; Chetty & Stangl, 2010). Morone and Testa (2008) in the study of Italian manufacturing sector concludes that product innovation, process innovation and organizational changes are significantly associated with organizational growth. Nevertheless, there is no considerable relation of marketing innovation in firms' growth. In addition, Ar and Baki (2011) reconfirm a positive influence of product and process innovation on firm performance based on the study done with SMEs located in Turkish science and technology parks. Lin and Chen (2007) emphasize the linkage between innovations development and increased firm sales, particularly they state that organizational innovations (administrative one) play the most important role in the total sales. Organizational innovation play fundamental role for innovative capabilities and they often prepare a suitable milieu for other innovation types;

thus, it is suggested that managers should pay greater attention to this type of innovation (Gunday et. al., 2011). In addition, marketing innovation is associated positively with sales growth in a study with data collected from Norwegian hotel industry (Sandvik & Sandvik, 2003). Moreover, market innovation is significantly associated with organizational growth in SME furniture industries from Italy, Spain and Finland was emphasized by Otero-Neira *et al.*, (2009). Furthermore, Lin and Chen (2007) found that marketing innovations lead to higher firm sales by increasing product consumption.

Indeed, in the literature review, product and process innovation have positive impact in firm performance, while the effect of marketing and organizational innovations to firm performance is not conclusive, as there are not many studies on them.

Therefore, the discussion leads to this hypothesis:

Hypothesis 9: SMEs that developed product/process innovations achieve firm growth.

Hypothesis 10: SMEs that developed organizational innovation do not necessarily achieve firm growth.

Hypothesis 11: There is no direct relation between SMEs that developed marketing innovation and firm growth.

3.5 Innovation through SMEs' networks

Over 60% of innovation has been introduced by SMEs in 20th century. Even though creative ideas are generated by them, they encounter financial difficulties and lack of skilled employees, which is required to transform inventions into products. SMEs are capable to develop innovation, but not many of them are able to manage the whole innovation process. This implies the need for collaboration of SMEs with others, such as other SMEs or academic and research institutions, which may help to promote innovation capabilities and strengthen their position in the market. More specifically, through networking partners, open innovation offers potential to respond to customers' needs and wants, leading to higher organizational performance (Konsti-Laakso *et al.*, 2012). The open innovation notion has been used firstly for managers in large technology-based companies. This is mainly because large firms have greater resources; nevertheless, open innovation can be applied also in SMEs as they develop different types of innovation and extend their technological competences through inter firm cooperation (Lee *et. al.*, 2010). It also helps to combine various knowledge and assets by involving many actors (Konsti-Laakso *et al.*, 2012).

Nevertheless, it should be emphasized that subcontracting a company to do a specific task does not mean open innovation. An example of open innovation is if an SME use an external marketing agency to contribute in an innovation process and collaborate continuously through market exploitation, market test or customer needs analysis (Lee et al., 2010). Moreover, Rocheska et al. (2014/5) highlight the importance of network through living labs, which are becoming very attractive for innovative solutions.

The importance of having network has been found in different areas, including in the field of innovation theory, which argues that organizations that are part of network will have higher rate of innovation. Network means the ties between different entities which are independent from each other. The reason why organizations enter a network is because of the long-term benefits that they intend to receive. Specific benefits of network include: an increase in the market share, total sale, and in the number of employees (Havnes & Senneseth, 2001). Other benefits from network for innovation development are higher turnover, profit rates and expansion of product range (Gardet & Mothe, 2012). SMEs have shown to efficiently utilize external networks, which lead shorter innovation time, lower risk and cost and greater flexibility in their operation (Lee *et al.*, 2010). One of the main benefits of network is the diversity of people with different skills and capabilities, who are able to recognize new innovations (Chetty & Stangl, 2010).

Pittaway *et. al.* (2004, p.145), cited in Chetty & Stangl (2010) identifies further innovation benefits that firms receive by networking, such as risk sharing, access to new markets and technologies, commercialization speed, accumulation of complementary assets, protection of property rights, and the role networks play as avenues to external knowledge. This shows the importance of developing networks for SMEs. For example, by working closely with customers, SMEs understand the improvements that are needed and receive new ideas for innovation which creates customers' value (Chetty & Stangl, 2010). Significant to SMEs network are also social relationships, as they provide information, finance, access to other networks and reputation asset.

SMEs use their limited resources for innovation and acquire other resources and assets through networks (Chetty & Stangl, 2010). Networks are linked to firm growth, mainly for capability development, which serves as a valuable source of knowledge. There are networks of exploration, which is focused on incremental innovation or improvements, while network of exploitation is focused on radical innovation, or new products and services (Laforet, 2011). At

the exploration stage, SMEs develop external partnerships mainly with public research institutes and universities, while at the exploitation stage, they try to create value to customers through supplier-customer relations with large firms (Lee *et al.*, 2010). Different networks include organizational customers, suppliers, competitors, government, as well as educational institutions (Chetty & Stangl, 2010).

The review of literature emphasize that SMEs are involved in innovation activities, which are carried out often within networks. Nevertheless, networks might bring also problems, especially when there are innovation projects with diverse organizations with different corporate and cultural backgrounds. Thus, to avoid this kind of pitfalls, coordination mechanisms should be used, such as the type of exchange, trust, sharing of benefits, guarantees and conflict resolution. Type of exchange means when members of innovation networks set some rules how to behave, in a formal or informal way, in order to resolve any conflict that can occur. Inter-organizational trust is another coordination mechanism, which has great influence in the success of networks. Result division encourages the network team to work harder and improve the performance of a certain innovation project. It is risky because all members require the same benefits, even if they have not contributed equally. Guarantee systems ensure protection from any damage that will be expensive for opportunistic members within the network. These members will be withdrawn from the group. Lastly, the conflict resolution is another coordination mechanism which happens when there is a problem between members of the network. To resolve this conflict, SMEs should use one of these mechanisms, such as joint resolution of problem, persuasion, coercion, sanction or even introduction of third party, such as arbitrator (Gardet & Mothe, 2012). It can be concluded that beside its benefits that network brings to SMEs that innovate, coordination mechanisms should be in place to avoid any conflict. **Therefore, the discussion leads to this hypothesis:**

Hypothesis 12: SMEs tend to develop innovation by cooperation with other institutions, rather than mainly by themselves, to achieve firm growth.

3.6 R&D activities and subsidies for innovation

R&D activities are extremely important to grow the innovative capacity of SMEs. In many countries, the level of innovative capacity is crucial to be able to make significant changes within company's production systems. Even though the expenditures of R&D for SMEs are high, they can still contribute to SMEs growth (Rogers, 2004). Other authors highlight that R&D

investment can be inefficient in SMEs because lack of skilled human resources, business risks associated with it. Niosi (2003) findings show no effect of R&D expenditures on growth, while Chamanski and Waago (2001) state negatively effect of R&D expenditure on growth. Moreover, Rocheska et al. (2014) highlight that SMEs do not necessarily have to invest in R&D activities to ensure commercialization. Yet, Wöhrl et al. (2009) states that R&D expenditure is positively associated with firm growth if they belong to high-tech sectors.

Therefore, the discussion leads to this hypothesis:

Hypothesis 13: R&D activities have positive influence on the firm's growth.

Moreover, subsidies in innovation have great impact on firm growth (Rehman, 2016). There are different studies that tackle that issue of supporting SMEs innovation through subsidies. Some of them highlight the importance of having sufficient financial resources in order to develop innovations. They state that support from government agencies brings better results to innovation output than the support from other external sources. Also, SMEs require the government to approve their new products, to grant patents for their products and provide grants for innovation (Rehman, 2016). To improve firm performance, SMEs require incentives, such as subsidies from government agencies (Harris and Trainor, 1995; Kim, 2000). In Japan, to spur firm growth and innovation in high-tech SMEs, they developed an R&D subsidy program. The results showed that the program was more successful for matured firms who hired additional research personnel, which led to employment growth (Koga, 2005). Moreover, Wallsten (2000) concludes that subsidies might decrease private R&D due to the bias on selection of the funding process. Nevertheless, another study conducted by Israeli high technology start-up state that R&D subsidy increases long-run private R&D expenditures, and that subsidies should be given to SMEs and not to large firms (Lach, 2000).

Therefore, the discussion leads to this hypothesis:

Hypothesis 14: Subsidies for innovation activities have positive influence on the firm's growth.

3.7 Innovation development within SMEs

This section includes driving factors for innovation development, as well as challenges that they encounter while trying to be innovative and achieve competitive advantage.

3.7.1 Driving factors for innovation development

There are different managerial and environmental elements required to achieve a successful application of new innovation. According to Cumming (1998, p. 22), there are three steps needed to be considered, such as “idea generation, the successful development of that idea into a useable concept; and finally the successful application of that concept.” Figure 3.3 shows a summary of factors having a positive effect on each of the three steps. The first step is the invention which is about having creative environment with efficient managerial attitudes and working conditions. Critical at this stage is ensuring that employees have freedom to think and act in order to access diverse and creative ideas and recognize their success. The second step is development, which is about process of having new concept and starting to develop, where it needs to have adequate resources, strong support and direction from the managers, the use of external expertise, efficient cooperation among the team, and close contact with the end user. The third step is successful application which has to do with whether the customer will adopt the new concept and whether it is seen valuable in customers’ eyes, so the company investment is paid off. Therefore, it is crucial to understand the customers’ perspectives of value for money at the early stage of development in order to have successful implementation of innovation as shown in Figure 3.3 (Cumming, 1998).

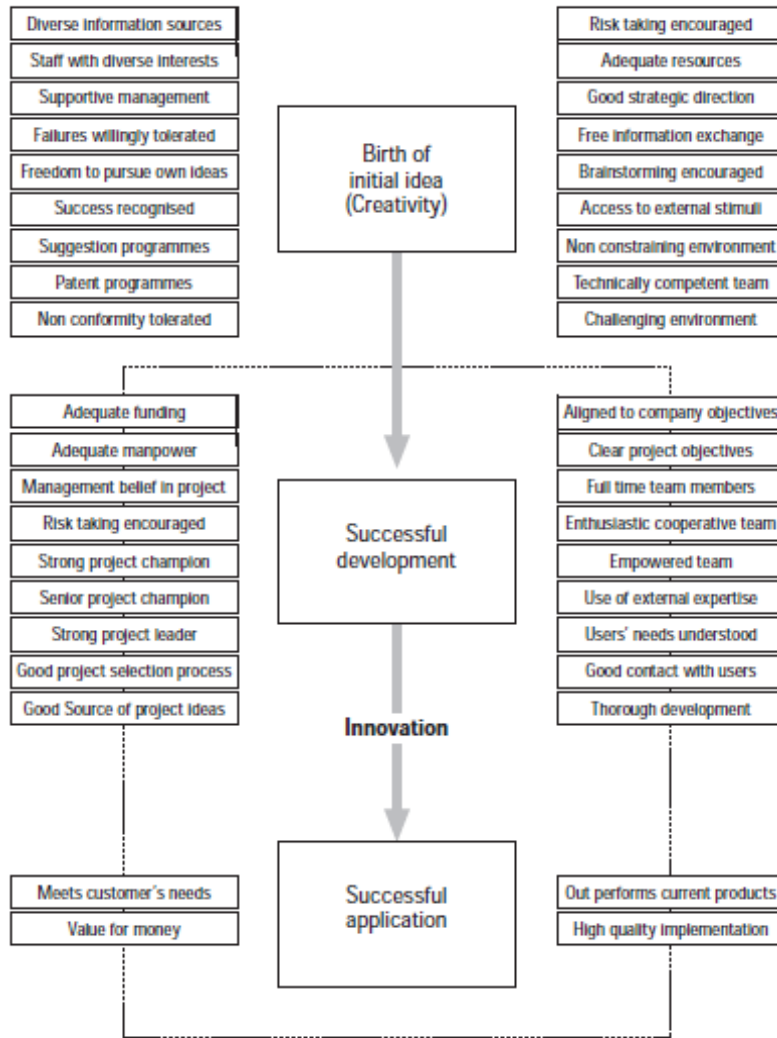


Figure 3.3 Summary of factors having a positive effect on each of the three steps

Source: Cumming, 1998

Cravens et al., (2002) emphasizes that creative innovative culture and climate can be developed within organizations by choosing the right innovation strategy, building effective development processes, making resource commitments and leveraging capabilities as shown in the Figure 3.4. In an innovative culture, there is open communications throughout the organizations and high involvement of employees in decision making. A crucial point to choose the right innovation strategy is taking account organization's core capabilities and market opportunities in order to bring a good customer value. If the company focuses in a new product strategy, it should set specific new product objectives (sales, profit, market share); communicate throughout the employees the role of new products in organizational growth; and define product scope, markets

and technologies. The second step is building effective development processes, which includes searching for ideas, screening and evaluating product concepts, developing promising concepts, marketing strategy development, market testing and full scale market introduction. The third step is making resource commitments, where management should be willing to provide adequate resources to develop innovation. The fourth step is leveraging capabilities, which is about matching customer value needs with organizational experience and skills, and this has a significant impact in innovation success (Cravens et. al., 2002).



Figure 3.4 Drivers of successful innovation

Source: Cravens et al., 2002

In addition, Hardie and Newel (2016) highlight value tree enabling factors to deliver innovation with significant originality. The first factor is about internal company resources used for innovation process that includes technical capabilities, capital investment, liquidity, time allocation and individual enthusiasm. The second factor is related to client's influence power toward the product as well their characteristics. The third factor is activities that involve organizational expertise, as well as supply chain relationships. The fourth factor is about networks, which involves connections with professional bodies, including associations, and research organizations and universities. The last factor is about legal framework regulations and standards in which a specific sector works. Moreover, to develop innovation companies must be aware of market-related factors and other external challenges, as well as develop an internal assessment to ensure that the firm possesses the skills and distinctive capabilities needed to have successful innovation. Even though SMEs are of a small size compared to large firms, they must keep in mind that large doesn't mean always better (Martins & Fernandes, 2015). Furthermore, Taneja et al. (2016) emphasize that critical success factors for innovation development are

passion for creating, inventing and innovating; cooperation and collaboration with employees as well as with external customers and suppliers, as well as with direct competitors, known as co-opetition. Another factor includes internal innovation capabilities by having adequate resources, skills and technology, and if the organization misses one of them, then it needs to collaborate with other firms and/or institutions. Moreover, organizational culture, structure and streamlined processes are crucial to support innovation. The last factor includes supportive customers, suppliers and employees by taking ownership in the innovation process. Robson and Bennett (2000) agree that in order to maximize the use of limited resources within SMEs, it is crucial to develop strong relationships with customers and suppliers (Robson & Bennett, 2000). This helps SMEs to improve existing skills, as well as acquiring new ones. In terms of innovation development, it means sharing risk to bring new or improved products and services (Terziovski, 2010).

Indeed, different authors agree that implementing innovation within organizations is a complex procedure. Innovation does not happen from a pure chance in the market; necessary conditions for innovation activities should be in place, in order to have successful implementation of innovation projects.

A universal model that leads to sustainable growth was used to analyze the innovation processes in more than 1500 SMEs across Europe, included in A.T. Kearney's "House of Innovation" as shown in Figure 3.5. This model covers all dimensions of innovation management, such as innovation strategy, innovation organization and culture, innovation life-cycle management, and innovation enablers. The key to success is to follow all these dimensions continuously to ensure efficient development of innovation within firms (Europe INNOVA, 2010).



Figure 3.5 The A.T. Kearney House of Innovation

Source: A.T. Kearney, 2006 in Europe INNOVA (2010)

The first dimension is innovation strategy, which is crucial one, considering that it should be aligned with business strategy, and it includes the identification of the most profitable areas to company through new products or services, existing products or services in new markets and new or improved processes or business models. The second dimension comprises of innovation organization and culture. This is very challenging dimension considering that resistance to change of employees used to work in a certain way. That's why it is crucial to create a culture where employees are open to new ideas, and there must be structures that drive innovation, and this includes external partners or consultants, and top management believes that a certain development of innovation will lead to profit growth. The third dimension is innovation life-cycle management, which includes a proves of idea generation, product or service development, market launch, as well as continuous analysis of which products and services are profitable, and which ones are no longer profitable. The last dimension is innovation enablers include knowledge management, IT and Human Resource systems, project management, and capabilities in specific technologies or expertise in new market development. These factors play significant role in SMEs growth, and the key is to be linked with innovation strategy, in order to allocate efficiently the limited resources and exploit the potential of innovation growth. Besides these internal dimensions, to have a leading role, organizations should consider other external interest groups, such as technological, market organizational and institutional dimensions (Europe INNOVA, 2010).

3.7.2 Challenges of implementing innovation in SMEs

Even though SMEs are characterized by their flexibility based on market needs, they encounter many challenges toward brining innovative products and services for the customers. The following are some of the main factors that hinder innovation introduction by SMEs. Al-Ansari et. al., (2013) argues that the main barriers of innovation include financial constraints, market challenges, as well as regulatory issues. On the other hand, barriers of lower level include suppliers, technology and knowledge transfer mechanisms, lack of skilled workers, lack of managerial expertise, limited access to research, and unwillingness to change (Blumentritt & Danis, 2006; Laforet & Tann, 2006; Al-Ansari et al., 2013).

Cost of finance

One of the main challenges of innovation development within SMEs is cost of finance. In the recent years, the issue of SME cost of finance has increased attention in order to build innovative SMEs which leads to innovative economy. Because of the trend of knowledge based economy, many governments are trying to develop policies to help SME financing. In many countries, economic growth is supported by credits provided by banks and financial institutions. Nevertheless, banks and financial institutions hesitate to provide credit lending to SMEs because they don't see it as a profitable business. This is because SMEs lack of sufficient assets, have no track record and are characterized with low capitalization (Wonglimpiyarat, 2015). Woodward (2006) also points out that banks are not interested to finance risky new ventures in any country.

Figure 3.6 portrays a valley of death, which means the funding gap encountered by SMEs that is about the difficulties in accessing necessary capital to develop their business. This is the period before the company generates revenues, which makes it hard to grow the business in start-up period (Ehlers, 1998 in Wonglimpiyarat, 2015).

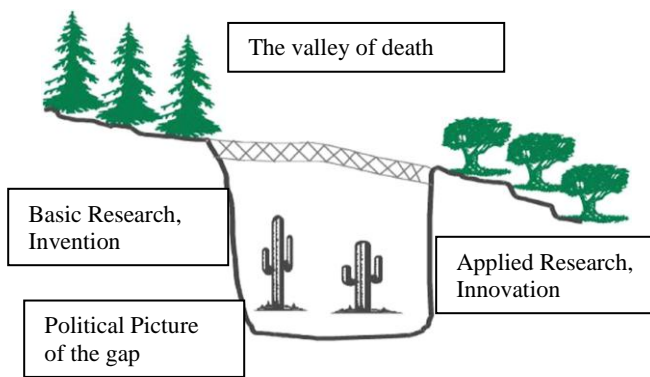


Figure 3.6 Valley of Death faced by SMEs

Source: Ehlers (1998) in Wonglimpiyarat, 2015

Moreover, Table 3.3 shows the stages of return on investment, where early stage investment requires the highest return which is more than 50% to compensate the risks that are greater than in the other stages of growth (Bygrave et al., 1999 in Wonglimpiyarat, 2015).

Table 3.3 Target returns by investment stages

Investee development phase	Expected return represented by internal rate of return (IRR)% per annum
----------------------------	---

Early stage (Seed/Start-up)	IRR>50
Expansion and growth	40>IRR>35
Maturity stage (Bridge, Management buyout)	IRR>30

Source: Bygrave et al. (1999) in Wonglimpiyarat, 2015

Schumpeter (1939, 1967) argues that the mainstreams of innovations are financial institutions, which also contribute to entrepreneurial ability to develop country's economy by creating jobs and stability. Many authors agree that there should be established some special banks to offer loans, as well as by tax incentives for innovation to SMEs as part of government policies to help alleviate financial limitations (Mani, 2004; Hyytinen & Toivanen, 2005; de la Torre et al., 2010). Because of the high potential to growth, many countries are trying to help SMEs grow by venture capital financing. Venture capital is considered a high risk; thus, this is the most convenient form of external finance to support new growing private companies through equity participation (Woodward, 2006; Wonglimpiyarat, 2015).

Costing innovation

Another challenge to SMEs for innovation development is the costing innovation. It is costly to develop innovation for SMEs because they have limited resources, such as money, time and people. Also, they do not have economies of scale, associated with limited reputation and distinctive capabilities. Thus, the best approach to innovate successfully is through strategic collaboration which are key for technology development that involves high costs and risks involvement (Taneja et al., 2016). Besides that, cost of innovation is very difficult to determine, and when the cost is estimated it is a critical input to decision making within organizations. The cost of any kind innovation, whether radical or incremental, needs to be calculated. Many organizations do not have established properly the resource cost analysis; thus, there is a risk of estimating the cost inaccurately and it can lead to poor firm performance (Hulkower, 2008).

Technical information

SMEs are also characterized with problems in finding adequate technical information and know-how (Kleinknecht, 1989). Nevertheless, it should be emphasized that a crucial factor in the innovation process is a continuous process of searching for information. Receiving and analyzing technical information has great importance considering that innovation ideas arise as environment sensitivity increases. This information must be integral part of firms technology

based strategies. Thus, having technical information in place is considered innovative efforts which contributed on improving competitive position in the market (Lefebvre & Lefebvre, 1993).

Management skills

Kleinknecht (1989) identifies other innovation barriers experienced by SMEs, such as lack of management capabilities and problems to find qualified employees related to innovation development. Other authors agree that lack of human resources and low management skills inhibit SMEs to bring innovative products and services to the market (Chun & Mun, 2012; McAdam et. al., 2004).

Uncertain market demand

SMEs encounter difficulties to forecast market demand, as well as market dominated by large enterprises (Kleinknecht, 1989). Many enterprises experience difficulties on forecasting market demand for new products because of the demand fluctuations on the timing of new product introductions (Axarloglou, 2003).

Nevertheless, the highest barrier to SMEs is the capital scarcity. Therefore, there should be used some policy instruments to help SMEs innovate through subsidies on R&D, technical development credits, management training, as well as innovation advice centers (Kleinknecht, 1989; Wonglimpiyarat, 2015; Taneja et al., 2016).

Management change

Another significant issue to be emphasized is change in management, which occurs because of innovation development within organizations. Individuals in organizations should be prepared mentally for change and have positive attitude for it. It is the challenge of managers to find the best way to explain the current situation and convince individuals throughout organizations for the need for change (Knippen & Green, 1997).

According to Klein and Sorra (1996), innovation implementation within organization is a decision taken by senior organizational managers. It is crucial for them to make employees use the innovation in their work, considering that many companies encounter resistance to change. This is mainly because there is direct management style, and managers don't want to empower their employees to be involved in innovation process. People with creative ideas often do not

have support from top management (McAdam et. al., 2004). Nevertheless, other authors agree that resistance to change happens more in large organizations, where there is more formal structure, while SMEs are associated with low resistance to change, thus, making it easier to develop innovation culture. Also, managers are less isolated by organizational hierarchy; thus, they have a greater say in the role of introducing new products and services (Terziovski, 2010).

Absorptive capacity

It is crucial to understand the causes and effects of knowledge, capabilities and skills gaps in relation to SME growth in order to fulfill the expected innovative function. Thus, a term absorptive capacity has been broadened to include an overall capacity for learning, implementing and disseminating new knowledge internally, as well as making use of new resources as technologies (Gray, 2006). Absorptive capacity means the ability to successfully replicate new knowledge (Ahimbisibwe et al., 2016). The concept was further developed by Zahra and George (2002), which includes the organizational routines and processes by which firms operate and manage knowledge, categorized in four areas to manage external knowledge successfully: acquisition; assimilation; transformation; and exploitation. The first two areas are seen as potential capability, while the transformation and exploitation areas represent realized absorptive capacity. Indeed, SMEs that possess higher levels of absorptive capacity are more proactive than those with modest absorptive capacity.

Recommendation on innovation development

The organization's climate for the implementation of innovation has to do with perception of employees, to whom the use of innovation is rewarded, supported and expected. Therefore, a key to success for innovation implementation is to ensure that employees possess the right skills and capabilities in innovation use. They should have incentive for innovation use and penalties for those avoiding it. It is crucial to identify and minimize obstacles for the use of innovation within organizations, such as employees concerns and complaints related to innovation. Therefore, it is vital to organize trainings or other kind of events to get familiar with new innovation (obtain the needed skills and additional assistance) and discuss any uncertainty they might have. The organization of this kind of training is important to minimize the resistance to change and frustration, and to make them believe that the innovation is worth to be implemented. In this way, they will be more enthused and committed toward the new innovation (Klein & Sorra, 1996). Nevertheless, it should be noted that implementing innovation includes a transition period

in which employees increase their skills and commitment toward innovation use. For many people, this can be stressful, as it might involve learning new technical knowledge. The key to success is managers devoting their time, great attention, conviction and necessary resources in the implementation phase of innovation (Klein & Knight, 2005).

Figure 3.7 shows a conceptual research model.

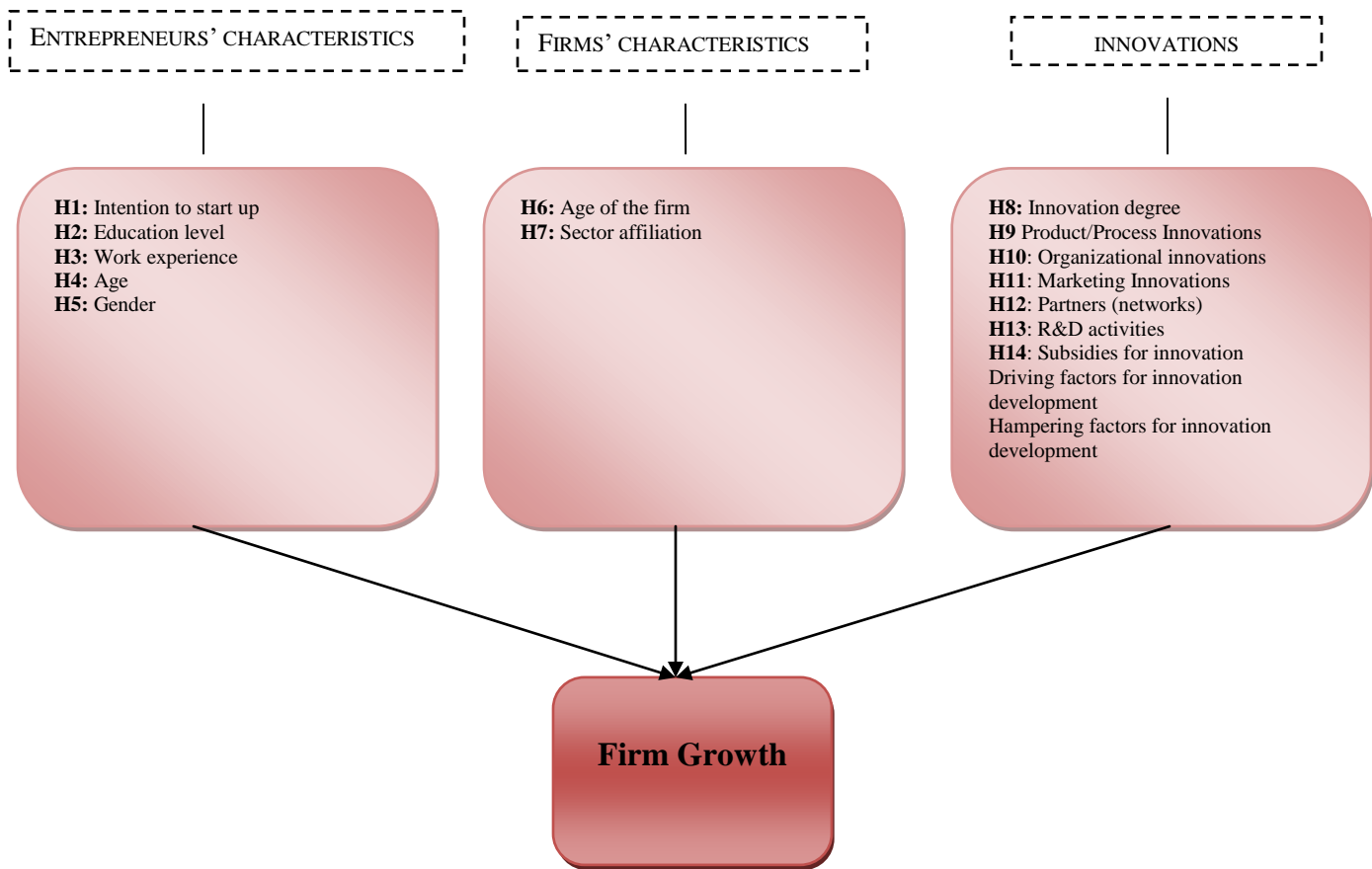


Figure 3.7 Conceptual Research Model

Source: Self devised

3.8 Summary

This chapter provided a detailed discussion to identify the shortcomings in the business management literature. It led to the development of a conceptual model based on the research questions and hypotheses that combined entrepreneur and firm characteristics, and looked at the innovation and its types; networking, R&D activities and subsidies for innovation development,

driving and hampering factors for introducing innovation, as well as their impact on SMEs growth performance.

The next chapter, Chapter 4, discusses the development of entrepreneurship and SMEs in Kosovo, considering that Kosovo SMEs are targeted group of analysis.

CHAPTER 4. THE DEVELOPMENT OF ENTREPRENEURSHIP AND SMEs IN KOSOVO

4.1 Introduction

Chapter 4 presents an overview of Kosovo's economy. It provides an overview of the origins of entrepreneurship in Kosovo. Private sector in Kosovo is investigated with the main focus in innovation and R&D activities. It provides a context for the empirical investigation of entrepreneurship and SMEs growth.

4.2 The economy in Kosovo

The Republic of Kosovo is the newest state in Southeastern Europe, and it is bordered by Macedonia, Albania, Montenegro and Serbia. It has a population of about 2 million. It is still one of the poorest countries in Europe with a very solid economic growth performance since the end of the war. It is low-middle-income country with more than 30% unemployment in 2013 and only 28.4% of employment rate, GDP per-capita of about €3,000 and 30% of population live below poverty line. After the war in 1999, the economy of Kosovo has been developed mainly by international aid, public sector and remittances. Nevertheless, Kosovo has privatized some state-owned enterprises, signed some free trade agreements, and economic projects with multilateral agencies. The impact of economic crisis in 2008 was lower compared to other neighboring countries due to the limited integration into the global economy, and high spending on reconstruction and private sector investment. The country still needs financial and technical assistance; thus, depends on diaspora and international community (World Bank, 2013). It should be highlighted that Kosovo is one of the four countries that recorded positive growth rates from the post-crisis period after 2008. The average growth rate was 3.5% during 2011-2014, which means it grew faster than the region, but below average compared to global economy as a whole (World Bank Group, 2015).

Kosovo's economy shows advance 3% year-on-year in the fourth quarters of 2016, which is followed by 3.8% expansion in the previous period. There is a slower increase in household consumption of 1.4% and government spending shrank 2.2%. Also, there is negative net trade, with export which grew for 11.1% and imports for 3.5%. Nevertheless, it should be highlighted that investments increased faster by 8.3%. In 2016, GDP advanced 3.4% compared to 4.1% expansion in 2015. The average GDP Annual Growth Rate in Kosovo in Kosovo from 2006 to 2016 is 3.59%, where the highest record was 10.9% in first quarter of 2011 and the lowest is in

the first quarter of 2012. Figure 4.1 presents Kosovo GDP Annual Growth Rate (Trading Economics, 2017).



Figure 4.1 Kosovo GDP Annual Growth Rate

Source: Trading Economics, 2017

In the following are shown tables related to exports and Gross Domestic Product (GDP), which presents the performance of the economy of a country in a certain period. Table 4.1 shows the exports by section of the harmonized system for the years 2011 to 2016 in percentage, while Table 4.2 presents participation of GDP by economic activity in percentage in years 2009-2015. Base metals and articles thereof, as well as mineral products have the highest contribution to exports. On the other hand, the following economic activities have the highest contribution to GDP, such as Agriculture, hunting, forestry and fishing; Wholesale and retail trade with; repair of motor vehicles and motorcycles; Manufacturing industry; Real estate activities; and Public administration and defense; compulsory social security Kosovo (Agency of Statistics, 2016).

Table 4.1 Exports by Sections and Year 2011-2016 in percentage

Code	Section of the harmonized system	2011	2012	2013	2014	2015	2016
1	Live animals, products of animal origin	0	0	0	0	0	0
2	Herbal products	4	5	5	6	5	5
3	Fats	0	0	0	0	0	0

4	Prepared foods, drinks, alcoholic beverages and tobacco	4	6	7	6	8	9
5	Mineral products	13	13	16	14	13	21
6	Products of the chemical industry	1	1	1	1	1	2
7	Plastics, rubber and articles thereof	4	5	6	5	7	9
8	Leather and articles thereof	3	4	4	4	3	4
9	Wood and wood articles	1	1	1	1	1	1
10	Paper and paper articles	0	1	1	1	1	1
11	Textile and textile articles	4	4	4	5	4	3
12	Shoes, etc.	0	0	0	1	1	1
13	Articles of stone, plaster, prod. ceramic and glass	0	0	0	1	1	1
14	Pearls, precious stones, precious metals, etc.	0	0	0	0	2	0
15	Base metals and articles thereof	61	53	49	52	48	36
16	Machinery, mechanical and electrical equipment	5	6	4	4	4	3
17	Means of transport	0	0	0	0	1	0
18	Optical instruments, medical, photographic, music, etc	0	0	0	0	0	0
19	Weapons and ammunition	0	0	0	0	0	0
20	Miscellaneous manufactured articles	1	1	1	1	1	3
21	Works of art	0	0	0	0	0	0
	Total	100	100	100	100	100	100

Source: Kosovo Agency of Statistics (2016)

Table 4.2 Participation of GDP by economic activity in percentage in Years 2009-2015

	Economic activities	2009	2010	2011	2012	2013	2014	2015
A	Agriculture, hunting, forestry and fishing	14.90	13.90	13.10	11.30	12.00	11.90	11.00
B	Mining and quarrying	3.40	3.10	3.20	3.10	2.50	2.30	2.00
C	Manufacturing industry	11.90	11.90	10.00	11.50	11.20	10.70	10.40
D	Supply of electricity, gas	2.40	2.30	2.40	2.60	2.60	2.70	3.00
E	Water supply	0.60	0.70	0.80	0.70	1.00	1.00	1.00

F	Construction	7.00	5.70	7.30	6.70	6.70	6.10	6.70
G	Wholesale and retail trade with; repair of motor vehicles and motorcycles	12.10	13.40	11.90	11.40	12.20	13.10	12.30
H	Transportation and storage	3.30	4.20	4.80	4.00	4.20	4.30	3.70
I	Hotels and restaurants	0.60	0.70	0.80	0.80	0.70	1.00	0.90
J	Information and communication	0.90	0.80	0.90	1.20	1.00	2.10	2.00
K	Financial and insurance activities	3.60	3.20	3.60	3.60	3.90	4.10	4.50
L	Real estate activities	10.60	9.80	9.10	8.50	8.70	8.60	8.60
M	Professional, scientific and technical activities	1.20%	1.30	1.40	1.40	1.40	1.40	1.50
N	Administrative and support activities	0.30	0.30	0.40	0.40	0.40	0.40	0.60
O	Public administration and defense; compulsory social security	9.50	9.30	9.60	9.80	9.70	8.50	7.40
P	Education	2.50	2.80	2.70	3.20	3.10	3.20	3.80
Q	Including health and social work activities	0.90	1.10	1.30	1.40	1.40	1.50	1.80
R	Art, entertainment and recreation	0.10	0.30	0.30	0.40	0.40	0.50	0.40
S	Other services	0.20	0.30	0.20	0.20	0.20	0.20	0.20
T	Activities of households as employers; Undifferentiated goods and services producing activities of households for own use.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GVA at basic price	85	84	82	82	83	83	82
	Taxes on products	15	16	18	18	17	17	18

Subsidies on products	-	-	-	-	-	-	-
Gross Domestic Product	100	100	100	100	100	100	100

Source: Kosovo Agency of Statistics (2016)

This chapter covers the history of evolvement of entrepreneurship in Kosovo, its business climate, as well as the current state of innovation and R&D within SMEs.

4.3 The history of entrepreneurship development in Kosovo

Entrepreneurship and small businesses are the backbone of economic development across the world. They play an important role for job creation, income and societal changes. The existence of the entrepreneurship and SMEs in Kosovo can be found before the World War II. SMEs were mostly comprised with family businesses, specialized in agriculture, cattle-raising and handicrafts, using primitive technology. Then, during the years 1945-50, there was centralized socialist system in Kosovo, dominated only by family farms, greengrocers, small shops, restaurants and some others. The Soviet type socialism was abandoned in 1950, modifying the economic system toward market-oriented system (Krasniqi, 2012). In 1974, Kosovo was given the status of Autonomous Province of Yugoslavia, enjoying the similar rights as the other six socialist republics that were part of the Federation of Yugoslavia.

Nevertheless, in 1989 Slobodan Milošević stripped Kosovo of that autonomy. This caused severe social and economic consequences, accompanied with unemployment, where many people saw migration as an option for survival. To cope with unemployment issue, many Kosovars started to take some private initiatives and open their own enterprise, which led to entrepreneurship and SMEs development in Kosovo. According to Mustafa *et al.*, (2006), the prevalence of SMEs can be divided in three phases.

1. The first phase, from 1991 until 1993
2. The second phase, from 1994 to 2000
3. The third phase, from 2001.

It should be emphasized that entrepreneurship in Kosovo has not been developed because of favorable business environment and market opportunities, but the main reason was its survival. Kosovo encountered challenges during 1990s when Serbian military and police forces suppressed the autonomy of Kosovo and occupied the country, which caused unemployment of

70% (150,000) Albanians from Kosovo from social and state sectors (BSCK, 2011). In response to these changes, in 1991, about 5,610 enterprises were established to secure the survival of themselves and their families, while in 1993 the number of enterprises tripled to 16,371, most of them were family-run and small businesses. Enterprises have been organized in the form of households, crafts, commercial, small shops, restaurants, as well as and agriculture.

The main motivation toward SME development at that time was the massive layoffs in the socially owned sector. Nevertheless, this was followed by a declining start-up rate due to the destructive effect of the institutional environment at the time, where many of SMEs went bankrupt and only about 50 – 55% of private SMEs remained active (Riinvest Institute, 2001; Ministry of Trade and Industry, 2005). Some of the characteristics of these firms include: “domination of trade enterprises in the overall structure (65%); lack of tradition and business culture to manage private capital; lack of institutional support for SME financing and development; undeveloped managerial structures, lack of modern business partnerships (predominance of family business relationships, lack of formal business education); lack of strategic/business plans; & high degree of political and commercial risk” (Riinvest Institute, 2001, pp.21).

The war in 1999 caused many damages and problems, which enforced citizens to start everything from scratch (Krasniqi, 2012). Moreover, the economic growth has shown progress after 1999 due to the inflow of financial support from different donors. In 2001, SMEs in Kosovo marked an expansive development (Ministry of Trade and Industry, 2005), and there were 29,564 enterprises registered in Kosovo, where about half of them were SMEs (14,656) and the other half were sole proprietorship (14,908) (Riinvest Institute, 2001). Moreover, Table 4.3 shows the growth of private enterprises between 1991 and 2008 in Kosovo.

Table 4.3 Number of private enterprises in Kosovo (1991-2008)

Year	No. of businesses	% growth
1991	5610	-
1992	10,391	85.22
1993	15,640	50.51
1994	16,371	4.67

1995	16,521	0.92
1996	16,375	-0.88
2000	31,918	94.92
2001	44,808	40.38
2002	53,588	19.59
2003	56,572	5.57
2004	62,776	10.97
2005	74,110	18.05
2006	79,299	7
2007	84,237	6.23
2008	90,929	7.94

Source: Krasniqi, 2012

Achieving full potential of entrepreneurship is linked to whether the entrepreneurial activities are developed because of necessity or opportunity. In Kosovo, necessity motives for entrepreneurship have greater domination. Even after the independence of Kosovo in 2008, business start-ups were still established based on push factors, due to the high unemployment rate. In 2008, there were 98.37% micro enterprises, 1.34% small enterprises and 0.23% medium enterprises, leaving large enterprises with only 0.06%. The average size of enterprises was 12 employees, which means SMEs are infancy development stage (Krasniqi, 2012). According to (Woodward, 2006), firms do not develop dynamically if there is over domination of micro enterprises, as this indicates low economic growth (Hallberg, 2000). Moreover, European Commission (2014) emphasizes that the private sector in Kosovo are not able to benefit from economies of scale as most of enterprises are SMEs with fewer than 250 employees.

SMEs failed to contribute highly in economic growth in most of the transition countries due to the unfavorable environment for doing business and lack of financial capital (Hoxha & Capelleras, 2010). In Kosovo, large incumbent enterprises with market domination position and anticompertitive barriers tend to restrain entrepreneurial energy and initiative, by taking advantage of weak institutional environment. Also, harm to business environment is informal economy with poor labor productivity, which has grown within Kosovo, and makes establishing formal business very costly to operate. This shows that informal economy hinders competition, and the firm performance doesn't reveal its real performance through competitive advantage

rather than their ability to engage in informal economy, tax avoidance and corruption (Krasniqi, 2012; European Commission, 2014). Hence, many individuals become entrepreneurs in informal economy because of the lack of employment opportunity in formal sectors. Most of such SMEs in Kosovo encounter challenges of lack of financial capital, management skills and technical know-how. This means that they are unable to enter in a market which involves high capital and bring valuable products and services, as well as technical know-how (UNDP, 2012).

Nevertheless, the SMEs contribution to GDP was 51% in 1995, while after the war in 1999; it increased to 65% (Krasniqi 2012). The contribution of SMEs in GDP for 2010 is presented in Table 4.4, which highlights the importance of micro and small enterprises that have the highest contribution. Also, SMEs account for 56.81% of GDP with a total turnover of €2,222,485,094.15. Nevertheless, the GDP in Kosovo is €4.2 billion, which is less than countries within the region (Government of Republic of Kosovo, 2011).

Table 4.4 Annual Turnover according to the Size of Enterprises and of GDP

Classification	Number of employees	Currency (€)	GDP %
Micro	14,968.00	656,885,164.33	16.79%
Small	1,210.00	667,585,914.82	17.07%
Medium	185.00	369,455,655.16	9.44%
Large	58.00	528,558,359.84	13.51%
Total	16,421.00	2,222,485,094.15	56.81%

Source: Government of Republic of Kosovo, 2011

Table 4.5 shows the number of enterprises in 2016, which means that 99% of them are comprised of micro enterprises.

Table 4.5 Number of Enterprises in 2016

Classification	Number of employees	Number of Enterprises	%
Micro	1-9	10316	99.0%
Small	10-49	100	1.0%

Medium	50-249	6	0.1%
Large	250 and above	2	-
Total		10424	100%

Source: Kosovo Agency of Statistics (2017)

Yet, the private sector's share on GDP has been estimated to be 70% in 2013 (European Commission, 2014). Thus, strong competition has started to develop among firms, and it should be emphasized that in some surveys, strong competition is ranked as a second barrier to SMEs growth. This is very beneficial for the economic growth, as private sector is forced to take entrepreneurial initiatives by bringing a vast variety of innovative products and services which adds value in the customers' eyes (Krasniqi, 2012).

Private sector is dominated by wholesale and retail trade which account for 30%, followed by service sector and real estate which account for 20% (European Commission, 2014). Manufacturing sector has less than 10% of enterprises mainly in food processing, with agriculture, which is a primary sector accounting only for 2 percent of enterprises. The failure of manufacturing sector is mainly due to the poor production capacity associated with obsolete technology, which led many goods to be imported abroad. Another reason for poor performance of manufacturing sector is that the imported goods are predominantly for consumption and very low share of machinery and equipment, which does not contribute to sustainable growth of manufacturing sector. Most of the enterprises (about 99.7%) have less than 50 employees; thus, contributing to 60% of economy turnover (Krasniqi, 2012; World Bank, 2015).

Table 4.6 shows the type of ownership of enterprises in Kosovo, which can be concluded that most of the SMEs operate as sole proprietor, dominated by Wholesale and retail trade, repair of motor vehicles, motorcycles; manufacturing; Agriculture, forestry and fishing; and Accommodation and food service activities.

Table 4.6 Number of Registered Enterprises by Sector of Economic Activity, and Legal Form of Organization during 2016

Sector of economic activity	Legal form of organization									
	Total	Sole proprietorship	General partnership	limited partnership	Liability	Joint Stock company	enterprise	enterprise	cooperatives	under the jurisdiction of KTA

	Total	10424	6401	39	0	3904	23	52	0	0	5	0
A	Agriculture, forestry and fishing	1090	917	3	-	164	1	1	-	-	4	-
B	Mining and quarrying	34	7	-	-	27	1	-	-	-	1	-
C	Manufacturing	1181	719	7	-	448	-	3	-	-	-	-
D	Supply of electricity, gas, steam and air conditioning	34	-	-	-	40	3	1	-	-	-	-
E	Water supply, sewerage, waste management and land	42	45	1	-	18	1	-	-	-	-	-
F	Construction	827	451	2	-	365	1	7	-	-	-	-
G	Wholesale and retail trade, repair of motor vehicles, motorcycles	2738	1537	6	-	1182	2	12	-	-	-	-
H	Transport and storage	528	387	-	-	135	1	3	-	-	-	-
I	Accommodation and food service activities	1017	727	7	-	282	3	1	-	-	-	-
J	Information and communication	423	135	2	-	281	1	4	-	-	-	-
K	Financial and insurance activities	178	130	-	-	41	5	2	-	-	-	-
L	Real estate activities	58	25	1	-	31	-	1	-	-	-	-
M	Professional, scientific and technical activities	654	265	-	-	378	-	11	-	-	-	-
N	Administrative and support activities	353	130	2	-	211	4	6	-	-	-	-
O	Public administration and defense	24	6	-	-	18	-	-	-	-	-	-
P	Education	141	58	-	-	73	-	-	-	-	-	-
Q	Human health and social work activities	204	123	2	-	79	-	-	-	-	-	-
R	Art, entertainment and recreation	271	208	1	-	61	1	-	-	-	-	-
S	Other service activities	596	521	5	-	70	-	-	-	-	-	-

Source: Kosovo Agency of Statistics (2017)

4.4 Private Sector in Kosovo: SMEs and its relationship with Innovation and R&D

Even though there has been some progress in recent years, private sector activities and productivity should become more critical engine to economic growth by improving employment and income perspectives. The country is comprised of less competitive SMEs with domestic goods and services that are not able to compete successfully in domestic or foreign markets, leading to large trade deficit (World Bank, 2015, Ministry of Trade and Industry, 2013).

Kosovo has improved its doing business position over the past years, and in 2016, it is ranked on 66th place of 189 countries (World Bank, 2016). This includes flexible labor markets, an open trade regime, and a healthy banking sector. Nevertheless, Kosovo has still weak institutional capacity, unclear property rights and complicated licensing, which are disincentives for private sector development activities. There is no fair competition mainly due to the large informal market that do not comply laws, as well as regional, family, or political connections that have impact on market outcomes, rather than powers of price and quality signals. A crucial part to the private sector growth is increasing human capital skills, with the focus on young Kosovars. About 23% of the firms state the lack of educated workforce as a key constraint of their business (World Bank, 2015).

A significant importance for Kosovo SMEs is implementation of Small Business Act, which is in an early phase; thus, it needs to have higher priority. The Investment Promotion Agency of Kosovo and the Small and Medium Enterprise Agency were merged into the Kosovo Investment and Enterprise Support Agency. Private sector development strategy (2013-17) needs to be monitored (European Commission, 2014). This strategy is focused on Small Business Act (SBA) for Europe and EU framework programs Competitiveness and Innovation (CIP), which are important for creating dynamic SMEs sector within Kosovo. It is crucial to have successful implementation of this strategy in order to increase private sector activity and investments, which will lead to employment opportunities (Government of Republic of Kosovo, 2011). Moreover, COSME is an EU programme for Competitiveness of Enterprises and SMEs, where Kosovo is eligible to participate. This program is running from 2014 to 2020 with a budget of €2.3billion, which is focused on facilitating access to finance, supporting internationalisation and access to markets, creating an environment favourable to competitiveness and encouraging an entrepreneurial culture. It is important to mention that through this programme it is being implemented the Small Business Act, which reflects the recognition of vital role of SMEs in EU economy. Thus, this programme aims to promote entrepreneurship and improve business environment for SMEs, to allow their full potential to global economy (European Commission, 2017).

According to World Bank (2013), the long years of conflict in Kosovo has led the country to focus resources in immediate needs related to infrastructure and basic schooling rather than developing human capital skills in R&D. Private sector is dominated by micro-enterprises who

were unable to spend huge amounts on R&D investments and technology transfer. Some of the main difficulties include lack of human capital for research and innovation, as well as old infrastructure at research centers and universities. Most importantly, there is a need to assist private sector in development of innovation by linking private sector and research institutions to improve innovation competencies, as well as providing policy incentives to private sector, such as subsidies, grants, and tax exemption for R&D investment.

Kosovo is characterized with lack of awareness in the evaluation by Research Technology Development and Innovation (RTDI). Considering the very low growth of RTDI activities in Kosovo, a programme or a project cannot be benchmarked based on accepted parameters in Europe. Nevertheless, there are group of evaluators who possess sufficiently set of skills and experience that are able to lead the process of RTDI evaluation in Kosovo (SEE Transnational Cooperation Programme, 2014). R&D is at early stage of development in Kosovo and private sector plays a limited role in R&D. There is a lack of qualified human resources with high expertise and many of qualified workers have left country due to the war conflict. In the OECD survey of 153 enterprises in Kosovo, 25% of the surveyed companies state that lack of human capital is constraint to introduce innovation (OECD, 2013).

According to OECD (2016), the innovation system in Kosovo is underdeveloped even when comparing with region. Some policy efforts have been done in 2010 with the adoption of the 2010-2015 National Research Programme (NRP), with the aim to support research activities. Nevertheless, its implementation was not done successfully considering that even the modest budget allocation has not been completely spent. There are some business and SME support agencies in Kosovo, such as Kosovo Investment and Enterprise Support Agency (KIESA) or the Regional Development Agencies (RDAs), but they do not focus explicitly on RDI and they encounter challenges on qualified human capital for innovation support. The higher education is focused more on teaching rather than on research, accompanied by lack of funding and capacities for research activities. Even though the University of Prishtina is the largest R&D performer with about 1,500 researchers and 27 equipment and laboratory facilities, and the research publications in Scopus has increased from 11 in 2007 to 93 in 2010, but still, the commercialization of research results, the joint R&D projects with businesses or other channels of technology transfer from science to the economy has not be pursued by the research institutions. Moreover, because of ineffective IPR protection, there is a limited activity in

patenting the innovation developed. There were more than 22,000 trademarks, design, and patent applications on hold in 2014 based on the information from Kosovo Industrial Property Office. Indeed, the innovation system in Kosovo is characterized by lack of human capital skills, research capacities and innovation infrastructure; poor government funding; low cooperation between academia and industry and very few linkages with foreign companies and research institutions. Commercialization of research and technology transfer are hindered mainly by poor research quality, lack of researchers' incentives, lack of trust and cooperation between researchers and businesses, and most importantly low funding and R&D capacity in SMEs (OECD, 2016).

Research, technological development and innovation are still in the inception phase in Kosovo. There is lack of national policies and programmes of innovation in Kosovo. The general R&D expenditures amount only 0.1% of GDP, which is significantly below the European average, and also below neighboring countries. Moreover, the industrial and business community demand for R&D is extremely scarce, accompanied with the lack of awareness of both public institutions and business community for the importance of innovation for socio-economic growth (SEE Transnational Cooperation Programme, 2014). Thus, the concept of innovation is mostly referred to incremental innovation in Kosovo, and many of the firms consider themselves innovative according to a survey of 153 companies conducted by OECD. About 90% of the surveyed enterprises identified innovation opportunities through internet, while 40-50% of surveyed companies identified innovation opportunities through consumers, suppliers and international trade fairs. The main drivers of innovation for private sector include clients' changes and preferences (77%), competition from other companies (63%), and the need to adapt to innovation from supplier (60%). Nevertheless, the lack of financial resources is considered main barrier to innovation. Also, there is a lack of cooperation between private sector and research institutions because of the absence of interest from private sector and absence of government support to cooperate with them (OECD, 2013).

The importance of R&D lies on its transformation to innovation with new products and services which strengthen private sector, competitive advantage and economic growth. To many SMEs the concept of R&D and innovation are completely new, and this is due to the financial constraints and high interest rates on bank loans (World Bank, 2013). The results from a study of

firms for Western Balkans show that innovative firms grow 15% times faster in terms of sales, and 8% faster in terms labor productivity compared to non-innovative firms (World Bank, 2013).

Innovation relies on research and development investments. In Kosovo, it is also limited in Kosovo due to the lack of capital investment. However, in the last three years, about 17.1% of companies have performed some innovation activities by new product development, and by upgrading existing products, services and processes. About 15.9% of new products and services have been developed in these years. However, the problem of small number of innovations is mainly due to the lack of cooperation between companies, and lack of cooperation with research institutions (BSCK, 2011).

The importance of SME sector is tremendous representing the majority of employment and output, and it is on development path towards business stabilization. Nevertheless, there is lack of creative culture of entrepreneurship because of the “me too” approach, leading to saturation of particular market niche, such as gas stations, swimming pools, hotels, etc. It can be concluded that innovation as a driver to competitive advantage is still new concept among SMEs in Kosovo (MTI, 2013).

4.5 Summary

This chapter provided a summary of entrepreneurship and SMEs growth in Kosovo. It provided three phases of entrepreneurship in Kosovo, how it has been developed which was mainly because of unfavorable business environment. It investigated the role of private sector in economic growth, highlight the innovation level and R&D activities.

The next chapter, Chapter 5, builds on the reviewed literature and discusses the research philosophy, research design and methodology used to conduct this study.

CHAPTER 5. EMPIRICAL ANALYSIS

5.1 Introduction

This chapter provides an outline of the research methodologies that can be applied to this research study and the foundation of the developed research hypotheses and conceptual model that can be tested empirically. The selection and justification of methodologies are summarized, which is followed by justification of using mixed methods research, including both quantitative and qualitative research in order to answer the research questions. Finally, the chapter is summarized.

5.2 Mixed Methods Research

As identified in the Literature Review, research into introducing innovation and achieving firm growth in SMEs is still at an early stage, and there is much scope for exploratory studies in this area. This study adopts quantitative and qualitative approaches to analyze this topic. Bygrave (2007) argues that there are not many studies done using qualitative research approaches to entrepreneurship. Nevertheless, positivist and interpretivist research can complement each other. According to Berglung (2007, p.5), the best approach is to “embrace the scope and richness of qualitative research while at the same time acknowledging the qualities of the more established, traditional or well-accepted approaches, both qualitative and quantitative. Various forms of quantitative approaches are indeed useful when there is a need to provide generalizable representative description as well as statistical analyses.”

5.3 Research Questions

Is the introduction of different types of innovations associated with the growth of SMEs seems a particularly interesting area of investigation. This has led to the formulation of the following sub-research questions, drawing on the conclusions of the literature review:

RQ1: Which of the types of innovations (product, process, marketing and organizational) are predominant in SMEs that affect firm growth?

RQ2: What are the entrepreneurs and internal firm characteristics that affect firm growth?

RQ3: What kinds of innovations (incremental or radical) are developed by SMEs to improve firm growth?

RQ4: What are the innovation sources used by SMEs that affect firm growth?

RQ5: What are the driving factors for successful innovation to SMEs that affect firm growth?

RQ6: What are the hampering factors for innovation development that affect firm growth?

RQ7: What kind of innovation activities is developed by SMEs and which are the most important information sources for innovation activities?

RQ8: Do SMEs receive subsidies for introducing innovation that affects firm growth?

RQ9: How innovative is the organizational culture within SMEs?

Question 1, 3, 4, and 8 investigates the most dominant types of innovation used by SMEs, the degree of novelty, and sources and subsidies innovation. Question 2 asks for the entrepreneurs and firm characteristics that affect SMEs growth. Question 5 and 6 consider the driving factors and hampering factors toward innovation development. Question 7 covers types of innovative activities, as well as the information sources used to come up with innovation activities. Finally Question 9 asks for the level of innovative culture within a firm.

5.4 Research Philosophy

Research on entrepreneurship has been undertaken mostly from positivist perspective. Positivism can be explained as, “an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond” (Bryman, 2008, p. 13).

Thorpe (2011) emphasize that part of epistemological approach are hypothesis, surveys and quantitative data. Nevertheless, Davidsson (2008) highlight that to study nature of phenomena in detail is more appropriate to use qualitative research approach. Interpretivism is gradually becoming more accepted in the research of entrepreneurship and it involves studying small samples, asking questions, and theory generation. According to Bryman (2008, p. 694), interpretivism may be defined as, “an epistemological position that requires the social scientist to grasp the subjective meaning of social action.” “The clash [between positivism and interpretivism] reflects a division between an emphasis on the explanation of human behaviour that is the chief ingredient of the positivist approach to the social sciences and the understanding of human behaviour” (Bryman, 2008, p. 15).

This research study will follow mixed methods of research, including quantitative and qualitative research. “Mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson & Onwuegbuzie, 2004, p.17). The purpose of using both of these methods is not to replace them, but to minimize the weaknesses, and draw more comprehensive conclusions. The main similarity is that in both methods, empirical observations are used to address research questions. Through mixed research

methods, it is attempted to provide insight by both qualitative and quantitative research and answer the research questions by coming up with practical alternative (Johnson & Onwuegbuzie, 2004).

Even though the problem of representation exist in qualitative research paradigm, the purpose of is to capture truly the lived experiences and attitudes of people, the way they perceive a particular issue (Onwuegbuzie & Johnson, 2006; McCusker & Gunaydin, 2015). With qualitative approach, it tend to understand the perspectives of participants on the impact of different types of innovation in SMEs growth, and most importantly the level of innovation culture within firm. The study adopts semi-structured interviews, which can lead the qualitative researcher into new and or unexpected areas which are raised by the interviewees (Berglund, 2007). The use of semi-structured interviews enables the researcher to capture the main variables related to innovation and SMEs and understand them from the participants' own viewpoints. Moreover, through quantitative approach, researcher aims to prove or disapprove hypothesis by collecting data through questionnaire and most importantly, through numerical implications, the assumption is that findings are valid, and they tend to remove the research from emotional and subjective bias. Indeed, mixed methods designs provide pragmatic advantages to explore research questions (Gunaydin & McCusker, 2015). Using both methods is time consuming and expensive; nevertheless, this study will follow mixed methods designs as it provides a broader perspective on the overall research issue.

5.5 Research Design

There is a distinction between the choice of research design and the adoption of research method. Research design is a framework for data collection and analysis, which may include experimental design, a cross-sectional design, a longitudinal design, a case study design or a comparative design. On the other hand, research method is a technique for data collection, such as self-completion questionnaire or a structured interview schedule, or participant observation (Bryman, 2008). This research study adopts cross sectional research design, collecting quantitative and qualitative data at one point in time.

5.6 Quantitative research approach

A quantitative methodology was designed to address the following Research Questions:

RQ1: Which of the types of innovations (product, process, marketing and organizational) are predominant in SMEs that affect firm growth?

RQ2: What are the entrepreneurs and internal firm characteristics that affect firm growth?

RQ3: What kinds of innovations (incremental or radical) are developed by SMEs to improve firm growth?

RQ4: What are the innovation sources used by SMEs that affect firm growth?

RQ8: Do SMEs receive subsidies for introducing innovation that affects firm growth?

Question 1, 3, 4, and 8 investigates the most dominant types of innovation used by SMEs, the degree of novelty, and sources and subsidies innovation. Question 2 asks for the entrepreneurs and firm characteristics that affect SMEs growth.

5.6.1 Data Collection

A quantitative empirical research approach has been chosen to investigate the research questions and be able to statistically test hypotheses. This research study uses empirical data gathered from 500 Small and Medium Enterprises through a Survey conducted by the Business Support Centre Kosovo (BSCK) for the year 2012, which provides information on the entrepreneurship and SMEs in Kosovo. This research was supported by the Netherland's Ministry of Foreign Affairs through SPARK organization, which has the aim to develop higher education and entrepreneurial opportunities for youth to lead their post-conflict societies into prosperity (BSCK, 2013).

Various experts have contributed to design the survey questionnaire and sample selection. The questionnaire contained nine sections, which included qualitative and quantitative questions relevant to the entrepreneurship and SMEs growth in Kosovo. Face to face interviews were conducted mainly with owner/managers or in some cases with financial managers. Questionnaire were conducted by students who were trained who were trained in advance to obtain more reliable results from the survey.

5.6.2 Data Sampling

The sample of SMEs was selected randomly from the business register of Ministry of Trade and Industry by Agency for Business Registration through Excel and SPSS using random command. Nevertheless, because of the unsatisfactory results of representation of medium enterprises and manufacturing ones, stratification was applied to have representation of both size of the company

and sectors of business activity. The sample includes SMEs within all the regions of Kosovo, stratified to the three main sectors, such as trade, production and services (BSCK, 2013).

Table 5.1 presents share of enterprises in the population and the sample by size and sector. SMEs in Kosovo operate mostly in the sectors of trade and services; nevertheless, stratification random sampling techniques were used for this study. The most dominant activity in manufacturing industry is building construction and material construction (27%), followed by wood processing. In trade sector, most of the firms operate as retails stores (33.2%), while transport, hotels and tourism are the most dominant activities in service sector. It is important to highlight that a large portion of SMEs diversify their portfolios as they penetrate in different sectors, by having two or more business activities.

Table 5.1 Share of enterprises in the population and the sample by size and sector (in %)

Sector Size	Micro	Small	Medium	Total	% share of company size in the population	% share of company size in the sample
Manufacturing	95.2	2.4	2.4	100	10	13
Services	97.0	1.7	1.3	100	40	43
Trade	98.7	0.8	0.6	100	50	44
% share of company size in the population	97.7	1.3	1.0	100	100	100
% share of company size in the sample	70.0	25.0	5.0	100	-	-

Source: BSCK, 2013

The sample has been stratified in order to be able to draw generalized conclusions about the whole population of SMEs in Kosovo as shown in Table 5.2.

Table 5.2 Total sample by sector and size

Sector Size	Micro	Small	Medium	Total	% Share of sector
Manufacturing	34	24	6	64	13

Service	140	64	12	216	43
Trade	176	37	7	220	44
Total	350	125	25	500	100

Source: BSCK, 2013

It is of significant importance to highlight that this questionnaire has gone under quality control before launching final interviews with companies. The first step involves testing questionnaire during the training of students, where they received few remarks and some technical errors. The second step involved piloting, where 50 interviews were conducted, and feedback of each interview process was provided. Most of the interviewed companies (about 40%) were called by phone to ensure that the interviewing process was conducted at satisfactory level. An additional check of quality control includes logical control, where consistency of responses was reviewed, and in some cases interviewers were sent back to the company to collect required data. As the data results shows consistency of responses compared to research reports of BSCK from two previous years, it can be concluded that this is an additional proof of high validity and reliability of the data used for this doctoral thesis. Appendix A shows the questionnaire used by BSCK, and Appendix B presents confirmation letter by BSCK to use their data for doctoral thesis.

5.6.3 Model specification and its justification

There are several factors that should be considered when choosing an appropriate model and estimation technique. The theoretical model proposed here is tested by the estimation of a binomial logistic regression model. This should be in accordance with the main research question of the study and the nature of the dependent variable, and independent variables. In this research study, the logistic regression is considered to be the option estimation technique, as dependent variable is dichotomous and the explanatory variables are either categorical or a mix of continuous and categorical; thus, it is more statistically robust. Considering that logistic regression calculates the probability of success over the probability of failure, the results of the analysis are in the form of an odds ratio. The odds ratios in logit model describe the strength of the partial relationship between an individual predictor and predicted event; thus, it tells the probability that an even will occur or not, as well as the strength of association of a given variable with the outcome of interest compared to other variables (Ryzhkova, 2015). Statistical Package for the Social Sciences (SPSS) served as basis for the statistical analysis of the data, because it is most recommended to use in the study of correlations and logistic regression.

Thus, logistic regression analysis will be employed to find out the impact of innovation in firm performance. It will indicate the probability of experiencing growth if there are innovations introduced within a firm. We use logistic regression, as the empirical data related to sales are dichotomous, meaning there are two possible values representing success and failure. In this case, there were options if sales have increased, decreased or stayed the same. Thus, if sales increased it will be coded by 1, otherwise it will be coded by 0.

$y_i = (1 \text{ if the sales increased}$
 0 otherwise.

The basic aim of the analysis will be to describe the way in which sales varies by innovation development, including control variables related to entrepreneur and firm characteristics.

So, in regression, besides the dependent variable (Y variable), which is firm growth, explanatory variables (X variables) are innovative degree, introduction of new or substantial modification of products/services/processes, organizational innovation and marketing innovation, innovation source, R&D activities performed for innovation development and innovative subsidies. In this research study, it is of interest to know whether or not innovation development leads the firm growth (higher sales). So the Y variable in the logistic regression whether or not innovation development lead to firm growth coded as 1 if yes, and a 0 otherwise.

Moreover, there are included other variables influence whether or not innovation development lead to firm growth. These are control variables, such entrepreneur and firm characteristics. Variables related to entrepreneur characteristics include intention to start up, as well as other entrepreneurs' characteristics, such as education level, work experience, age and gender. Besides that, control variables related to firm characteristics include firm age and sector affiliation.

5.6.3.1 Dependent variable

The dependent variable is firm growth. The term firm growth was introduced in 1930s, which was known as Law of Proportionate Effect. It is also called Gibrat's rule of proportionate growth, used to determine firm growth, which does not depend on the firm size (Rosli & Sidek, 2013). Gibrat's law is the most elaborated framework for policymakers on the determinants of firm growth, predicting that firm growth as purely random effect and independent of firm size (Gibrat

1931). The turnover of the firm is the most frequent measure of growth, which addresses taxation concerns, whereas the number of employees is another measure of growth, which addresses the job concerns and has to do with the working capacity. There is interconnection between these two growth indicators within the context of SMEs, and they are used because of their visibility and simplicity to obtain within organizations (Fadahunsi, 2012). Overall, the success of the firms can be measured also by using financial indicators, such as return on assets (ROA), return average annual occupancy rate, net profit after tax and return on investment (ROI) to measure growth (Rosli & Sidek, 2013; Moog, 2002). Moog (2002) highlights some other growth indicators, such as number of innovations or patents a firm develops and generates, as well as number of created jobs.

Although a variety of measures have been used in the literature review, in this research study, sales will be used as measure of firm growth. In the questionnaire, respondents were asked whether the sales has increased or not in the past three years.

5.6.3.2 Independent variables

Miller & Friesen (1984) suggest that testing a large number of independent variables helps to come up with more realistic image of growth phenomenon. Thus, in this research study, they are grouped into three components, such as entrepreneur, firm and innovation. The first two components are control variables.

The first group represents variables related to entrepreneur, such as entrepreneur intention to start up, as well as entrepreneurs' education, work experience, age and gender.

Entrepreneurs' intention to start up is also related to firm growth. According to Owualah (1990), the four most important motivations to start up include need for independence through self-employment, market opportunity afforded by business owner to develop a certain idea, higher financial returns and building up a business for the future. In empirical analysis, a variable is used to measure whether (or not) the main motivation was because they spotted business opportunity and decided to act upon it and establish their own company (1=Yes, 0=No).

Human capital is significant for any organizations because of employees' qualifications and loyalty to a firm that leads to organizational success (Becker, 1962 in Moog, 2002). Becker's

human capital theory makes distinction between general and specific human capital. Common measures of general human capital include education, apprenticeship, and vocational training, while measures of specific human capital involves tacit skills and trainings related to a specific job, that are less transferable, and have narrow scope of applicability in job. Therefore, in this research study, a proxy for general human capital is used the influence of the highest education level on organizational performance. An entrepreneur who is educated and has high amount of human capital is better prepared to lead a company, because of the efficiency for organizing and managing the firm processes, managing information and creating relationships with various partners for investment (Pfeiffer/Falk 1999 in Moog, 2002). In empirical analysis, a variable is used to measure whether they have university degree or not (1=Yes, 0=No).

Most of studies argue that women have more intrinsic goals that is flexibility to interface family and work commitments, while men are focused on quantitative results, such as sales, profitability, and job created (Hamilton et al., 1996). Storey (1994) highlights that gender of business owner is not a significant factor for the growth behavior of the firm. Also, middle-aged owners have more potential to succeed because of the experience, credibility, energy and availability of resources. Moreover, the business owners, who have prior experience, are likely to observe better growth-related opportunities and avoid pitfalls (Storey, 1994). We control for gender (males=1, female=0), work experience and age of the entrepreneur.

The second component includes variables related to the firm, such as firm age and sector affiliation. These are used as control variables that might influence firm growth.

We also control for industry sector, where three main sectors dummies are manufacturing, trade and services. Moreover, control variable, such as firm age is used to capture the effect on firm growth (Storey, 1994).

The third group of variables includes the most important explanatory variables related to innovation. It includes innovative degree, introduction of new or substantial modification of products/services/processes, organizational innovation and marketing innovation, innovation source, R&D activities performed for innovation development and subsidies for innovation.

According to Storey (1994), SMEs are characterized with incremental innovation, which are new to the firm. In empirical analysis, new to the firm variable indicates that introduction of innovation is new to the firm, rather than new to the market (Yes=New to the firm, No=Otherwise).

Several studies have concluded that product/process innovation brings higher profitability to firms (Oke *et al.*, 2007; Chetty & Stangl, 2010; Rosli & Sidek, 2013; Bayus et al, 2003). On the other hand, several studies have concluded mixed results related to introduction of marketing and organizational innovations in firms performance (Ar & Baki, 2011; Sandvik, 2003; Otero-Neira et al., 2009). Therefore, through empirical analysis, it will be measured whether or not introduction of product/service innovation, as well as organizational and marketing ones has an impact on SMEs growth (Yes=1, No=0).

According to European Commission (1995), the driving forces of growth are the know-how and technological change, rather than capital that company has. Facilitating the interaction between firms, as well as firms with other institutions, including universities can help develop the know-how and skills that affect economic growth. Moreover, Terziovski (2010) highlights that it is of high importance for SMEs to develop partnership with customers and suppliers, mainly to maximize the utility of scarce resources, and sharing risk. Through empirical analysis, it will be measured whether SMEs collaboration for innovation with other institutions has affected firm growth (Yes=1, No=0).

R&D activities contribute to SMEs growth despite their expenditures (Rogers, 2004). In empirical analysis, variable of R&D activities is included to measure whether or no undertaking R&D activities for creation or substantial modification of products, services or new processes has an influence on firm growth (Yes=1, No=0). Moreover, several studies indicate positive relationship between subsidies for innovation and SMEs growth (Harris & Trainor, 1995; Kim, 2000; Rehman, 2017). Thus, the variable subsidies for innovation is used to measure whether SMEs have received any public or private subsidies, which has impact on firm growth (Yes=1, No=0).

Table 5.3 shows a detailed description of list of explanatory variables.

Table 5.3 Independent and Control Variables

Research Framework	Variables	Definition
Independent variables		
<i>Entrepreneur</i>	Intention to start up	1=opportunity driven, 0 = otherwise
	Education level	1 = if the entrepreneur has university degree, 0 = otherwise
	Entrepreneur work experience	1=had previous experience before opening their own enterprise 0=otherwise
	Age of entrepreneur	Age of the entrepreneur in years
	Gender	1 = male, 0 = female
<i>Firm</i>	Age of the firm	The number of years since a firm was founded
	Manufacturing	1 = if the firm operates in manufacturing sector, 0 = otherwise
	Service	1 = if the firm operates in service sector, 0 = otherwise
	Trade	1 = if the firm operates in trade sector, 0 = otherwise
<i>Innovation</i>	Degrees of innovation Newness to the firm	1 = Yes, 0 = No
	Introduction of new products/services/processes, or substantial modification in them	1= During the past three years the company has introduced new products/services/processes, or made substantial modification in the products/services/processes; 0 = Otherwise
	Organizational innovation	1 = Over the past three years the enterprise has substantially modified or fully changed its organizational structure, 0 = Otherwise
	Marketing innovation	1 = Over the past three years the enterprise has

		introduced any new method of marketing for its products that was not used by other enterprises in the market, 0 = Otherwise
	Source of Innovation	1 = In cooperation with others, 0 = mainly by the firm
	R&D activities for innovation	1= During the past three years the company has undertaken R&D activities for the creation or substantial modification of products, services or new processes; 0 = Otherwise
	Subsidies for innovation	1 = Yes, 0 = No

Source: Self devised

5.7 Qualitative research approach

Qualitative research approach will be also used in this study to better answer the research question and to enable more in depth analysis. The reason for that is because of some limitations in the questionnaire conducted in the BSCK. For instance, there is a question like whether SMEs have developed any product/service or process innovation in the last three years, but does not distinguish each type of innovation, to specifically understand what kind of innovation the firms have developed. The networking and collaboration is highlighted as a term if it is used within the company, but not primarily associated to innovation development. Moreover, there are questions on increasing/decreasing sales, profit and employment, but not directly related as a result of innovation development. The internal factors, related to organizational change due to the innovation development are not tackled at all. Therefore, the aim is to get in depth analysis through semi-structured interviews and make distinction between product, process, marketing and organizational innovation; organizational change and employees' resistance to change that resulted from innovation, investment that were required to develop innovation, financial and implementing innovation challenges that were encountered.

In-depth interviews were the qualitative method chosen to conduct this research and generate empirical data from SMEs. A semi-structured interviews was used as a systematic and comprehensive approach to ensure that the key questions has been covered, but the researcher (i.e. the interviewer) had the flexibility to decide on the sequence and wording of the questions, as well as to ask sub-question during the interview in order to better understand or clarify the

topic exploration and elaborate issues more deeply (Kruegar, 1994; Ritchie & Lewis, 2003). Oakley (1981) highlights the importance of one to one relationship between the researcher and interviewees. The aim was to explain some of the key terms of the topics at the beginning of the interview, as well as by email, in order to put the interviewee at ease and encourage fuller responses. The interviewees were therefore invited to think about types of innovations beforehand, and this could reveal more in depth thoughts. Nevertheless, a potential disadvantage could be that some of the answers were not so spontaneous as they would be otherwise.

Consequently, twenty-four companies with unique characteristics were chosen to be interviewed based on the following criteria: size and sector of firms, innovative behavior (R&D activity); intellectual property. Therefore, the target group includes SMEs from one of these sectors: manufacturing, services and trade that have developed at least one innovation in the last three years.

According to OECD and European Commission (2005), it is recommended to use qualitative data for innovation activities. This research phase explores some of the research questions through a qualitative study. It explored the types of innovation introduced by SMEs, the degree of innovation novelty, source of innovation, cooperation for innovation, and most importantly the organizational change with innovation development. Using an interpretative epistemology, the aim of this research was to explore owners or managers detailed explanations of organizational change as a result of introduction of innovation. The impact on turnover is necessary to be emphasized due to the new or significantly improved products.

A qualitative methodology was therefore designed to address the following Research Questions:

RQ1: Which types of innovation (product, process, marketing and organizational) are predominant in SMEs that affect firm growth?

RQ2: What are the entrepreneurs and internal firm characteristics that affect firm growth?

RQ3: What kinds of innovations (incremental or radical) are developed by SMEs to improve firm growth?

RQ4: What are the innovation sources used by SMEs that affect firm growth?

RQ5: What are the driving factors for successful innovation to SMEs that affect firm growth?

RQ6: What are the hampering factors for innovation development that affect firm growth?

RQ7: What kind of innovation activities is developed by SMEs and which are the most important information sources for innovation activities?

RQ8: Do SMEs receive subsidies for introducing innovation that affects firm growth?

RQ9: How innovative is the organizational culture within SMEs?

Question 1, 3, 4, and 8 investigates the most dominant types of innovation used by SMEs, the degree of novelty, sources and subsidies for innovation. Question 2 asks for the entrepreneurs and firm characteristics that affect SMEs growth. Question 5 and 6 consider the driving factors and hampering factors toward innovation development. Question 7 covers types of innovative activities, as well as the information sources used to come up with innovation activities. Finally Question 9 asks for the level of innovative culture within a firm.

5.7.1 Sampling and data collection

The parameters of the sample and sample size are outlined. The parameters of the sample include participants who have operated their business for at least three years; have developed at least one innovation within the last three years 2014-2016; come from manufacturing, service or trade sector, and enterprises which are SMEs, meaning that they have no more than 250 employees. This is because selecting a business that have at least three years of experience allowed the entrepreneurs enough time to see positive effects of innovation, as well as challenges associated to it. By including enterprises with various sizes and from different sectors, it was possible to explore and compare different types of innovation developed, and benefits and challenges they encounter.

A sample of 24 cases conforms to the sample size of other qualitative studies (Neergaard & Ulhoi, 2007). Bryman (2008) highlight that the research should be carried out until theoretical saturation is reached, meaning that no new or significant details have been revealed. In this research study, by the time the researcher reached 20th interview, it was apparent that there are no new insights, thus, four more interviews were carried out to ensure that the judgment is correct.

5.7.2 Finding the Participants

There is no feasible way to identify SMEs that have developed at least one innovation in the last three years, from which a random sample could be drawn (Lewis, 2009). Thus, purposive

sampling seemed as the most appropriate method to choose a sample. This is because it allows the research to identify appropriate sample to address the research questions (Bryman, 2008). Sources used to identify interview participants included list of companies from Kosovo Chamber, media features on innovation (newspapers and online magazines), as well as snowball sampling. Related to snowballing sampling, once the semi-structures interviews started, participants were asked to suggest names of potential interviewees who might meet the sample criteria. In some cases, such recommendations often confirmed potential participants identified by the researcher.

5.7.3 Interviewing

Interviewing can use focused open ended questions to examine broader issues, as well as more structured questioning for financial information or employee numbers. Nevertheless, large amount of data can be generated by interviews, which puts the research at difficulty handling material generated. Moreover, qualitative interviewing is about developing an interview guide, listing topics which the researcher intends to cover, not necessarily asking questions word-for-word. Topics for interview guide can arise from literature review, researcher personal knowledge and discussion with people with experience in certain research area (Forster, 1994). Similarly, the interview guide in this research study included closed and open questions. Also, the interview guide has been adapted from OECD (2012). Appendix C provides the interview guide, while Appendix D provides a sample of interview transcript.

5.7.4 Documentary Materials

In order to conduct the interviews efficiently, the researcher looked at documentary materials, newspaper interviews, the social media published data as well as their websites. Company documentation is useful approach to analyze documents properly (Forster, 1994). Thus, taking this approach helped the researcher to learn more about the interviewee background and business; which led that the company takes the researcher more seriously. Moreover, this approach is helpful as it ensures accuracy in the research, as it enables the researcher to crosscheck the information collected during the interview.

5.7.5 Content and process of interviewing

Interviewees were emailed a short summary of the research and the key topics two days before the interview time in order to remind the meeting. Clifton and Handy (2003) emphasize that

crafting questions carefully as trust relationship should be established within a short period of time. Also, it is benefit of the researcher that different types of innovation and the culture change may not seem sensitive information in nature.

The questioning and discussed covered the following topic areas:

- Demographic information and internal firm characteristics
- Types of innovation developed and the sales generated from innovation
- Degree of innovation: new to the firm or new to the market
- Combination of innovation (implementation of one innovation influencing another one)
- Innovation activities undertaken
- Innovation subsidies
- Cooperation for innovation
- Positive effects of innovation
- Hampering factors of innovation
- Intellectual Property rights
- Innovation culture and innovation

The initial contacts were made using email correspondence, which was followed by telephone communication in order to introduce the researcher and explain the objective of the research study. Moreover, the researcher has sent a personalized summary of the study's results designed to help companies understand their performance compared to competitors, and to identify innovation performance levers. The researcher has informed the participants of the interviews that all data will be reported anonymously, and confidentiality will be strictly maintained with respect to company's specific interview data. Babbie (2005) pointed that an ethical dilemma might be posed when interview participants are aware of the research purpose; thus, it may decrease cooperation. In this regard, the researcher didn't observe any unwillingness on the part of the participants.

The duration of the interviews ranged from forty (40) minutes to one (1) hour and twenty-five (25) minutes, with majority of interviews having duration of fifty (50) minutes. Data collection took place from the May 22 to July 15, 2017. There was a timetable change of three interviews at the last minute; nevertheless, a new timing was set and the interviews were managed to be

conducted also for these cases. Despite these set-backs, an adequate diversity of demographic characteristics, as well as organizational size and sector has been achieved.

Even though every effort has been done to cover all topic areas, at some cases, the richness of information provided was not at the same level. Thus, supplementary questions were asked to obtain additional information. Babbie (2005) highlight the difference between field research interviewing and survey research. Surveys tend to be rigidly structured. On the other hand, qualitative interviews tend to be more flexible and improvised. There is an interaction between researcher and interviewees. According to Babbie (2005), the process of field research interviewing comprises of asking questions and then listening to the answers, and the interview participants should do most of the talking. Lofland and Lofland (1995) believe that, role of the “socially acceptable incompetent” should be adopted when interviewing, which means researcher is less informed but it interesting party. It is crucial to keep the conversational flow and avoid abrupt transition between topics. Thus, the researcher should not create impression of lack of interest for a certain topic even if the interviewee goes beyond the question asked.

5.7.6 Data processing

The raw data obtained during fieldwork visits were recorded by the researcher using Voice Memos, which comprised of twenty-four (24) one to one interviews. The interview recordings were transcribed by the researcher, which involved translating from oral language with its own rules to a written language with other set of rules. This is because the transcripts are interpretive constructions, rather than copies of original reality.

Beside this, the data written in Microsoft Word document were translated from Albanian language to English language. The transcripts in Microsoft Word document were re-formatted by adding headings styles to break the document up into labeled passages (Bazeley et al., 2013). Heading 1 style was used for the main questions, while Heading 2 style was used for speaker’s code names, which included the researcher and the interviewees. This was done to separate statements made by different speakers in all transcript documents, which were imported into QSR NVivo 11 – a computer aided qualitative data analysis package. NVivo software was chosen to analyze these data, because it makes it easy to organize and keep track of interviews and other documentary sources. It helps creating character-based coding let you freely edit or

write text without invalidating the code created earlier. The software tutorial was used in order to get a brief overview of different elements in NVivo (Bazeley et al., 2013).

A more comprehensive analysis of the full transcripts, using the NVivo qualitative data analysis program is discussed in detail in the following. The NVivo software was used to support analytical tasks, such as data management in order to organize and keep track of the data; identification of significant themes and recording them through codes; query data to retrieve the relevant information to obtain answers, identify frequently used terms as well as cross tabulate how content is coded; visual modeling to show different relationships between various cases and themes being constructed; and lastly, report data, by building researcher's own understandings and making analysis with links to supporting evidence in the past review of literature (Bazeley, 2007).

Nevertheless, Gilbert (2002) indicates that even though the usage of computer tools are becoming more acceptable, issues have been raised about those people who are skeptical about their use. Thus, to eliminate this problem, the researcher has gone through online tutorials attached with the NVivo software, which offered step-by-step displays, and it has developed competency in using the software for code data analysis, extraction and visual modeling.

Interview transcripts were coded into tree nodes. New potential themes were incorporated into parent or child nodes, which created additional tree nodes, until all the interview transcript text coding was completed.

5.7.7 Thematic analysis and coding process

According to Braun and Clarke (2006), thematic analysis enables researchers to identify, analyze and report patterns within data. It is important to highlight that intimate knowledge of data is required for thematic analysis; thus, the data should be collected personally by the researcher. Then the data is transcribed and major themes in the interviews are identified from participants through interviews. The advice from Smith and Osborn (2003) helped to complete analyzing interview data individually, and allow participants views to directly inform the themes and sub-themes used in this study. The transcript was read twice before writing preliminary interpretations.

The next step was coding process. The researcher firstly generated autocoded themes that were created automatically from NVivo. NVivo groups themes by comparing words with the same stem. It is crucial to mention that themes can belong to more than one group. Also, some of the autocoded themes were not so relevant for data analysis, thus they were deleted. On the other hand, some were created through line by line coding. Then codes that were linked were grouped together and themes started to develop as a result of categorizing the codes into meaningful groups. Original data from the interviews was reviewed several times and some codes were redefined as needed in order to gain some insights which were not anticipated.

Even though the process of transcription is often considered time consuming and monotonous, it is also a great method to analyze qualitative data (Riesman, 1983). Data analysis is important part as the main themes and concepts are discovered in the interview (Rubin & Rubin, 1995).

5.7.8 Problems encountered through interviews

The greatest challenge was to obtain the desired number of participants to take part in this research study. The process of data collection lasted two months because of the busy schedule of participants, which prevented them to keep up with the particular date and time that was scheduled. Some of the participants were hesitant in recording their voice; nevertheless after explaining them that the purpose of recording is only not to misinterpret the data results; then the number of respondents that still denied it dropped to only four, but they were open to be called by phone if the researcher needed further details and clarifications.

5.8 Generalisability, Reliability and Validity

The following part discusses the validity, reliability, and generalization issues in research methods used in the thesis, including quantitative and qualitative research methods.

5.8.1 Quantitative Research Method

The empirical study includes firms that have less than 250 employees; the data was taken directly from Business Support Center in Kosovo. The major validity concern in this paper relates to the robustness of the model, which includes many of the important factors related to innovation and SMEs growth. Moreover, quality control was used testing the questionnaire during the training, where few remarks about the questions and technical errors were received. After this, 50 interviews were used as part of piloting phase in order to verify its validity.

Besides that, BSCK team has phones 40% of all interviewed firms to ensure that interviews were conducted efficiently. The findings from empirical data were consistent with literature, which is additional proof of high validity and reliability of the data for this current research.

The advantages of quantitative approach are the ability to include a large sample size, in order to increase the generalizability of the results. In this research study, the sample included 500 SMEs from various manufacturing, service and trade industries, which increases generalizability beyond these industries, to the population of SMEs in Kosovo, and to cater for the exploratory nature of the study.

5.8.2 Qualitative Research Method

There is little consensus among authors about the generalisability of qualitative research. It is questioned whether findings can support wider inference beyond the sample or population of study. There are two types of generalizations, such as empirical and theoretical. An example of theoretical generalization would policy development based on results of specific sample. Moreover, empirical generalization has to do with application of results to other people or contexts. Empirical generalization is further divided into representational generalizability, which has to do whether sample findings can be generalized to parent population and inferential generalizability which means whether sample findings can be inferred to other populations (Lewis & Ritchie, 2003). In the present research, there is some degree of representational generalizability from the sample to parent population.

Easterby-Smith et al. (2002) questions whether sufficient numbers of perspectives were included. For this case, as outlined above, interviewing continued until no new insights were taken from participants. Participants were selected to include wide range of perspectives on innovation and firm growth. Moreover, the researcher developed analysis of the raw data into themes and sub-themes. Also, certain comparable data were collected to ensure internal reliability. In addition, in order to distinguish viewpoints of participants from the researcher as suggested by Curran and Blackburn (2001), the findings chapter reports perspectives of participants, while the discussion chapter provides interpretation of data from researcher perspective.

To ensure validity of qualitative data, member checking of transcribed interviews was used. Participants of interviews could go through the transcribed interviews and approve content or

make changes as needed. Nevertheless, only few of them made some minor changes. According to Mishler (2010), it depends from judgment of investigator on how it is assessed validity of data, as it cannot be done through specific procedure or guideline.

5.9 Summary

This chapter provided a summary research methodologies used for this study. It described sample and data collection for quantitative and qualitative methods. This study adopted a mixed methods research. It adopted positivist paradigm to test the research hypotheses and conceptual model and as a result selected a quantitative research approach for further data collection and analysis. Moreover, it adopted qualitative approach by using interpretative epistemology, in order to explore owners or managers detailed explanations of organizational change as a result of introduction of innovation.

The next chapter, Chapter 6, presents the results and analysis for the empirical data from quantitative and qualitative research study.

CHAPTER 6. INTERPRETATION OF RESULTS AND DISCUSSION –QUANTITATIVE RESEARCH

6.1 Introduction

Chapter 6 presents analysis and interpretations of findings from the survey questionnaire. It offers the findings from the questionnaire conducted by Business Support Center Kosovo, which is followed by extensive discussion comparing the empirical results for the impact of innovation in SMEs performance for the case of Kosovo with the findings from the existing literature. It presents the descriptive statistics for the entrepreneurs' and the firms' characteristics, as well as innovation variables. By considering the dichotomous nature of dependent variable, which is firm growth in terms of turnover, the econometric analysis includes logistic regression model, which is estimated by using SPSS software. Finally, the chapter is summarized by presenting the main conclusions.

6.2 Descriptive Statistics

At the beginning, an overview of descriptive statistics is presented, followed by correlation of variables employed in a multivariate analysis. After this, there will be a discussion about logit regression and estimated results related to firm growth in terms of sales. Descriptive statistics, comprising of variables related to entrepreneurs and firm characteristics, as well as innovation development within firm are presented in Table 6.1.

Table 6.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Opportunity driven start up motivation	456	.00	1.00	.7193	.44984
Education level of entrepreneur	486	.00	1.00	.4033	.49106
Prior experience of entrepreneur	467	.00	1.00	.7259	.44653
Age of entrepreneur	494	17	78	37.37	11.194
Age of the entrepreneur squared	494	289.00	6084.00	1521.6053	922.54745
Gender of entrepreneur	493	.0	1.0	.846	.3615
Firm Age	466	0	73	10.32	9.012
Manufacturing sector	410	.00	1.00	.1732	.37886
Service sector	410	.00	1.00	.3976	.48999
Trade sector	410	.00	1.00	.5049	.50059
New or substantial modification of products/services/processes	484	.0	1.0	.126	.3322
Organizational innovation	484	.0	1.0	.200	.4007
Marketing innovation	484	.0	1.0	.101	.3020
New to the firm-innovations	400	.00	1.00	.1000	.30038
Source of innovation: in cooperation	393	0	1	.17	.372
R&D activities	480	.0	1.0	.104	.3058
Subsidies for innovation	431	.00	1.00	.0093	.09600
Valid N (listwise)	288				

The descriptive statistics in Table 6.1 display that average age of respondents in the sample is 37 years. Vast majority of respondents are males. A significant number of respondents have a university degree (about 40%), and most of them have prior experience before opening the business. The average age of enterprise is 10 years, which shows that most of them have been established in the post-war period. The majority of firms were established in trade sector, followed by service and manufacturing sectors with lower number of firms. In general, the level of innovations in Kosovo is low, and most innovations are new to the firm; still new or improved product/service innovations are more likely to be developed by firms compared to organizational and marketing innovations which are conducted at lower degree. It is interesting that the majority of respondents indicated that the main motivation to establish a firm was driven by market opportunities, rather than necessity. Almost all respondents in this study highlight that innovations were developed mainly by firms themselves, and only about 8% indicate that there has been some kind of cooperation (with companies or research institutions) for introduction of innovation. In addition, almost no subsidies have been provided for the firms to conduct

innovations. In relation to intellectual property rights, very few respondents indicated that they either applied for a patent or have registered a new commercial brand or new design.

Table 6.2 contains bivariate correlations for all variables under consideration. It can be concluded that even though numerous correlation coefficients are significant at the 0.01 level (2-tailed test) and at the 0.05 level (2-tailed test), multicollinearity will not affect our data results as most of the coefficients are sufficiently low compared to the absolute value which is a threshold smaller than 0.7 (Lind et. al., 2000), except one variable as a source of innovation. Moreover, multicollinearity is tested by means of collinearity statistics, where the variance inflation factor (VIF) is a reciprocal of tolerance as presented in Table 6.3. At the tolerance, the value needs to be greater than 0.1, so anything less than 0.1 indicates a potential multicollinearity problem, while anything greater than 10 for VIFs indicates a possible multicollinearity problem. Thus, bivariate correlations and VIFs show that the data does not show any significant multicollinearity because of relatively low correlation and none of VIFs is close to cut-off threshold of 10. Because of this, all these variables can be initially included within the model (Kleinbaum et al., 2007).

Table 6.2 Correlation matrix

Correlations

		Opportunity driven start up motivation	Education level of entrepreneur	Prior experience of entrepreneur	Age of entrepreneur	Gender of entrepreneur	Firm Age	Manufacturing sector	Service sector	Trade sector	New or substantial modification of products/services/processes	Organizational innovation	Marketing innovation	New to the firm-innovations	Source of innovation: in cooperation	R&D activities	Subsidies for innovation
Opportunity driven start up motivation	Pearson Correlation Sig. (2-tailed) N	1 456															
Education level of entrepreneur	Pearson Correlation Sig. (2-tailed) N	.217* 444	1 486														
Prior experience of entrepreneur	Pearson Correlation Sig. (2-tailed) N	.227* 438	.093* 453	1 467													
Age of entrepreneur	Pearson Correlation Sig. (2-tailed)	.136* 0.004	0.049 0.286	0.017 0.71	1												

	N	452	481	463	494												
Gender of entrepreneur	Pearson Correlation	.096 [*]	0.086	0.073	.212 ^{**}	1											
	Sig. (2-tailed)	0.042	0.059	0.117	0	0											
	N	449	480	460	488	493											
Firm Age	Pearson Correlation	0.062	0.028	0.041	.314 ^{**}	.167 ^{**}	1										
	Sig. (2-tailed)	0.198	0.55	0.396	0	0											
	N	429	454	439	463	460	466										
Manufacturing sector	Pearson Correlation	0.072	0.023	0.06	0.09	0.046	.107 [*]	1									
	Sig. (2-tailed)	0.159	0.643	0.238	0.071	0.359	0.035										
	N	380	407	391	406	404	390	410									
Service sector	Pearson Correlation	0.069	0.046	0.003	0.042	0.025	.118 [*]	.293 ^{**}	1								
	Sig. (2-tailed)	0.182	0.355	0.946	0.395	0.618	0.019	0									
	N	380	407	391	406	404	390	410	410								
Trade sector	Pearson Correlation	0.073	0.094	-0.073	-0.075	0.045	0.043	.282 ^{**}	.681 [*]	1							
	Sig. (2-tailed)	0.158	0.057	0.151	0.131	0.369	0.398	0	0								
	N	380	407	391	406	404	390	410	410	410							
New or substantial modification of products/services/processes	Pearson Correlation	.118 [*]	.138 ^{**}	0.081	0.029	0.064	0.067	.157 ^{**}	0.078	0.033	1						
	Sig. (2-tailed)	0.014	0.003	0.084	0.534	0.16	0.159	0.002	0.119	0.508							
	N	441	471	452	478	477	450	398	398	398	484						
Organizational innovation	Pearson Correlation	0.005	.159 ^{**}	0.078	-0.034	.101 [*]	0.009	.134 ^{**}	0.055	0.002	0.059	1					
	Sig. (2-tailed)	0.92	0.001	0.1	0.46	0.027	0.842	0.008	0.275	0.966	0.197						
	N	441	471	452	478	477	450	398	398	398	484	484					
Marketing innovation	Pearson Correlation	0.062	0.063	0.08	-0.003	0.027	0.069	.215 ^{**}	.100 [*]	0.035	.306 ^{**}	.226 ^{**}	1				
	Sig. (2-tailed)	0.191	0.172	0.089	0.953	0.561	0.146	0	0.045	0.485	0	0					
	N	441	471	452	478	477	450	398	398	398	484	484	484				
New to the firm-innovations	Pearson Correlation	0.094	.132 ^{**}	.113 [*]	0.032	0.081	0.033	.138 ^{**}	0.074	0.045	.677 ^{**}	.284 ^{**}	.285 [*]	1			
	Sig. (2-tailed)	0.07	0.008	0.028	0.524	0.108	0.518	0.009	0.165	0.395	0	0	0				
	N	372	397	377	395	393	377	353	353	353	400	400	400	400			
Source of innovation: in cooperation	Pearson Correlation	0.094	.166 ^{**}	.112 [*]	0.049	0.008	0.026	.248 ^{**}	0.056	0.035	.867 ^{**}	.544 ^{**}	.582 [*]	.694 [*]	1		
	Sig. (2-tailed)	0.071	0.001	0.031	0.338	0.869	0.619	0	0.305	0.518	0	0	0	0			
	N	365	390	370	388	386	370	343	343	343	393	393	393	389	393		
R&D activities	Pearson Correlation	.108 [*]	.129 ^{**}	0.069	0.058	0.016	0.049	.189 ^{**}	0.046	0.004	.689 ^{**}	.173 ^{**}	.370 [*]	.514 [*]	.718 ^{**}	1	
	Sig. (2-tailed)																
	N																

	Sig. (2-tailed)	0.023	0.005	0.142	0.209	0.736	0.305	0	0.359	0.931	0	0	0	0	0		
	N	438	467	449	474	473	447	396	396	396	480	480	480	400	392	480	
Subsidies for innovation	Pearson Correlation	0.062	.121*	0.007	0.045	-.0089	-.0041	-.004	0.047	-.0031	.169**	.121*	0.051	.221*	.232**	.192**	1
	Sig. (2-tailed)	0.218	0.012	0.891	0.356	0.067	0.408	0.434	0.36	0.551	0	0.012	0.29	0	0	0	
	N	398	428	406	426	424	404	378	378	378	431	431	431	399	391	431	431

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 6.3 Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Opportunity driven start up motivation	.797	1.254
	Education level of entrepreneur	.869	1.150
	Prior experience of entrepreneur	.870	1.150
	Age of entrepreneur	.761	1.314
	Gender of entrepreneur	.842	1.188
	Firm Age	.822	1.217
	Manufacturing sector	.288	3.468
	Service sector	.155	6.462
	Trade sector	.152	6.562
	New or substantial modification of products/services/processes	.153	6.546
	Organizational innovation	.541	1.849
	Marketing innovation	.472	2.118
	New to the firm-innovations	.418	2.390
	Source of innovation: in cooperation	.129	7.722
	R&D activities	.392	2.548
	Subsidies for innovation	.839	1.191

a. Dependent Variable: Firms turnover within 36 months

6.3 Logistic Model

Logistic regression model was used to predict a dichotomous variable of firm growth from predictor variables. A dichotomous variable is firm growth in terms of turnover, coding 1 if sales grow, and 0 if there is no growth in sales. The independent variables comprise of those related to entrepreneur, firm and innovation characteristics. The discussion of econometric logit model is used to investigate which of the factors lead to firm growth in terms of turnover.

Table 6.4 presents Hosmer and Lemeshow goodness-of-fit test tells us how well the model fits the data, meaning how well is going to predict an outcome. To test the fit of the logistic model, a probability p-value is computed from the chi-square distribution with 8 degrees of freedom.

Hosmer and Lemeshow goodness-of-fit test statistics should be greater than 0.05. In our analysis, it is 0.537. The non-significant value is an indication of good fit, implying that this is a good model and the model prediction does not significantly differ from the observed. Yet, this is not a highly recommended test, as there are various problems with this test, but it can still be useful as a screener for looking overall fit.

Table 6.4 Hosmer and Lemeshow Test with respect to SMEs growth

Step	Chi-square	df	Sig.
1	6.996	8	.537

Classification Table 6.5 with respect to SMEs growth presents how good the model was when predicting firm turnover based on independent variables included in the model. The model can predict that 96% were correctly classified for group of firms not growing sales, and about 26.1% of those achieving higher sales. It can be concluded that 77.6% of outcomes were correctly classified in this model, implying a good model. If the model is close to 65-70% (which is a threshold) range of correct prediction than it can concluded that it is a good model. The accuracy rate is higher to those firms that will not achieve firm growth, rather than SMEs that will achieve firm growth.

Table 6.5 Classification Table with respect to SMEs growth

Observed			Predicted		
			Firms turnover within 36 months		Percentage Correct
			No	Yes	
Step 1	Firms turnover within 36 months	No	190	9	95.5
		Yes	51	18	26.1
	Overall Percentage				77.6

The Logistic model is appropriate to predict dichotomous variable from a set of predicted variables, which shows the individual impact of independent variables on the dependent variable. In line with our hypothesis testing, it includes variables related to entrepreneur, firm characteristics, as well as innovation related variables. Therefore, the logistic regression equation is as follows:

$$P(y = \text{turnover} | x) = \beta_0 + \beta_1 \text{Opportunity_driven} + \beta_2 \text{Edu_entrep} + \beta_3 \text{Experience_entep} + \beta_4 \text{Age_entrep} + \beta_5 \text{Age_entrep_squared} + \beta_6 \text{Gender_entrep} + \beta_7 \text{Firm_age} + \beta_8 \text{Man_sec} + \beta_9 \text{Serv_sec} + \beta_{10} \text{Trade_sec} + \beta_{11} \text{Prod_innovation} + \beta_{12} \text{Org_innovation} + \beta_{13} \text{Mkt_innovation} + \beta_{14} \text{New_to_the_firm} + \beta_{15} \text{Cooperation_with_firms} + \beta_{16} \text{RD_activities} + \beta_{17} \text{Subsidies} + \epsilon_i \dots$$

Where P is the probability of SMEs achieving turnover.

Table 6.6 Logit estimates for SMEs growth

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a								
Opportunity_driven	.466	.427	1.191	1	.275	1.593	.690	3.679
Edu_entrep	.522	.354	2.172	1	.141	1.685	.842	3.374
Experience_entrep	1.319	.460	8.227	1	.004***	3.741	1.519	9.214
Age_entrep	.293	.123	5.684	1	.017**	1.341	1.054	1.707
Age_entrep_squared	-.004	.002	5.555	1	.018**	.996	.993	.999
Gender_entrep(1)	-.142	.463	.094	1	.759	.867	.350	2.149
Firm_age	-.050	.025	4.098	1	.043**	.951	.906	.998
Man_sec	-1.316	.919	2.052	1	.152	.268	.044	1.623
Serv_sec	-1.063	.944	1.267	1	.260	.346	.054	2.198
Trade_sec	-1.696	.933	3.304	1	.069*	.183	.029	1.142
Prod_innovation	1.907	1.227	2.416	1	.120	6.733	.608	74.569
Org_innovation	-.322	.865	.138	1	.710	.725	.133	3.951
Mkt_innovation	1.960	.840	5.439	1	.020**	7.099	1.367	36.857
New_to_the_firm	-2.001	.858	5.433	1	.020**	.135	.025	.727
Cooperation_with_firms	-1.144	1.223	.874	1	.350	.319	.029	3.505
RD_activities	-.196	.825	.056	1	.812	.822	.163	4.144
Subsidies_innovation	1.127	1.670	.455	1	.500	3.087	.117	81.478
Constant	-6.231	2.554	5.951	1	.015	.002		

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level

6.3.1 The entrepreneur

In this research model, the entrepreneur characteristics represent the first group of independent variables that influence firm performance. Different individual attributes of entrepreneurs reflect their ability to contribute to firms' growth. Thus, the research study is focused on the motivation to start a business, as well as other entrepreneurs' characteristics, such as education level, work experience, age and gender.

The first hypothesis is related to the motivation of the entrepreneur to start up a business.

Hypothesis 1: Entrepreneurs tend to establish an SME by catching opportunity rather than a need to achieve firm's growth.

X_{ii} = Opportunity driven

This variable is not statistically significant with the value of 0.275, higher than the level of confidence. This evidence doesn't support the hypothesis, because of non-significance value.

Entrepreneurial motivations have been classified into push and pull factors (McClelland et al., 2005; Segal et al., 2005). Push factors are usually described by personal or external factors, such as necessity for survival, unemployment, frustration with previous employment and others, and they are often associated with negative implications. On the other hand, pull factors are characterized with catching an opportunity as a main reason to start a business. Pull factors relate to independence, autonomy, self-achievement, being one's own boss, as well as social status and power (Alstete, 2002). Other researchers classify entrepreneurial motivations as driven by pull factors meaning having autonomy and push factors driven by economic necessity (Bogenhold & Staber, 1991).

Segal et al. (2005) and Asah et al. (2015) argues that there is a predominance of business ownership driven by pull factors; thus, they are more likely to succeed and have a better chance of survival. Moreover, some authors have found positive relationship between entrepreneurial motivations and firm growth (Verheul et al, 2010); while others didn't find significant relationship between these two variables (Block & Wagner, 2007). Block and Wagner (2007) argue that entrepreneurs entering a business due to pull factors are more successful in business and they are characterized with higher earnings compare to those of necessity entrepreneurs.

There are mixed results related to entrepreneurial motivations in developing countries. For instance, for Vietnamese entrepreneurs, challenge and achievements are more important motivators than necessity and security (Swierczek & Ha, 2003). Some others studies conclude that there are regional differences in Vietnam, where some entrepreneurs that come from weaker economy are motivated by push factors related to job creation (Benzing et al., 2005). Another illustration is Romania, the strongest motivator for creating an enterprise is related to income needs (Benzing et al., 2005). On the other hand, in a more developed region of India, entrepreneurs are mainly motivated by pull factors, such as desire for independence and autonomy (Benzing et al., 2005). Also, a study of SMEs in Kenya, Ghana and Nigeria shows

that entrepreneurs in developing countries are motivated mostly by push factors, in order to increase their income and have job stability (Benzing & Chu, 2009).

In most of the transition countries, SMEs are characterized by being established mainly because of necessity, and to some extent based on opportunities in the market. The main reasons for this are destabilized market and business environment in these countries. Empirical results in Kosovo show that the largest number of respondents claim that they opened a business because they wanted to have their own company (32.61%); followed by spotted a business opportunity (26.13%) and because of unemployment (23.97%) as shown in Table 6.7. These results indicate that the decision for entrepreneurs to start up a business in Kosovo is largely impacted by both push and pull factors (BSCK, 2013).

Table 6.7 Reasons for starting up business

Start-up motivations	% (2012)
I spotted a business opportunity and I decided to act upon it and establish my own company	26.13
I have been unemployed and had to do something to earn a living	23.97
I always wanted my dream of having my own company to come true	32.61
Dispute with my previous employer – partner	2.38
I inherited from my family	8.21
Others	0.22

Source: BSCK, 2013

The second hypothesis is related to entrepreneur’s educational level.

Hypothesis 2: The type of education level of entrepreneurs has an influence in the firm growth.

X_{2i} Entrepreneur education

The next variable is a continuous variable which shows the number of years of entrepreneur. Highly educated owners may be prone to establish a firm based on the discipline they have been educated, and thus achieve firm growth. Nevertheless, this variable is not significant predictor with the p-value of 0.141 higher than the level of confidence. This evidence doesn't support the hypothesis that education level of entrepreneurs has positive influence upon firm growth.

Nevertheless, Gao & Hafsi (2015) argue that the higher the level of owner's education, the better is the outcome of innovation activities and firm growth. Moreover, Bhutta et al., (2008) found that education has positive impact on firm's performance. Akinboade (2015) suggest that there is SMEs efficiency is affected by the level of education of owners. The results of a study of 575 SMEs owners show that there is an improved turnover growth with increased level of owners' education.

Table 6.8 presents the educational level of entrepreneurs in 2012 in Kosovo, which shows that the majority of owners are with secondary school education (54.8%), which is followed by Bachelor Degree (37.2%).

Table 6.8 Gender and educational level

Male (founders)	Female (founders)
89.8%	10.2%
Education Level	% (2012)
Doctoral Degree	0.9
Master Degree	4.3
University Degree	37.2
Secondary School	54.8
Primary School	2.8
Total	100.0

Source: BSCK, 2013

The third hypothesis is related to entrepreneur's prior work experience.

Hypothesis 3: The work experience of entrepreneurs has positive influence in the firm growth.

X_{3i} Entrepreneur experience

This predictor is statistically significant with p-value of 0.004, lower than the level of confidence. It has a positive Exp Beta of 3.741, implying that for every one unit increase in years of experience, there is an increased likelihood to achieve firm turnover by factor of 1.319. This evidence supports the hypothesis that work experience positively affects firm growth.

Similarly, in the review of literature, it is argued that previous entrepreneurial experience plays a significant role in firm's growth. The entrepreneurial experience with the goals, rewards and methods of particular area play significant role in their perception and decision making. Moreover, those entrepreneurs with experience in the function of R&D/engineering and marketing/sales often support more innovation strategies leading to organizational growth with new products and markets (Gao & Hafsi, 2015). Similar results are found in another study by Krasniqi et al., (2008) who found that experience matters for firm growth.

The empirical findings indicate the majority of respondents in 2012 claim that they had extensive experience (41.11%) before opening their own business, followed by 31.48% with limited experience and 27.41% with no experience as presented in Table 6.9. Indeed, the average experience of entrepreneurs is 8 years, which indicates the time which is necessary to acquire knowledge about customers, suppliers and markets, before starting up your own business.

Table 6.9 Experience of SME owners in business prior to start-up

Did you have any experience in the field where you started your own company?	% (2012)
I had extensive experience	41.11
I had limited experience	31.48
I did not have experience	27.41
Total	100

Source: BSCK, 2013

The fourth hypothesis is related to age of entrepreneur stated as follows:

Hypothesis 4: The age of entrepreneurs has negative influence on the firm's growth.

$X_{4i} = Age$

The fourth independent control variable is age. This variable resulted to be significant predictor, considering that it has significance of 0.017, implying that for every one unit increase in entrepreneur age, there is an increased likelihood to achieve firm turnover by factor of 0.293. The evidence doesn't support this hypothesis, as the results show as the entrepreneurs become older; there is likelihood that firm growth increases.

Nevertheless, entrepreneur age was squared to better find out the turning point, which shows until what age, the entrepreneur is capable of having positive effect on firm growth. The logit estimates present p-value of 0.018, implying that the variable entrepreneur age squared is significant, but it has negative effect on firm growth by -0.004 .

The following is the calculation of the turning point or the maximum of the function in the estimated equation entrepreneur age and entrepreneur age squared (Wooldridge, 2012, p.195). This is achieved at the coefficient on entrepreneur age over twice the absolute value of the coefficient on entrepreneur age squared. This measures the point where the effect of entrepreneur age becomes zero at about 36.6 ($|0.293/(2*-0.004)| = 36.63$ years). Entrepreneur age and its squared term at the start up is significant and nonlinear, in the form of inverted U-shaped. The effect of entrepreneur age on firm growth at the beginning is positive because entrepreneurs are young and have greater dynamism. The turning point when entrepreneur age becomes negative is around 36 years. This is because entrepreneurs get older and their efforts and dynamism for growth decreases, suggesting that entrepreneurs older than 36 years have negative effects on firm growth.

Other studies found entrepreneur age as a significant variable for firm growth. Previous research shows also that older top managers tend to be less likely to take risks and to invest in growth strategies compared to their younger counterparts (Hambrick & Mason, 1984; Mudambi & Treichel, 2005). Some of the explanations for this include that older executives have less physical and mental stamina and gave psychological commitment to status quo of the firm. They are less able to grasp new ideas and adapt to new behaviors, and sometimes their financial and career security are more important; thus they try to avoid any risky action. Hence, the firm growth, in particular sales and earnings are associated with youthful entrepreneurs (Hambrick & Mason, 1984). Moreover, young founders are better adapted to new economy associated with

development of new technology, markets, metrics and others, as they have better understanding of these important aspects. When people get older, their flexibility decreases, and they try to maintain status quo because of their resistance to change (Mudambi & Treichel, 2005). Therefore, younger founders have individual characteristics, such as creativity, intuition, and ability to grasp new opportunities and take risks, which impacts firm growth. Moreover, another study concludes that the lower age of entrepreneur has positive impact on firm's growth, considering that the strategic orientation of older ones may be detrimental to firm growth (Colombelli, 2015).

The average age of entrepreneurs in the sample is 37 years, which might be due to the composition of population in Kosovo, which is among the youngest in Europe with 70% of population younger than 35 years.

The fifth hypothesis is gender of entrepreneur as follows:

Hypothesis 5: The gender of entrepreneurs influences the firm growth.

$X_{5i} = \text{Gender}$

The first explanatory variable is gender which is also a binary coded variable where '1' indicates males and '0' indicates females. This variable is not statistically significant with the value of 0.759, higher than the level of confidence. The evidence doesn't support the hypothesis, because of its non-significance.

The empirical results are similar with findings of other authors in the literature review. There is no association of gender of owner with firm growth in terms of business turnover (Akinboade (2015). Different experts suggest that female entrepreneurs have lower growth ambitions compared to males, because of scarce resources, time, and experience (Cliff, 1998). In terms of sales growth, women entrepreneurs tend to perform worse than men (DuRietz & Henreksson, 2000). Krasniqi (2009) states that gender has a positive impact on entrepreneurial involvement, with men being more likely to become entrepreneurs than women.

Earlier studies show mixed results related to gender of entrepreneur and its effect on firm performance. Some studies conclude a positive effect, such as a positive relationship between

return on asset (ROA) and the chance to have woman to board for 1000 Fortune firms (Farrell & Hersch, 2005). Nevertheless, there are some studies that confirm negative association between female on board and firm growth (Shrader et al., 1997). Moreover, Thompson et al. (2009) indicate that women businesses are small and remain so, and they are more likely to manage home based business, or operate a business in part time basis, which gives them flexibility to take care of their families.

The empirical results indicate that the gender structure of entrepreneurs shows that the share of women entrepreneurs is underrepresented compare to men, as the majority of respondents are men (90%). This shows that there is a room for strengthening the role of women in private sector in Kosovo.

6.3.2 The firm

In this model, the firm characteristics represent the second group of independent variables that influence firm performance, such as firm age, and sector of economic activity (manufacturing, service or trade).

The sixth hypothesis is age of the firm as follows:

Hypothesis 6: The age of the firm has positive influence on firm's growth.

X_{6i} = Age of the firm

The age of the firm is another independent variable used in this study. This predictor is statistically significant with p-value of 0.043, lower than the level of confidence. It has a positive Exp Beta of 0.951, implying that for every one unit increase in years of experience, there is decrease likelihood to achieve firm turnover by factor of -0.050. This evidence does not support the hypothesis that firm age positively affects the firm's growth.

Other studies show mixed results. According to Calantone et al. (2002), firm age has positive impact on their performance. Nevertheless, other studies conclude that firm age is negatively and significantly correlated with firm growth (Krasniqi, 2012; Colombelli, 2015).

The seventh hypothesis is related to sectors as follows:

Hypothesis 7: The sector (manufacturing, service and trade) has positive influence on firm growth.

To have a clear overview of each sector, three sub-hypotheses have been developed, such as:

Hypothesis 7a: Manufacturing sector has positive influence on firm growth.

Hypothesis 7b: Service sector has positive influence on firm growth.

Hypothesis 7c: Trade sector has positive influence on firm growth.

X_{7ai} = Manufacturing sector

Manufacturing sector is not statistically significant with the value of 0.152, higher than the level of confidence. The evidence does not support this hypothesis considering the non-significance of manufacturing sector.

X_{7bi} = Service sector

Similarly, service sector variable is not statistically significant with the value of 0.26, higher than the level of confidence. The evidence does not support this hypothesis considering the non-significance of service sector.

X_{7ci} = Trade sector

Nevertheless, trade sector is statistically significant with the value of 0.069, lower than the level of confidence. The Exp(B) lower than one (0.183) indicates that for every unit increase on trade sector, there is a decrease likelihood to achieve firm turnover by -1.696. The evidence does not support this hypothesis considering the negative significance of trade sector to achieve firm growth.

Nowadays, there is a growing interest of the topics of innovation in service firms. Service sector took a center role in developed and developing economies since 2000 (Bhatnagar & Gopaldaswamy, 2017). Previous studies are largely focused on manufacturing firms; nevertheless, it is not possible to predict patterns and understandings of innovation services in services firms through studies in manufacturing firms (Menor et al., 2002). There are some studies that show the importance of innovation in service sector (Rodríguez-Gutiérrez et al., 2015; Gianiodis et al., 2014). Yang et al. (2014) discuss that service-oriented SMEs can provide differentiated service products through internal R&D to expand market share, or they can develop low cost competitive advantage by providing continuous innovation. The firms in manufacturing sector are more likely to be engaged in process innovation than in product innovation, as manufacturing

firms tend to use more technologically advanced production processes when compared to other sectors such as trade and services (Krasniqi & Kutllovci, 2008). Still, Thornhill (2006) emphasize that if the industry dynamism is increasing, then innovation is more common on those firms, irrespective of which industry they are operating.

6.3.3 Innovation

Innovation characteristics represent the third group of independent variables that influence firm performance, such as innovative degree, product/process innovation, organizational innovation and marketing innovation, innovation source, R&D activities and subsidies for innovation.

The eighth hypothesis is related to innovation degree, as follows:

Hypothesis 8: SMEs tend to introduce new products to the firm, rather than to the market to achieve firm growth.

X_{8i} = New to the firm

This variable is statistically significant predictor with the value of 0.02, lower than the level of confidence. The Exp(B) lower than one indicating that for every unit increase on new to the firm, there is a decrease likelihood to increase firm turnover by -2.001 (beta). The evidence indicates that hypothesis SMEs tend to introduce more new product to the firm to achieve firm growth is not supported.

In this context, there are mixed results related to the innovation degree. SMEs are characterized with innovation that are incremental, or new to the firm, as they are characterized with limited resources in capital, personnel, and technology (Storey, 1994; Woschke et al., 2016). Oke et al. (2006) found that SMEs tend to develop more incremental innovations, and this focus is related to firm growth in terms of sales. Nevertheless, in a study conducted in Dubai SMEs, the leading type of innovation was radical (Al-Ansari et al., 2013), which is considered a disagreement with previous authors that perceive SMEs not as risk takers as large enterprises, only limited to incremental innovation.

The results of the empirical research in BSCK show that the degree of innovation in most of Kosovo SMEs is at the box “Improvement of existing products” as shown in Figure 6.1.

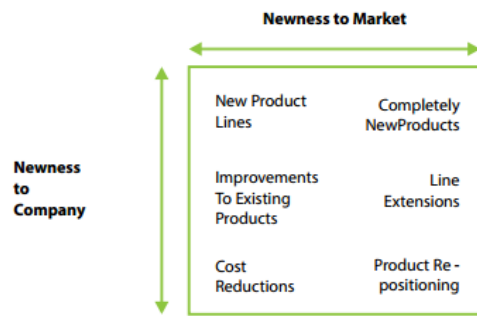


Figure 6.1 Innovation Degree

Source: BSCK, 2013

The ninth hypothesis is related to product/process innovation, stated as follows:

Hypothesis 9: SMEs that developed product/process innovations achieve firm growth.

X_{9i} = *The firm has introduced product/process innovation*

This variable is not statistically significant with p-value of 0.12. The evidence does not support hypothesis because of its non-significance value. This empirical finding is not in line with literature review. It is probably because manufacturing sector is not developed at high extent; thus, there are not many innovations developed by SMEs in Kosovo.

Various studies have examined the influence of product innovation on firm growth, and most of them find positive relationship (Bayus *et al.*, 2003; Oke *et al.*, 2007; Chetty & Stangl, 2010; Ar & Baki, 2011; Rosli & Sidek, 2013). Other studies show significant relationship between product, process and market innovations on firm growth, but not relationship between organizational innovation and firm growth (Hernandez-Espallardo & Delgado-Ballester, 2009). Nevertheless, in a study of Morone and Testa (2008), product innovation, process innovation and organizational changes are significantly associated with organizational growth, while no considerable relationship between marketing innovation and firms' growth. Moreover, a strong relationship between marketing innovation and firm growth has been concluded in a study conducted by Sandvik and Sandvik, (2003) and Lin and Chen (2007). In addition, there is a positive relationship between new product innovation in an economy and larger share of high growth firms in the economy (Krasniqi & Desai, 2016).

The empirical findings suggest that the average number of new products or services introduced during the past three years by companies was 15.9% in 2010, 8.5% in 2011 and 7.2% in 2012. This shows a decreasing rate of companies in the average number of new products or services introduced during the past three years. Moreover, Table 6.10 presents types of innovation across sectors, where SMEs from trade sector developed innovation mostly, followed by manufacturing and services sectors.

Table 6.10 Industry vs. Types of Innovation

Industry/Innovation	Product/Process Innovation	Organizational Innovation	Marketing innovation	Total
Manufacturing Sector	19	18	17	54
Service Sector	18	20	10	48
Trade Sector	32	30	18	80
Total	69	68	45	182

The tenth hypothesis is related to organizational innovation, stated as follows:

Hypothesis 10: SMEs that developed organizational innovation do not necessarily achieve firm growth.

X_{10i} = *The firm has introduced organizational innovation*

Organizational innovation has a p-value of 0.710, which means it is not significant. Thus, the evidence does not support hypothesis because of its non-significance.

There are mixed results about organizational innovation. Some studies indicate a positive relationship between organizational innovation and firm growth (Oke et al., 2007; Lin & Chen, 2007; Morone & Testa, 2008; Chetty & Stangl, 2010). Specially, Lin and Chen (2007) indicate a positive relationship between organizational innovation and firm growth, in terms of sales. Moreover, managers should play a great attention to organizational type, even though it is intangible, considering that it often has an impact in other types of innovation (Gunday et. al., 2011).

The eleventh hypothesis is related to marketing innovation, stated as follows:

Hypothesis 11: There is no direct relation between SMEs that developed marketing innovation and firm growth.

X_{11i} = *The firm has introduced marketing innovation*

The independent variable, marketing innovation has a p-value of 0.02, and for every one unit increase on marketing innovation, there is an increase likelihood that firm increases its sales by 1.960. The evidence does not support hypothesis that there is no relationship between marketing innovation and firm's growth.

There are mixed results related to marketing innovation. Some agree that changes in marketing can lead to higher sales (Lin & Chen, 2007; Oke *et al.*, 2007; Chetty & Stangl, 2010). Sandvik (2003) highlight no considerable relation of marketing innovation in firm growth.

The twelfth hypothesis is related to innovation source, as follows:

Hypothesis 12: SMEs tend to develop innovation by cooperation with other institutions, rather than mainly by themselves, to achieve firm growth.

X_{12i} = *Innovation source: in cooperation with others*

This variable is not statistically significant with the value of 0.35, higher than the level of confidence. The evidence doesn't support the hypothesis because of its non-significant value.

There are mixed results related to innovation source. Various authors emphasize the importance of introducing innovation through networks to achieve firm growth (Konsti-Laakso *et al.*, 2012). There is higher rate of developing successful innovations when organizations are part of a network, which lead to market expansion, total sales and/or number of employees (Havnes & Senneseth, 2001). According to Calantone *et al.* (2002), innovative ideas may come from organizations, or from other parties that the firm has relationship, such as customers, suppliers or other firms. Also, researchers emphasize that networks has helped firms to identify market opportunities and turn them into new products and services, which is a way of their survival (Watson, 2007). Inter-firm cooperation and linkages involving SMEs impact positively firm

growth and performance, considering that they encounter limitations, such as access to technological information and guidance on quality control; access to finance; and assistance in purchase of materials or equipment (Mohannak, 2007). Nevertheless, Torkkeli et al. (2016) argue that there is no relation to growth of the network competence of domestically operating SMEs.

The empirical data results show that only 5.1% of firms in the sample have conducted innovation themselves, while other firms have cooperated with other firms to conduct innovation (48.9%), followed by mainly from company and cooperation with institutions outside company (31.6%), and 14.4% cooperation with academic and research institutions as presented in Table 6.11.

Table 6.11 Source of innovation

Source of innovation	% (2012)
Mainly from company	5.1
Company in cooperation with other companies	48.9
Company in cooperation with other academic and research institutions	14.4
Mainly from company and institutions outside company	31.6
Total	100.0

Source: BSCK, 2013

The thirteenth hypothesis is related to R&D activities, stated as follows:

Hypothesis 13: R&D activities have positive influence on the firm's growth.

X_{13i} = *The firm has undertaken R&D activities*

This variable is not significant predictor with the p-value of 0.812, lower than the level of confidence. The evidence doesn't support the hypothesis due to its non-significant value.

According to Nunes et al., (2013), R&D expenditures can be a barrier to SMEs as they represent a significant sunk costs; nevertheless, they can also represent high growth rates associated with

greater investment opportunities. Some of the positive effects of R&D in SMEs growth include: diversification of activities, increased capacity to create networks with other SMEs, as well as organizational flexibility to adapt changes arising from market (Nunes et.al, 2013; Rogers, 2004). Nevertheless, R&D expenditures can also restrict SMEs growth because of lack of competence and experience to manage R&D projects, associated with challenge of recruiting qualified employees, as well as problems in managing financial resources in the short run. Thus, older SMEs are better able to manage R&D expenditures than younger ones (Nunes, et. al., 2013; Ortega-Argilés. 2009). It can be concluded that most SMEs operate in medium- to low-technology environments; thus, they innovate without using formal R&D inputs (Martins & Fernandes, 2015).

According to empirical results, the level of R&D innovation activities for the creation or substantial modification of products, services or new processes during the past three years is only 13.2% in 2012. This might be because small firms encounter difficulties on spending in R&D, because they are very costly and risky, as they don't possess capital and extensive resources and lower access to external funding compared to larger ones. R&D is very costly and risky especially for SMEs that face financial problems; thus, patents are considered to be a valuable solution to finance innovation. Even though SMEs are less likely to be involved in a formal R&D compared to large firms, they are more efficient as R&D agents as they tend to produce more patents and innovations by unit of input invested in R&D (Ortega-Argilés, 2009).

The fourteenth hypothesis is related to subsidies for innovation, stated as follows:

Hypothesis 14: Subsidies for innovation activities have positive influence on the firm's growth.

X_{14i} = *The firm has received subsidies for innovation*

This variable is not statistically significant with the value of 0.500, higher than the level of confidence. The evidence support or doesn't support the hypothesis, because of its non-significant value.

Some studies emphasize the positive impact between subsidies and SMEs growth (Harris & Trainor, 1995; Kim, 2000; Rehman, 2017). Nevertheless, Howell (2017) finds out that subsidies

stimulate innovation development only in high-tech industries, although it leads to decrease in firm total factor productivity in both high and low tech industries.

Moreover, the empirical results show that most of the respondents claim that the level of subsidies for innovation was very low, where only 11.9% received some kind of subsidy in 2012, from EU funds, central government or local government.

6.3.4 Robustness check

As a robustness check or as a means of evaluating the appropriateness of logistic regression model, series of logit estimation were analyzed. The findings, statistical significance and Coefficient, from logit estimation demonstrate that they are closed to the full model of logistic regression.

In order to examine the effects of entrepreneur, firm and innovation characteristics on firm growth in relation to sales, and validate previous logistic regression results, robustness check was conducted by adding variables in the model as group components. Three baseline models were estimated as follows:

$$P(y = \text{turnover} | x) = \beta_0 + \beta_1 \text{Edu_entrep} + \beta_2 \text{Experience_entep} + \beta_3 \text{Gender_entrep} + \varepsilon_i \dots (1)$$

$$P(y = \text{turnover} | x) = \beta_0 + \beta_1 \text{Edu_entrep} + \beta_2 \text{Experience_entep} + \beta_3 \text{Gender_entrep} + \beta_4 \text{Firm_age} + \beta_5 \text{Trade_sec} + \varepsilon_i \dots (2)$$

$$P(y = \text{turnover} | x) = \beta_0 + \beta_1 \text{Edu_entrep} + \beta_2 \text{Experience_entep} + \beta_3 \text{Gender_entrep} + \beta_4 \text{Firm_age} + \beta_5 \text{Trade_sec} + \beta_6 \text{Org_innovation} + \beta_7 \text{Mkt_innovation} + \beta_8 \text{New_to_the_firm} + \varepsilon_i \dots (3)$$

The models are presented in Table 6.12. In the first model are included variables related to entrepreneur, such as education, experience and gender of entrepreneur. The variable entrepreneur education is statistically significant, which increase that likelihood that firm growth increase by 44.8%. Similarly entrepreneur experience is statistically significant, and positively affects firm growth with B of 86%. On the other hand, the variable gender is not significant.

In the second baseline model are added variables related to firm characteristics, such as firm age and trade sector. The firm age is not significant, while trade sector is significant, and decreases

likelihood of firm growth by 42.5%. Yet, the variables related to entrepreneur remain significant and positively affect firm growth, just as in the first baseline model.

In the third baseline model were added variables related to innovation, such as organizational innovation, marketing innovation and new to the firm innovation. The variable organizational innovation is not significant. The variable marketing innovation is statistically significant and increases likelihood of firm growth by 175.6%. Similarly, new to the firm innovation is statistically significant, but decreases likelihood of firm growth by 94.1%. Again, the variables related to entrepreneur remain significant and positively affect firm growth, similar as in the first baseline model. Nevertheless, variables related to firm characteristics show minor changes in relation to their significance. In this model, the variable firm age is significant and negatively affects firm growth, while trade sector is not significant, even though the p-value is not much larger 0.13.

Table 6.12 Various specifications of the Logit model for firm growth in terms of sales

Logit estimates	(1)		(2)		(3)	
	B	Sig.	B	Sig.	B	Sig.
Edu_entrep	.448	.050**	.461	.069*	.472	.106*
Experience_entrep	.860	.003***	.720	.018**	1.148	.002**
Gender_entrep(1)	.199	.522	-.056	.870	-.090	.819
Firm_age			-.014	.322	-.029	.090*
Trade_sec			-.425	.089*	-.430	.130
Org_innovation					-.267	.667
Mkt_innovation					1.756	.002***
New_to_the_firm					-.941	.065*
Model fit						
n		415		341		296
-2 log-likelihood		465.192		388.719		312.188
χ^2		2.077		21.071		10.482
Nagelkerke R2		0.051		0.053		0.146
Overall percentage of predictions correct		73.5		72.4		73.6

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

The results show that entrepreneur experience, marketing innovation and new to the firm variables are statistically significant in three models, nearly the same as in the full model. Moreover, the variables firm age and trade sector are statistically significant in the full model. The results are robust with the previous estimated logistic model results as shown in Table 6.18. Nevertheless, the variable firm age is not significant in the second baseline model, but it is significant in third baseline model, and variable of trade sector is statistically significant in the second baseline model, but not in the third baseline model. Yet, there are not substantial differences; thus, it can be concluded the appropriateness of logistic regression model for this research study.

Regarding the fit statistics, all models appear to fit well with the data. The value of the Nagelkerke R² ranges from 0.051 to 0.146 for the baseline models to 0.217 for the full model, suggesting that the predictors explain a reasonable amount of the variation between firms having or having not achieved sales growth. Besides, the different estimated models show an acceptable predictive power, with more than 70% of predictions.

6.3.5 Logistic Model – Interaction of product/process innovation across sectors

In order to know whether there is a sectorial difference when measuring the impact of innovation in SMEs growth, three Logistic Models were performed by adding interaction between product/process innovations across sectors as presented in Table 6.13. The first includes manufacturing sector, followed by service sector and trade sector. The results from logit estimate of variables related to entrepreneur, firm and innovation are similar as in previous model. The first interaction is comprised of product/process innovation and manufacturing sector, which shows that this new attribute is statistically significant with p-value of 0.010, which affects negatively firm growth in terms of sales. Nevertheless, it is interesting that the attribute product/process innovation itself is statistically significant and positively related to firm growth. In the second model, it is presented the second interaction which includes product/process innovation and service sector that resulted to be not statistically significant considering that the p-value is higher than the significance level. On the third model, it is presented the interaction between product/process innovation and trade sector, which shows that it is significant with p-value of 0.02, and there is likelihood of an increase in the firm growth by 2.190. It should be emphasized that in this model, the variables product/process innovation and trade are also

significant themselves, where product/process innovation is positively related to firm growth, while trade sector is negatively related to firm growth. Thus, it can be concluded that the highest interaction exist between product/process innovation and trade sector. This may be as a result of large number of SMEs operating in trade sector in Kosovo.

Table 6.13 Logit estimates - measuring interaction between product/process innovation in SMEs growth across sectors

Variables in the Equation									
		B	Sig.		B	Sig.		B	Sig.
Step 1a	Opportunity _driven	.518	.233	Opportunity _driven	.407	.334	Opportunity_ driven	.456	.288
	Edu_entrep	.327	.353	Edu_entrep	.425	.219	Edu_entrep	.489	.170
	Experience_ entrep	1.371	.003***	Experience_ entrep	1.356	.003***	Experience_ entrep	1.285	.005***
	Age_entrep	.249	.036**	Age_entrep	.273	.024**	Age_entrep	.285	.019**
	Age_entrep _squared	-.003	.043**	Age_entrep _squared	-.003	.025**	Age_entrep_ squared	-.004	.022**
	Gender_entr ep(1)	-.077	.871	Gender_entr ep(1)	-.081	.862	Gender_entr ep(1)	-.005	.991
	Firm_age	-.050	.042**	Firm_age	-.051	.040**	Firm_age	-.054	.029**
	Man_sec	.459	.327	Serv_sec	.494	.141	Trade_sec	-.945	.007***
	product_ma n	-3.533	.010***	product_ser vice	.008	.994	product_trad e	2.190	.020**
	Prod_innova tion	3.066	.040**	Prod_innov ation	1.542	.178	Prod_innovat ion	.225	.868
	Org_innovat ion	-.367	.708	Org_innovat ion	-.491	.557	Org_innovati on	-.618	.475
	Mkt_innovati on	2.493	.013**	Mkt_innovat ion	2.050	.015**	Mkt_innovati on	1.769	.030**
	New_to_the _firm	-2.521	.018**	New_to_the _firm	- 1.808	.038**	New_to_the_ firm	-1.583	.069*
	Cooperation _with_firms	-1.542	.282	Cooperation _with_firms	- 1.091	.341	Cooperation _with_firms	-1.123	.350
	RD_activitie s	-.157	.857	RD_activitie s	.057	.944	RD_activities	.317	.716
	Subsidies_i nnovation	.797	.672	Subsidies_i nnovation	1.190	.469	Subsidies_in novation	1.279	.491
Constant	-7.067	.003	Constant	- 7.449	.002	Constant	-7.054	.003	

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level

6.4 Summary

This chapter provided a summary of the results and discussions from empirical data through quantitative approach. The findings of the research study were discussed in detail in order to investigate the conceptual model, as well as research hypotheses of this study. Logistic model was used to estimate the empirical evidences on the impact of entrepreneur, firm and innovation characteristics in SMEs growth in terms of sales. The model has been well specified based on Hosmer and Lemeshow goodness-of-fit test. The estimates from logit model were compared to check the consistency with the expectations of the theory.

With respect to entrepreneurial attributes, consisting of education level, work experience, age and gender, the estimates from logit model shows that only entrepreneur experience and age resulted to be statistically significant positively affecting firm growth in terms of sales, which consistent with results from literature (Krasniqi et al., 2008; Gao & Hafsi, 2015). Other entrepreneurial attributes show non significance-values. For instance, even though the start-up motivation attribute resulted to have a non-significant value, there are mixed results in the literature for the relationship between start-up motivation and firm growth. Some argue a positive relationship between entrepreneurial motivations and firm growth (Verheul et al, 2010), and emphasize that those SMEs that are driven by pull factors are more successful (Segal et al. 2005). In contrary, Block and Wagner (2007) found not significant relationship between start-up motivation and firm growth. Moreover, the logit estimates show no relationship between entrepreneur education and firm growth. In contrast, several studies show that firm growth is improved with higher level of entrepreneur's education (Bhutta et al., 2008; Akinboade, 2015; Gao & Hafsi, 2015). With respect to entrepreneur age, the logit estimates show significant value, which is in line with previous studies argue that the firm growth, in particular sales and earnings are associated with youthful entrepreneurs (Hambrick & Mason, 1984; Colombelli, 2015), as when people get older they try to keep status quo (Mudambi & Treichel, 2005). Nevertheless, in a study by Krasniqi et al. (2008), the turning point when entrepreneur age becomes zero and then starts to have benefits is around 31 years, implying that the effect of entrepreneur age on firm growth is negative when entrepreneurs are young, as they do not have enough experience despite their dynamism. Moreover, with respect to entrepreneur gender, the logit estimates show non-significance value, which is similar to other studies that found no association between gender and firm growth in terms of sales (Akinboade, 2015). Nevertheless, some studies suggest a

positive relationship between gender and firm growth (Farrell & Hersch, 2005), whereas another study found negative association between female on board and firm growth (Shrader et al., 1997).

In relation to firm characteristics, comprising of firm age, and sector of economic activity (manufacturing, service or trade), estimates from logit model show that firm age and trade sector resulted to be significant and negatively related to firm growth. The estimates of logit model show that firm age is negatively related to firm growth, which is in line with some other studies (Krasniqi, 2012; Colombelli, 2015). Nevertheless, another study has found a positive relationship between firm age and firm growth (Calantone et al., 2002). Moreover, manufacturing and services sectors have non-significant value from logit estimates, while trade sector resulted to be negatively significant to firm growth. Previous studies have focused more on manufacturing firms (Menor et al., 2002); nevertheless, other sectors have been studied lately. Still, Thornhill (2006) emphasize that if the industry dynamism is increasing, then innovation is more common on those firms, irrespective of which industry they are operating.

Moreover, innovation characteristics comprise of these independent variables, such as innovative degree, product/process innovation, organizational innovation and marketing innovation, innovation source, R&D activities and subsidies for innovation. The following independent variables resulted to be statistically significant predictors to firm growth, such as new to the firm, and marketing innovation. Other innovation attributes have resulted with non-significance value. For instance, new to the firm innovation variable resulted to be statistically significant predictor that negatively affects firm growth, while other studies have found a positive relationship between SMEs that developed incremental innovations and firm growth (Al-Ansari et al., 2013). Moreover, the evidence from logit estimates does not support hypothesis that SMEs that introduce product/process innovation achieve firm growth, which is not in line with previous studies (Bayus *et al.*, 2003; Oke et al., 2007; Chetty & Stangl, 2010; Ar & Baki, 2011; Rosli & Sidek, 2013; Krasniqi & Desai, 2016). This empirical finding can be as a result of lack of innovative products developed by SMEs. Nevertheless, organizational innovation attribute from logit estimates resulted with non-significance value; while some previous studies indicate positive relationship between organizational innovation and firm growth (Oke et al., 2007; Lin & Chen, 2007; Morone & Testa, 2008; Chetty & Stangl, 2010). Moreover, it is of crucial importance to highlight that even though organizational innovation has intangible nature, it often

impacts other types of innovation; thus, managers should take this into account (Gunday et. al., 2011). The marketing innovation variable resulted to be significant, which is in line with some of the previous work showing positive relationship between marketing innovation and firm growth (Lin & Chen, 2007; Oke *et al.*, 2007; Chetty & Stangl, 2010). On contrary, another study found no considerable relation between marketing innovation and firm growth (Sandvik, 2003). In addition, cooperation for innovation resulted with non-significance value from logit estimates, which is in line with another study who found no relation to growth of the network competence of domestically operating SMEs (Torkkeli et al., 2016). Nevertheless, there are many studies who emphasize the importance of innovation through networks to achieve firm (Havnes & Senneseth, 2001; Konsti-Laakso et al., 2012). Besides that, R&D activities resulted with non-significant value. Previous studies found that older SMEs are better able to manage R&D expenditures than younger ones (Nunes, et. al., 2013; Ortega-Argilés. 2009). Similarly, the attribute of subsidies for innovation in terms of sales resulted with non-significant value. A study found that subsidies stimulate innovation development only in high-tech industries (Howell, 2017), while other studies found a positive impact of between subsidies and SMEs growth (Harris & Trainor, 1995; Kim, 2000; Rehman, 2017).

The next chapter, Chapter 7, offers summary of the results and discussions from empirical data through qualitative research approach.

CHAPTER 7. INTERPRETATION OF RESULTS AND DISCUSSION –QUALITATIVE RESEARCH

7.1 Introduction

Chapter 7 offers data analysis and interpretations of findings corresponding to the research questions from in-depth interviews, which were conducted by the researcher. This is followed by discussion in order to contribute to better understanding to the context of SMEs innovation and innovation culture. NVivo software was used to analyze the empirical data. Finally, the chapter is summarized.

By using the NVivo11 qualitative data analysis software, several “parent nodes,” representing the parameters linked to innovation have been created, as well as “children nodes” representing the constituent variables related to the noted parameters, respectively. The tree nodes present both parent and children nodes, which are arranged alphabetically.

Moreover, Figure 7.1 presents schematic diagram of tree node, using NVivo software maps function.

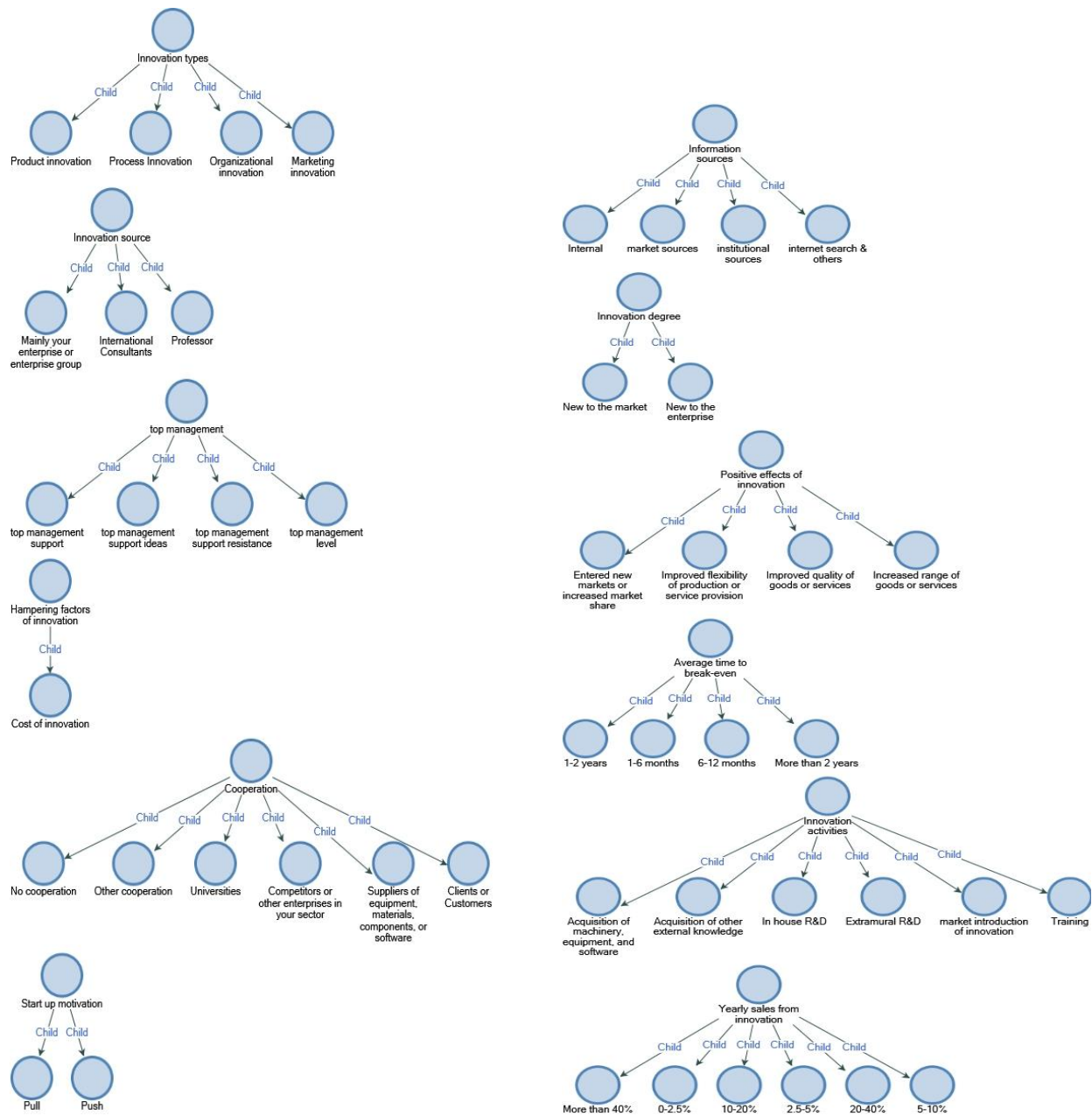


Figure 7.1 Schematic diagram of tree nodes

The usefulness of schematic diagram is that it provides the possibility for an integrated and holistic approach that includes parameters and their constituent variables.

Figure 7.2 shows word cloud of innovation, which indicates the most frequent used words within the study. In the following are presented the findings for the constituent variables associated with model parameters. The transcript data capture main topics and are organized in Table and Figure format.

Respondent #	Gender	Age	Professional qualification	Position in Enterprise	Employed before	Previous job experience	Previous job experience in no.
R1	Male	50	Bachelor Degree	Owner, Manager	Yes	Extended experience	8
R2	Female	22	Bachelor Degree	Manager	No	No experience	0
R3	Male	47	Master Degree	Owner & General Director	Yes	Extended experience	14
R4	Male	40	Master Degree	General Director	Yes	Extended experience	15
R5	Male	26	Bachelor Degree	Owner	Yes	Limited experience	2
R6	Male	32	Master Degree	General Director & Manager	Yes	Extended experience	9
R7	Male	37	Master Degree	Owner & Chief of Operation Officer	Yes	Extended experience	14
R8	Female	27	Bachelor Degree	General Director	Yes	Limited experience	3
R9	Male	27	Bachelor Degree	General Director	Yes	Limited experience	3
R10	Female	31	Master Degree	Manager	Yes	Extended experience	10
R11	Male	28	Bachelor Degree	Manager	Yes	Limited experience	1
R12	Male	39	High School	Owner	Yes	No experience	0
R13	Male	30	Master Degree	Owner & General Director	Yes	Limited experience	2
R14	Female	24	Master Degree	Manager	No	No experience	0
R15	Female	24	Bachelor Degree	Manager	Yes	Limited experience	2
R16	Male	41	Master Degree	Owner & General Director	Yes	Extended experience	15
R17	Male	62	Doctoral degree	Owner	Yes	Extended experience	14
R18	Female	36	Master Degree	General Director	Yes	Extended experience	12
R19	Male	29	Master Degree	Owner & General Director	Yes	Limited experience	4
R20	Female	45	High School	Manager	Yes	No experience	10
R21	Male	31	Master Degree	Owner & Manager	Yes	Limited experience	5
R22	Male	31	Bachelor Degree	Owner & General Director	Yes	Limited experience	2
R23	Male	41	Bachelor Degree	Board of directors Advisor	Yes	Extended experience	18
R24	Male	27	Bachelor Degree	Manager	Yes	Limited experience	1

7.2.1 Gender

Figure 7.3 shows that most of the people interviewed were male 71%, while only 29% of them were female.

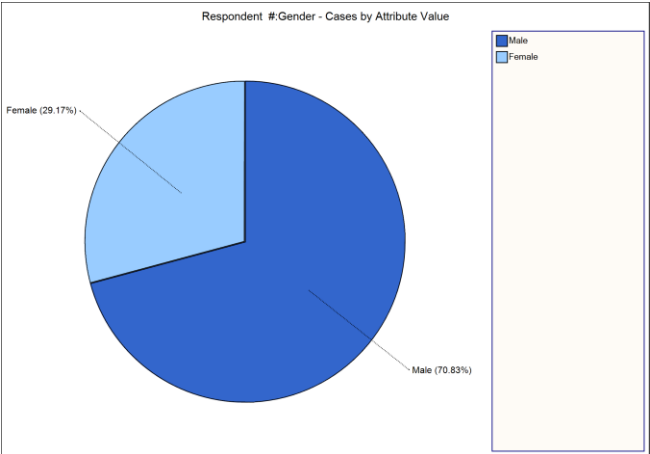


Figure 7.3 Interviewees’ gender

Most of the people interviewed were male, which shows dominance of male in owner and or manager position in Kosovo. It became apparent that it was difficult to achieve equal gender split in the sample, as very few women were identified who met sample criteria. A study argues that

in qualitative study is not important to achieve statistically balanced sample in basis of demographics such as gender, rather it is more import to fulfill sample criteria (Silverman, 2008).

7.2.2 Age

Figure 7.4 shows the age of the interviewees, which were owners or managers of SMEs. The mean age of interviewees is 34 years old. In order to receive more accurate data, an owner or manager was interviewed.

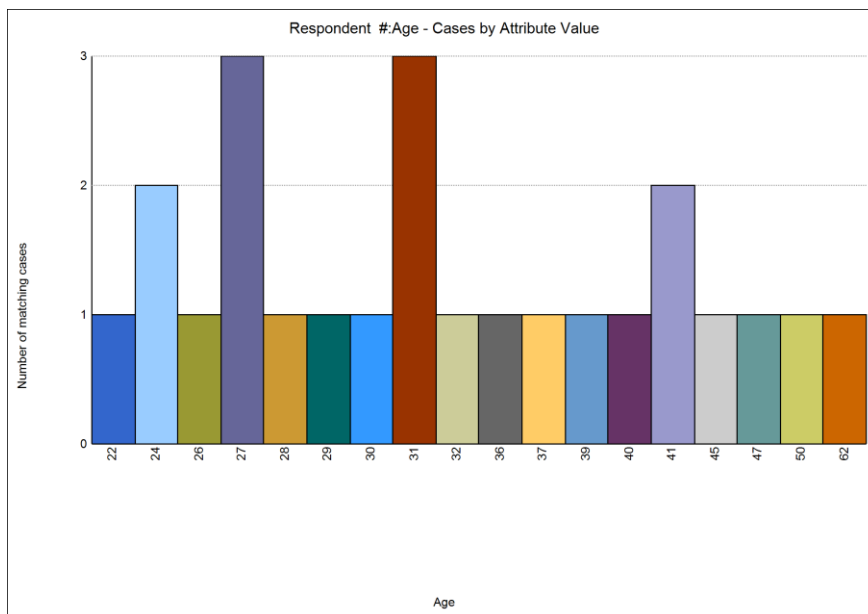


Figure 7.4 Interviewees' age

It can be concluded that age ranged from 22-62 (mean 34), and gender was not balanced, as most of the owners or managers (70%) were male.

The results are in line with literature review. Several studies found that initially age increases the likelihood to exploit opportunities. On the other hand, when people get older, the tendency to exploit opportunities is negative. People in their late 30s and early 40s are more successful on establishing and operating a firm, than in their late 20s and early 30s. Age is seen as an ability to grow the business by Storey (1994).

7.2.3 Education

Figure 7.5 shows professional qualification of interviews, where the highest percentage fall in Master Degree (46%) and Bachelor Degree (42%), followed by High School 8% and Doctoral degree with only 4%.

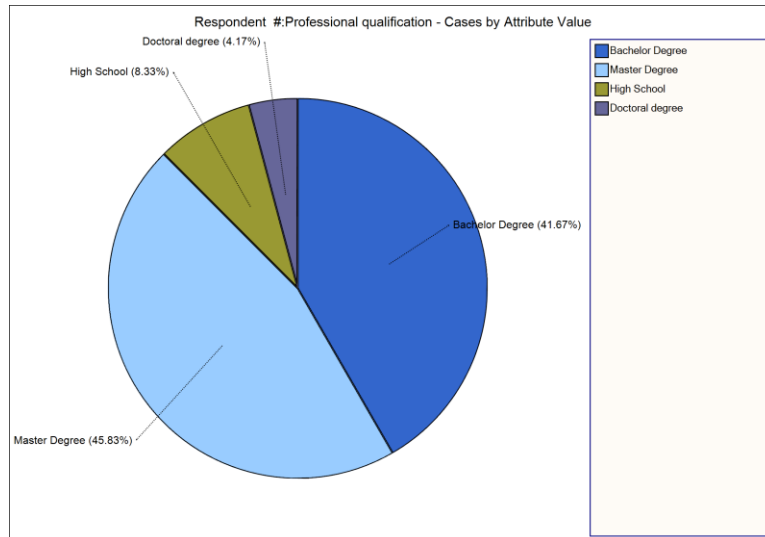


Figure 7.5 Interviewees' professional qualification

Education level is satisfactory among interviewed firms in Kosovo, where majority fall in the category of Master Degree and Bachelor Degree. Formal Education is an important source of developing general human capital and some personal attributes (Cooper et al, 1994). This study had tended to record the last level of education completed. A study has found that the more education one has, the more likely is to establish a business (Davidsson & Honig, 2003) and higher education benefits entrepreneurial performance (Pickernell et. al., 2011).

7.2.4 Work Experience

Figure 7.6 shows that most of the interviewees had previous employment before establishing and/or managing current business.

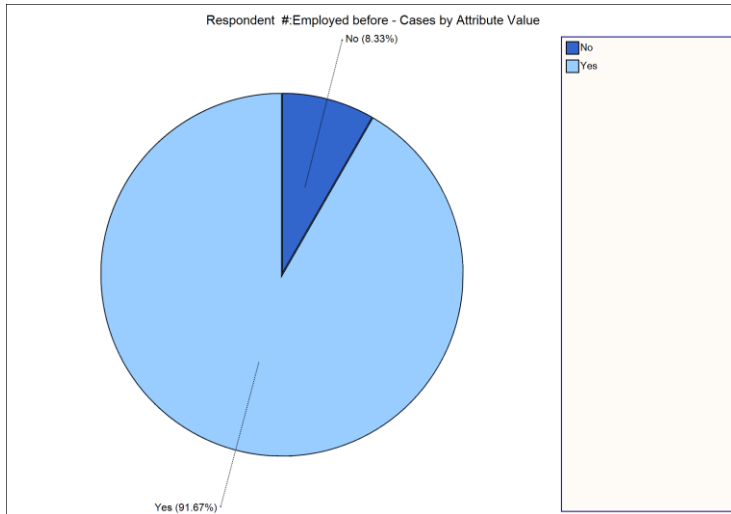


Figure 7.6 Interviewees' Previous Employment

Figure 7.7 presents mixed results related to previous job experience. 45% of interviewees had limited job experience, followed by extended experience with 42% and only 17% of them had no experience at all.

Figure 7.7 Interviewees' job experience

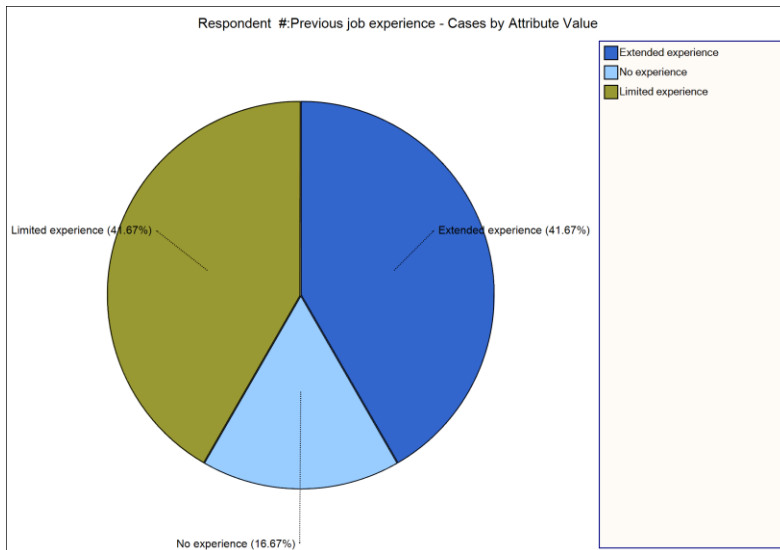


Figure 7.7 Interviewees' job experience

The interviewees had previous job experience from 1 to 18 years, with the average of 7 years as presented in Figure 7.8.

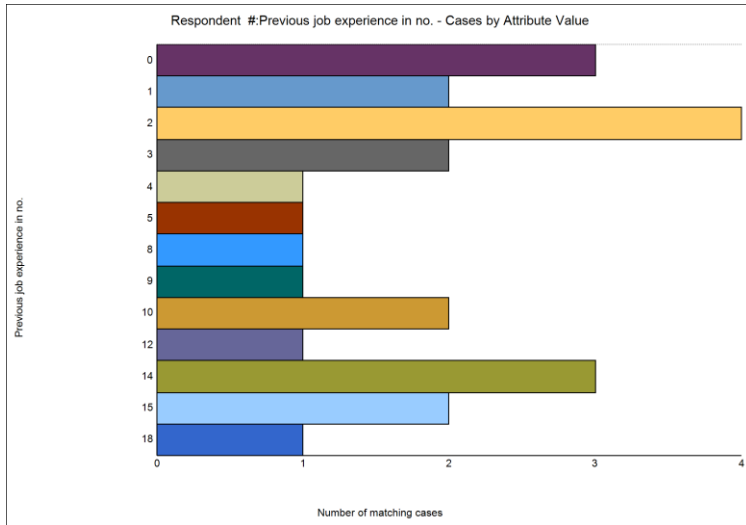


Figure 7.8 Interviewees’ previous job experience in number

Almost all of them were previously employed, and majority has prior work experience, with the average years of experience of 7. Human capital studies conclude that work experience leads to better performing in a business (Davidsson & Honig, 2003). Nevertheless, there are some studies that found no relationship between entrepreneurial performance and work experience (Cooper et al., 1994).

7.2.5 Start-up motivation

The model of the parameter Start-up motivation, and its constituent variables, is illustrated in Figure 7.9. The constituent variables include push and pull factors, to understand whether entrepreneurs were motivated to open their business because of necessity, market opportunity, or combination of them.

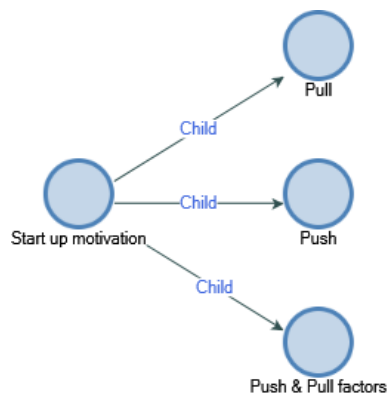


Figure 7.9 Model of the parameter Start-up motivation and its constituent variables

The frequency distribution of all source coded for the parameter Start-up motivation is shown in Table 7.2. The blue cell shading with number 1 indicates the responses that fall in pull or push factors.

Table 7.2 Matrix Coding Query showing source coded frequency for model parameter Start-up motivation and its constituent variables

	A : Push	B: Pull	C: Push & Pull factors
1 : R1	0	0	1
2 : R10	0	1	0
3 : R11	0	0	1
4 : R12	0	1	0
5 : R13	0	0	1
6 : R14	0	1	0
7 : R15	0	1	0
8 : R16	0	1	0
9 : R17	1	0	0
10 : R18	0	0	1
11 : R19	0	1	0
12 : R2	0	0	1
13 : R20	0	1	0
14 : R21	0	0	1
15 : R22	0	1	0
16 : R23	0	0	1
17 : R24	1	0	0
18 : R3	0	1	0
19 : R4	0	1	0
20 : R5	0	1	0
21 : R6	0	0	1
22 : R7	0	1	0
23 : R8	0	0	1
24 : R9	0	0	1

The following part shows different reasons for SMEs start up, such as push factors, pull factors or combination of them. Empirical results show that very few SMEs have been opened because of necessity, indicating survival reasons, as they were expelled from work due to political causes. Others have pointed pull factors as the main reason to establish their firm, such as exploiting market opportunities, passion to open a business, experience and knowledge, and responsibility to society. Also, it is very interesting that a high number of respondents stated that they have opened a business due to both, push and pull factors. Many SMEs have been established because of push factors to make a living, but at the same time, they recognized a market demand for those products and services, which has strengthen their position in the market.

Figure 7.10 shows that 8% of the enterprises were opened due to the push factors, 42% of them claimed that the man reason was the pull factors, while for 50%, the start-up motivation were both push and pull factors. In general, Kosovo SMEs have been opened more due to the push

factors rather than pull ones. Nevertheless, considering that the interview sample consists of innovative firms in Kosovo, it can be concluded that they have been established more due to the market opportunity rather than necessity.

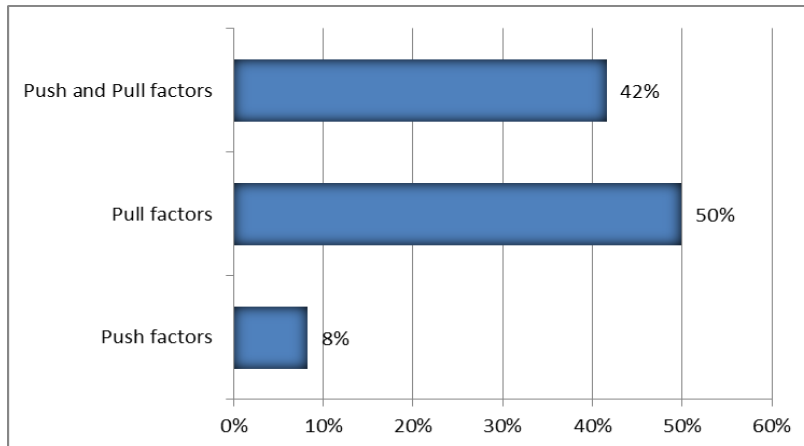


Figure 7.10 Push & Pull factors

Entrepreneurship research tends to focus on how a business has been established by understanding the key motivations of entrepreneurs (Shane & Venkataraman, 2000). One of the core intellectual questions of entrepreneurship involves understanding opportunity identification process (Gaglio & Katz, 2001). When evaluating the role of entrepreneurial knowledge and skills, efforts have been given to evaluate their innovativeness, except the number of business opportunities that entrepreneurs pursue (Shane, 2000; Shepherd & De Tienne, 2005).

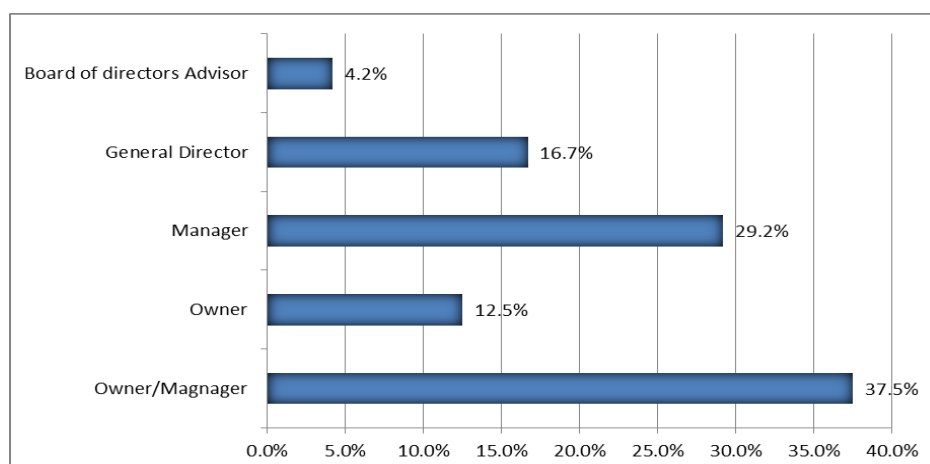
In Kosovo, the main motivations for entrepreneurs to start their business include positive motivators, which are pull factors, or combination of positive and negative motivations, including pull and push factors. Therefore, the negative motivators, which include push factors, were not so dominant in interviewed innovative firms from Kosovo. Similar results have been found also in a study with 300 small business owners and managers located in selected cities in Tanzania (Isaga et. al, 2015). These empirical findings contradict findings from earlier studies claiming that push motives are more important than pull motives in developing countries (Chu et al., 2007; Benzing et al., 2009). Nevertheless, these findings are consistent with western studies, considering that positive motivators are the key source of establishing their firm (Mitchell, 2004; Kirkwood, 2009). This is because the interviewed enterprises were selected those that have performed some kind of innovations.

Additionally, there are cases that unemployed entrepreneurs were motivated by both push factors and pull factors at the same time. For example in a survey study, the three most important reasons to open a business were need for achievement, opportunity seeking and anticipated job satisfaction (Hisrich & Brush, 1986). Another study highlights the following reasons, such as need for recognition, money, work flexibility, role models and individual achievement (Dubini, 1989).

7.2.6 Position in the Enterprise

Table 7.3 shows position in the enterprise of interviews, where most of them were owner/managers.

Table 7.3 Interviews' position in the enterprise



It was important that the interviewee had a position in the enterprise as owner, manager or similar in order to receive accurate information about firms' innovation and growth (Branzei & Vertinsky, 2006).

7.3 Firm

The following are some firm characteristics from empirical results, which include location, foundation year, enterprise registration, industry, average number of employees in year 2014 and 2016, enterprise size, total turnover in 2016, and changes of turnover within years 2014-2016.

7.3.1 Location

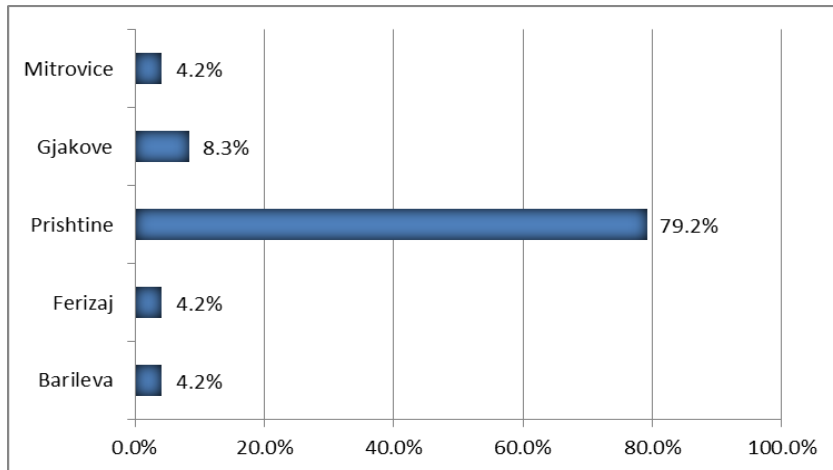


Figure 7.11 Firm's location

Figure 7.11 shows location of firms interviewed, where most of them are from capital city of Kosovo, which is Prishtina.

Most of the firms interviewed come are located in urban area, specifically in Prishtina. A business' location affects its turnover growth (Akinboade, 2015). Many studies have examined the regional differences in explaining firm's innovativeness and performance (Keeble, 1997; Covin et al., 1999; Almus, 2002; Hoogstra & Van Dijk, 2004;). Nevertheless, there are some studies that found few or no regional differences in innovation and firm performance (Littunen & Tohmo, 2003; North & Smallbone, 2000). Storey (1994) provides evidence that firms in rural areas experience more rapid growth because of the advantages related to infrastructure factors, such as lower rental and labor costs compared to agglomerations, and better transport links.

7.3.2 Age of the firm

Enterprises where established from 1990 to 2014. Most of the enterprises have been established between the years 2006-2015 as shown in Figure 7.12.

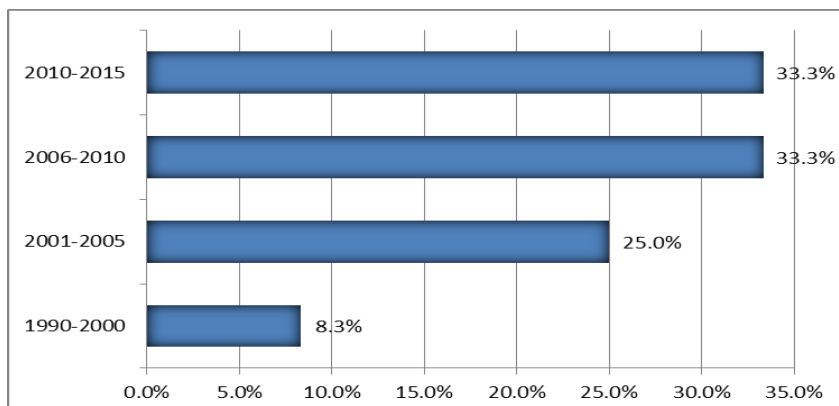


Figure 7.12 Firm's foundation year

Most of the enterprises have been established between the years 2006-2015, with the average age of the firm being 8 years. According to some studies, new firms in the start-up stage grow faster with innovation, while when they become more mature, they may exhibit growth and then decline after achieving growth. Moreover, Kohn and Scott (1982) suggested that economies of scale do not necessarily result in the production of innovative output.

7.3.3 Registration form

Figure 7.13 shows that most of the interviewed enterprises were registered as Limited Liability Company.

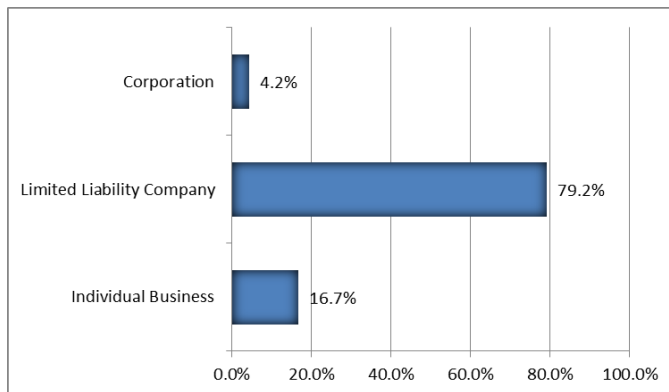


Figure 7.13 Firm registration

Limited Liability Company was the most used form of registration within interviewed firms as shown in Figure 7.10. According to Dickinson (2008), most SMEs are registered as limited liability Company, not as sole trade, partnership, cooperative or corporation for several reasons. As shareholders join together, resources can be pulled together, and there is succession of a registered private limited company despite the death of a founder and the entrepreneurial risk is decreased with its formation. The company assets are separate from personal assets; thus, they cannot be taken to satisfy company debts. More importantly, this kind of registration gives freedom for innovation and experimentation, which increases its stability and brings success to a company. Thus, it can be concluded that this is an optimum strategic SME ownership form.

7.3.4 Industry

Figure 7.14 shows that most of the interviewed firms are from service sector with 79% and 13% from manufacturing sector. There were two firms who were part of two sectors simultaneously, one in manufacturing and service, and the other one from service and trade sector.

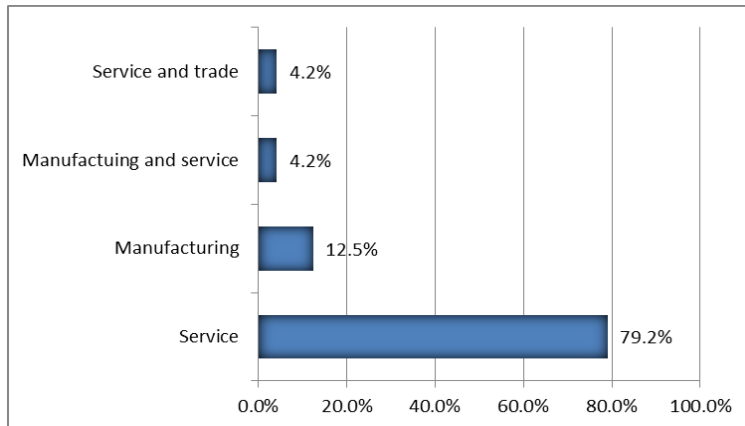


Figure 7.14 Industry sector

Regarding the industry, most of the interviewed firms were from service sector. There are other findings from review of literature indicating that SME innovation is significantly determined by their belonging to specific sector. One study highlights the effects of innovation on firm growth in high-tech sectors, and generally firm growth is related to the innovativeness for most high tech firms (Coad & Rao, 2008). For example, ICT industry is characterized by continuous technological change, high R&D expenditures and innovation. In service sectors, innovation heavily depends on the skills and knowledge of employees, which are oriented to fit specific customers wants by developing innovation in close interaction with clients (De Jong et. al., 2003). Moreover, Forsman's (2011) findings argue that the innovation capacity is not extremely different among SMEs in manufacturing and services sector; the differences are more pronounced across industries within manufacturing and services. Other studies present findings with differences between these two sectors. Manufacturing firms tend to be focused more on technological innovations, while services tend to be focused more on non-technological innovations (Castro et. al., 2011). Moreover, in-house R&D are more performed by manufacturing firms, whereas service firms are focused more on technology improvement developed by other firms (Gallaher & Petrusa, 2006). Other studies conclude that industry is irrelevant in relation to innovation; nevertheless, when industry dynamism is high, then those innovative firms tend to achieve growth (Thornhill, 2006).

7.3.5 Firm Size

Figure 7.15 shows average number of employees in year 2014 and 2016; which shows that percentage of micro enterprises has decreased from 50% to 33%, the percentage of small

enterprises remains the same, while the percentage of medium enterprises has increased from 13% to 29%.

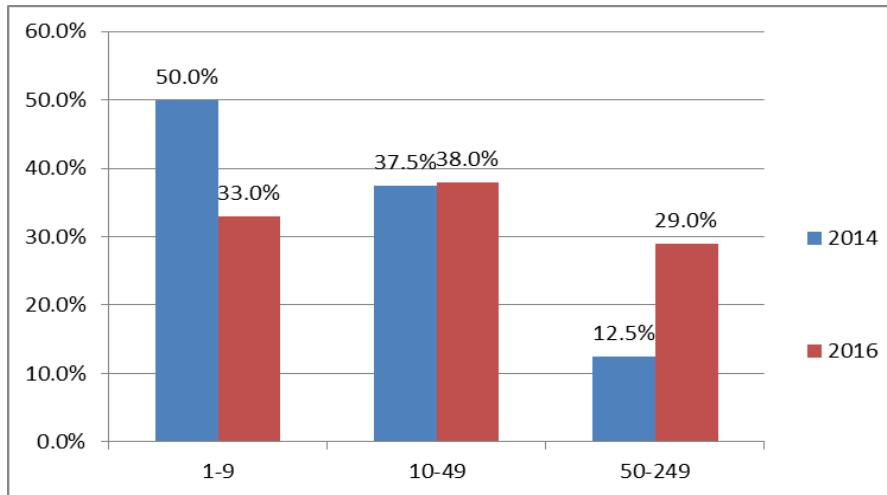


Figure 7.15 Average number of employees in year 2014 and 2016

Related to enterprise size based on employees in 2016, the number of SMEs interviewed is divided proportionally, meaning that 33% of them were micro, 38% small and 29% medium. Nevertheless, in 2014, the number of employees was lower in some of these enterprises (50% micro, 38% small and 23% medium). This means that there was a growth in employment from 2014 to 2016. Even though Gibrat’s law of proportionate growth assumes that there is no correlation between size and firm growth, there are other empirical studies who concluded that growth decreases as firm size increases (Almus & Nerlinger, 2000).

7.3.2.6 Firm annual turnover

Figure 7.16 presents total turnover in 2016, which ranges within the following amounts: 20,000 to 17,000,000 EUR. Most of them fall in group of 20,000-500,000 EUR. Nevertheless, it should be emphasized that 38% of interviewed SMEs didn’t disclose this information.

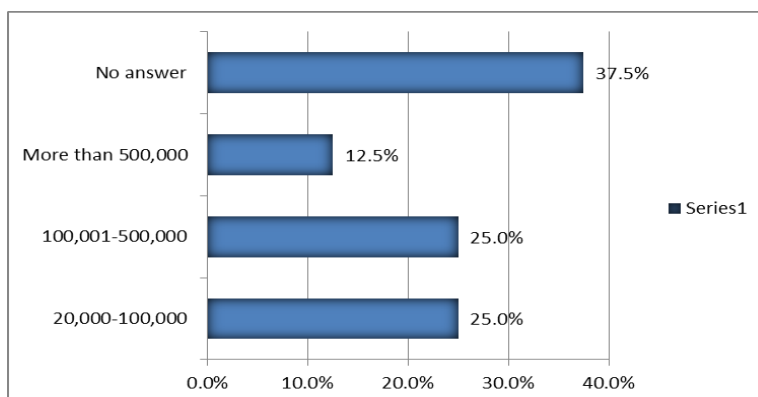


Figure 7.16 Total turnover in 2016

Figure 7.17 shows that during the last three years 2014-2016 whether the firm turnover has increased, decreased or had no difference. Within the last three years, in the most of interviewed firms, the turnover has increased.

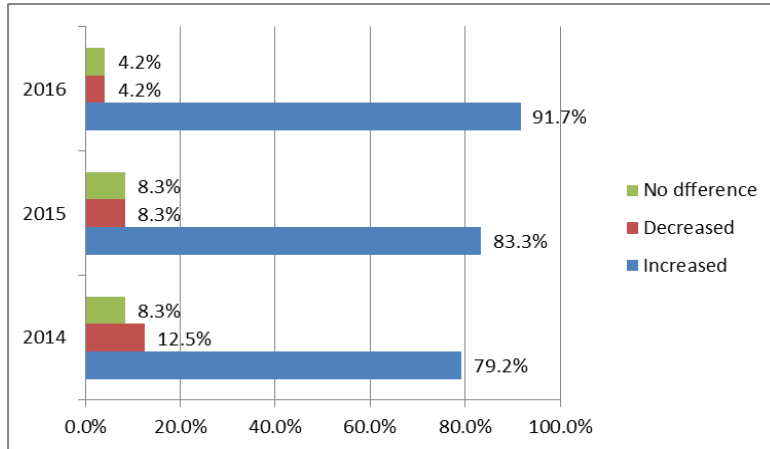


Figure 7.17 Changes in Turnover 2014-2016

Total turnover in 2016 varies between firms, but most of them fall between in group of 20,000-500,000 EUR. Firm growth has been defined in terms of sales or turnover as it relates to innovation by many studies in literature. It is measure that is easy to obtain and it increases the likelihood for SMEs to innovate when they realize direct benefits through increase in sales.

7.4 Innovation

7.4.1 Types of innovation

The model of the parameter innovation types, and its constituent variables, is illustrated in Figure 7.18. The constituent variables include product, process, organizational and marketing innovations, to understand types of the innovations that were mostly introduced by firms.

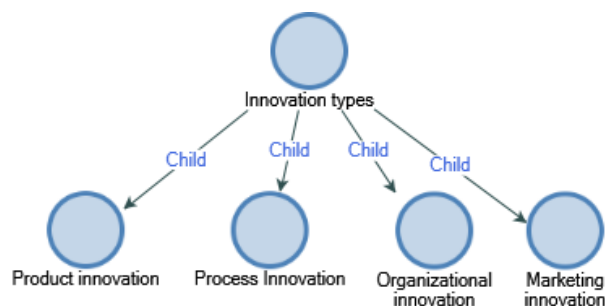


Figure 7.18 Model of the parameter Innovation types and its constituent variables

Figure 7.19 generated the nodes clustered by work similarity for the types of innovation.

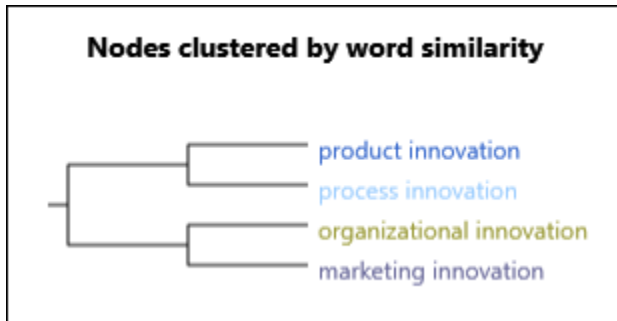


Figure 7.19 Nodes clustered by work similarity – types of innovation

The frequency distribution of all source coded for the parameter Innovation types is shown in the Table 7.4. The blue cell shading with number 1 indicates the responses that fall in the four types of innovations. This shows that many firms have introduced various innovations within last three years.

Table 7.4 Matrix Coding Query showing source coded frequency for model parameter Innovation types and its constituent variables

	A : Marketing innovation	B : Organizational innovation	C : Process Innovation	D : Product innovation
1 : R1	0	1	1	1
2 : R10	0	1	0	1
3 : R11	0	0	1	1
4 : R12	1	0	1	1
5 : R13	0	1	0	1
6 : R14	0	1	1	1
7 : R15	1	1	0	1
8 : R16	1	1	1	1
9 : R17	0	0	0	1
10 : R18	0	1	1	1
11 : R19	0	0	0	1
12 : R2	0	1	1	1
13 : R20	1	0	0	1
14 : R21	0	0	0	1
15 : R22	1	1	1	1
16 : R23	0	1	1	1
17 : R24	1	0	1	0
18 : R3	1	0	0	1
19 : R4	0	1	1	1
20 : R5	0	1	0	1
21 : R6	0	0	0	1
22 : R7	1	1	0	1
23 : R8	0	1	0	1
24 : R9	0	1	1	0

Types of innovation introduced by the firms are presented in Appendix E. 92% of innovations developed by interviewed firms were product innovation, followed by 63% organizational innovations, then 50% process innovation and only 33% of them introduced marketing innovations as presented in Figure 7.20.

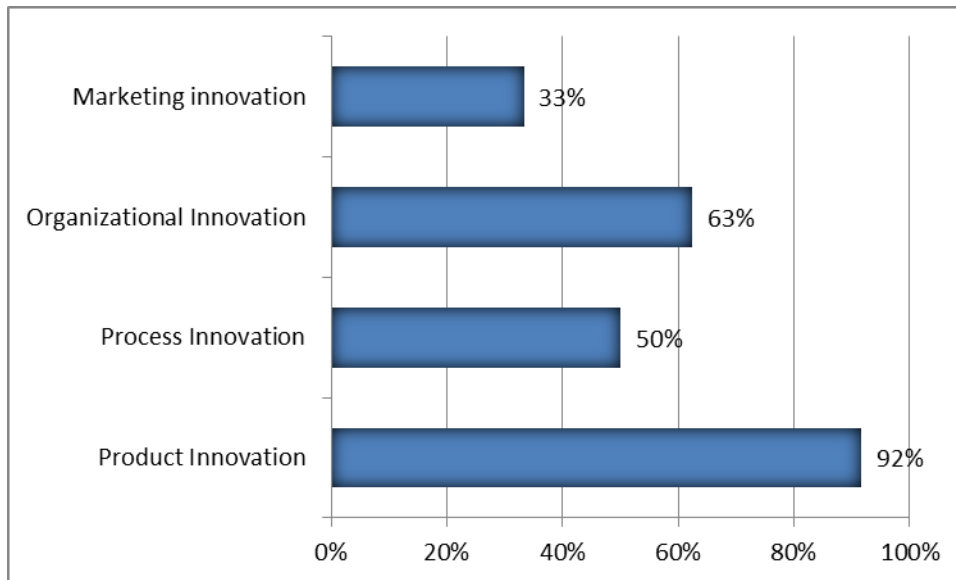


Figure 7.20 Types of Innovations

More respondents highlighted product, process and organizational innovations than of marketing innovations. This might be evidence of a greater level of engagement with product, process and organizational innovation in Kosovo SMEs. Incremental innovation was the leading type of innovation in Kosovo SMEs in the past three years. This is in agreement with Storey (1994) who finds that compared to larger firms, SMEs are more able to make incremental innovations due to their scarce resources and some firms have no ambitions to grow and take risks by introducing new products and services and are often content with making significant changes in existing products and services regardless of dynamism of their external environments. Moreover, other authors agree that SMEs develop more incremental innovation; thus, this is a nature of their small size, and not necessarily a characteristic of developing countries (Oke et al., 2007).

7.4.1.1 Combined Innovation

The model of the parameter combined innovations, and its constituent variables, is illustrated in Figure 7.21. The constituent variables include Yes and No, to understand whether enterprises have developed combined innovation or not.

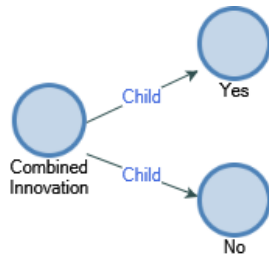


Figure 7.21 Model of the parameter Combined Innovation and its constituent variables

The frequency distribution of all source coded for the parameter Combined innovation is shown in Table 7.5. The blue cell shading with number 1 indicates the responses that fall in Yes or No categories. This shows that many firms have introduced combined innovations within last three years.

Table 7.5 Matrix Coding Query showing source coded frequency for model parameter Combined Innovation and its constituent variables

	A : Yes	B : No
R1	1	0
R10	0	1
R11	1	0
R12	1	0
R13	1	0
R14	1	0
R15	0	1
R16	1	0
R17	0	1
R18	1	0
R19	1	0
R2	1	0
R20	1	0
R21	0	1
R22	1	0
R23	1	0
R24	0	1
R3	1	0
R5	0	1
R6	1	0
R7	1	0
R8	1	0
R9	1	0
R4	1	0

Figure 7.22 tells that the majority of interviewed enterprises (75%) developed two innovations at the same time, meaning that the introduction of one innovation led to the introduction of another one.

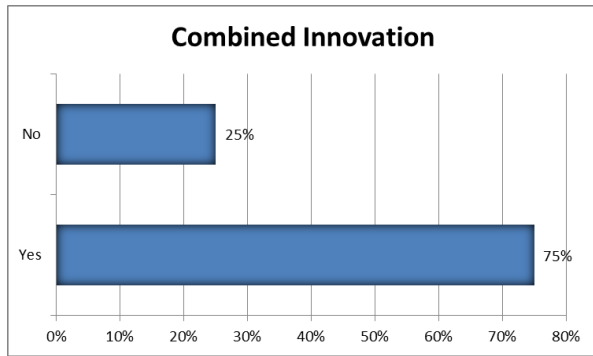


Figure 7.22 Combined Innovation

Empirical results show that very often the development of one innovation leads to a development of another one, among four types of innovations as presented in Table 7.6.

Table 7.6 Combined Innovation

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation
R1	1		3	
R2	1	2		
R3	1			
R4	1		3	
R6	1	2		
R7	1	2		
R8		2		
R9	1	2		
R11	1	2		
R13	1		3	
R14	1	2		
R18	1	2		
R19	1			
R20	1			4
R22		2		4

Most of the respondents (29% SMEs) have stated that new product innovation has led to new process innovation. Such illustration includes purchase of high technology machinery, which led to offering new product; development of an application led to new product; the combination of aquaculture (raising fish) and hydroponics (the soil-less growing of plants), where the fish produced has been sent to a restaurant; as well as the adaptation of a technological room that resulted in a new service innovation, offering one-way mirror room to clients. Moreover, in few cases, the product innovation has resulted in organizational innovation. The respondents stated

that the development of product led to changes in organizational structure. In some cases, new employees have been hired, while in some cases, a completely new department has been established to implement the product innovation successfully. Besides that, there is one case that shows the development of product innovation led to new marketing innovation, by providing the same product in different sizes and packaging to satisfy customers' needs. Another case is the development of process innovation led to new organizational innovation, which have made the work more efficient as it has shorten the time of data entering and reduced the risk of making mistakes. Moreover, there are few cases that introduction of product innovation led to new complementary product innovation, such as providing a service related to a new product. It can be concluded that combined innovations exist mostly with product and process innovations.

Many SMEs have introduced combined innovation in Kosovo. Doran (2012) states that any innovation is developed in order to complement at least one other form of innovation. Thus, implications are that firm should follow a multifaceted approach to innovation, which means new processes are introduced along with new products.

7.4.1.2 Impact of innovative products and services on sales performance

The model of the parameter innovative products and services on sales performance, and its constituent variables, is illustrated in Figure 7.23. The constituent variables include 0-2.5%; 5-10%; 10-20%; 20-40% and more than 40%.

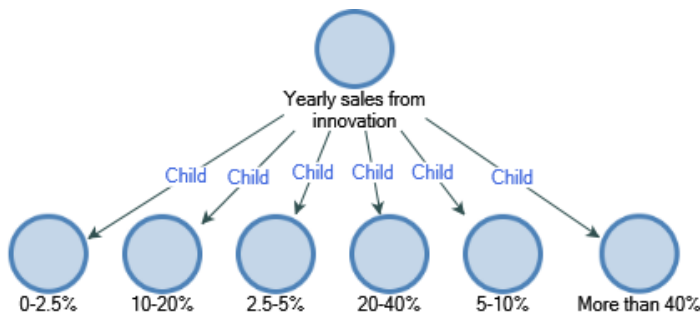


Figure 7.23 Model of the parameter sales of innovative products and services and its constituent variables

The frequency distribution of all source coded for the parameter sales stemming from introduced innovations in SMEs is shown in Table 7.7. The blue cell shading with number 1 indicates the responses that fall in the abovementioned sales constituent variables.

Table 7.7 Matrix Coding Query showing source coded frequency for model parameter sales of innovative products and services and its constituent variables

	A : 0-2.5%	B : 10-20%	C : 2.5-5%	D : 20-40%	E : 5-10%	F : More than 40%
1 : R1	0	0	0	0	0	1
2 : R10	0	1	0	0	0	0
3 : R11	0	1	0	0	0	0
4 : R12	0	0	0	0	0	1
5 : R13	0	0	0	1	0	0
6 : R14	0	1	0	0	0	0
7 : R15	0	0	0	1	0	0
8 : R16	0	0	0	1	0	0
9 : R17	0	1	0	0	0	0
10 : R18	0	0	0	1	0	0
11 : R19	0	0	0	1	0	0
12 : R2	0	0	0	0	0	1
13 : R20	0	0	0	1	0	0
14 : R21	1	0	0	0	0	0
15 : R22	0	1	0	0	0	0
16 : R23	0	0	0	0	1	0
17 : R24	0	0	1	0	0	0
18 : R3	0	0	0	0	1	0
19 : R4	0	0	0	0	1	0
20 : R5	0	0	0	0	0	1
21 : R6	0	1	0	0	0	0
22 : R7	0	0	0	0	0	1
23 : R8	0	0	0	1	0	0
24 : R9	0	0	0	0	0	1

Figure 7.24 shows sales, where most firms achieved sales from innovative products and services of 20-40% (29% cases) in 2016, followed by more than 40% (25% cases); 10-20% (25% cases), 5-10% (13% cases), 2.5-5% (4% cases) and 0-2.5% (4% cases).

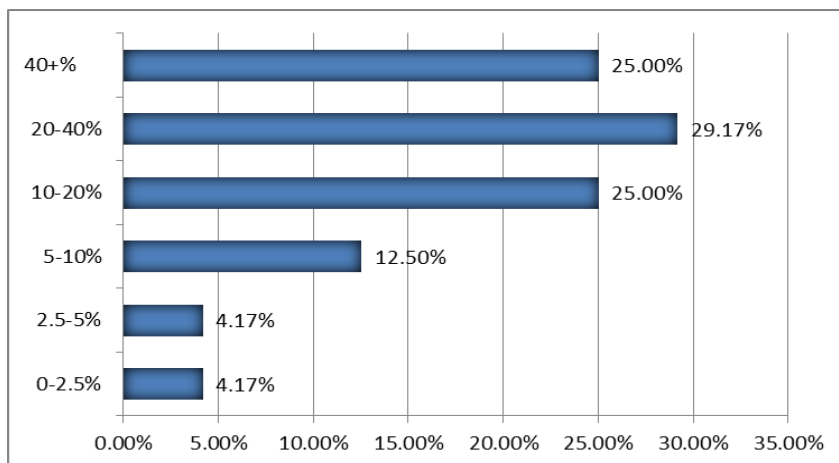


Figure 7.24 Sales of innovative products and services

Empirical findings show that there is a link between innovation and sales growth in SMEs. This is significant contribution as it confirms the importance of innovation and provides support for the encouragement of innovation in SMEs.

A study of Dubai SMEs confirms this link and implies that Dubai SMEs understand the importance of innovation as it enables them to achieve business growth (Madrid-Guijarro et al., 2013) This is in line with the findings from a review of literature in a study of UK SMEs presenting innovation impact on firm growth in terms of sales (Oke et al., 2007). Moreover, Varis & Littunen, (2010) highlight a positive link between firm performance and innovation in product, process and market. Nevertheless, there is no association between firm performance and organizational innovation, probably due to their intangible nature. It should be emphasized that organizational innovations have indirect impact on firm growth through other types of innovations. Empirical findings for Kosovo SMEs show that organizational innovation was introduced as a result of product innovation making organizational structure changes, or by introducing different working methodologies that only have ease the organizational processes, but have not necessarily resulted on firm growth. Hansen and Birkinshaw (2007) argue that organizational structure should be developed to encourage introduction of new innovations.

7.4.1.3 Average time to break-even

The model of the parameter Average time to break-even and its constituent variables is illustrated in Figure 7.25. The constituent variables include 1-6 months, 6-12 months, 1-2 years and more than 2 years.

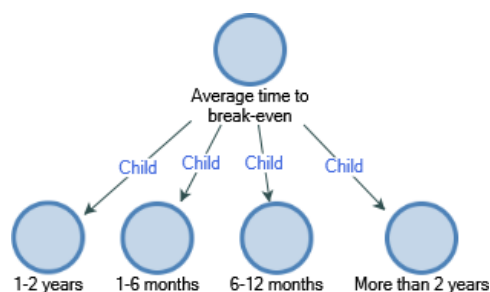


Figure 7.25 Model of the parameter Average time to break-even and its constituent variables

The frequency distribution of all source coded for the parameter average time to break even is presented in Table 7.8. The blue cell shading with number 1 indicates the responses that fall in the abovementioned constituent variables.

Table 7.8 Matrix Coding Query showing source coded frequency for model parameter Average time to break-even and its constituent variables

	A : 1-2 years	B : 1-6 months	C : 6-12 months	D : More than 2 years
1 : R1	0	0	0	1
2 : R10	0	0	0	1
3 : R11	1	0	0	0
4 : R12	0	1	0	0
5 : R13	1	0	0	0
6 : R14	0	1	0	0
7 : R15	0	1	0	0
8 : R16	0	0	1	0
9 : R17	0	1	0	0
10 : R18	0	1	0	0
11 : R19	1	0	0	0
12 : R2	0	1	0	0
13 : R20	0	1	0	0
14 : R21	0	1	0	0
15 : R22	0	1	0	0
16 : R23	0	1	0	0
17 : R24	0	1	0	0
18 : R3	0	0	1	0
19 : R4	0	1	0	0
20 : R5	1	0	0	0
21 : R6	0	1	0	0
22 : R7	0	1	0	0
23 : R8	0	0	1	0
24 : R9	0	1	0	0

Figure 7.26 shows that most of the interviewed enterprises have achieved average breakeven point for 1-6 months (63%) after they developed a certain innovation, followed by 1-2 years (17%), 6-12 months (13%) and 2 years or more (8%).

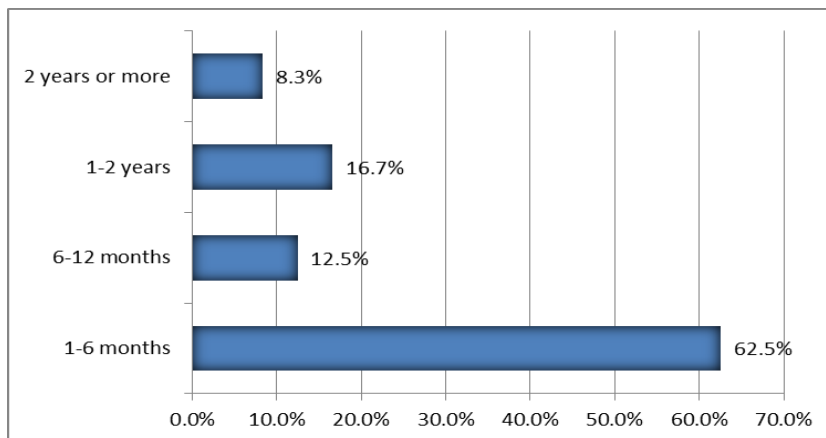


Figure 7.26 Average break-even

Most of the interviewed enterprises have achieved average breakeven point for 1-6 months after they developed a certain innovation, followed by 1-2 years, 6-12 months, and 2 years or more. The reason for this might be because these innovations were incremental with low investment, and break-even point has been reached faster.

7.4.2 Types of Innovation related to market perspective

The model of the parameter Types of innovation related to market perspective, and its constituent variables, is illustrated in Figure 7.27. The constituent variables are new to the market and new to the enterprise, in order to illustrate whether the novelty of innovation developed by enterprises in Kosovo.

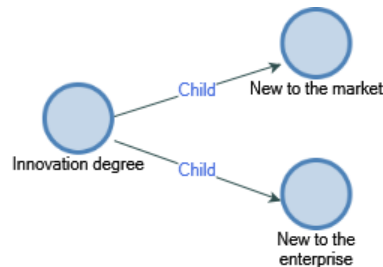


Figure 7.27 Model of the parameter Types of innovation related to market perspective and its constituent variables

The frequency distribution of all source coded for the parameter Types of innovation related to market perspective is shown in Table 7.9. The blue cell shading with number 1 indicates the responses that fall in new to the enterprise or new to the market innovations. Considering that some firms have introduced several innovations, or one innovation led to another one, the empirical findings show that many firms claim that their innovations were both new to the firm and new to the market.

Table 7.9 Matrix Coding Query showing source coded frequency for model parameter Types of innovation related to market perspective and its constituent variables

	A : New to the enterprise	B : New to the market
1 : R1	0	1
2 : R10	1	1
3 : R11	1	1
4 : R12	1	1
5 : R13	0	1
6 : R14	1	1
7 : R15	1	1
8 : R16	1	1
9 : R17	0	1
10 : R18	1	1
11 : R19	1	1
12 : R2	0	1
13 : R20	0	1
14 : R21	1	0
15 : R22	1	1
16 : R23	1	1
17 : R24	1	1
18 : R3	0	1
19 : R5	0	1
20 : R6	0	1
21 : R7	0	1
22 : R8	0	1
23 : R9	0	1
24 : R4	1	1

Figure 7.28 shows that 54% of the innovations introduced by the firm were new to the enterprise, while 96% of them claimed they introduced new to the market innovations.

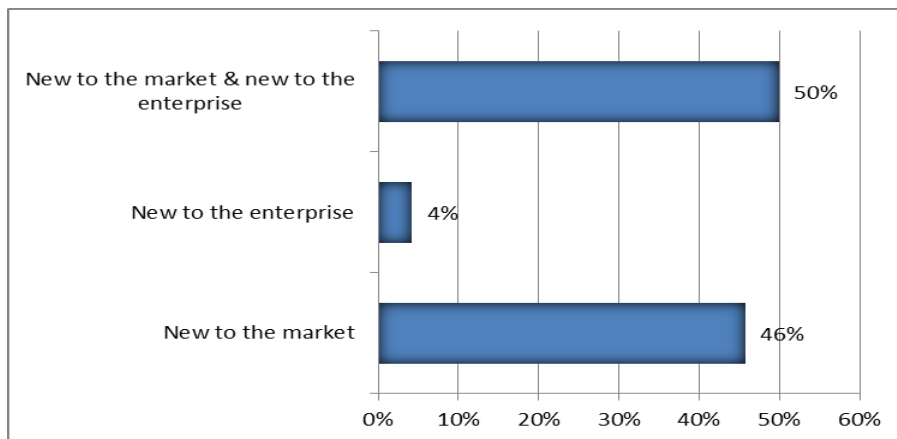


Figure 7.28 Types of innovation related to market perspective

Table 7.10 shows the percentage of total turnover in 2016 for the products and services that were new to the market, new to the firm, as well as total turnover for existing product and services.

Table 7.10 Percentage of total turnover in 2016 for the products and services: new to the market, new to the firm and existing products and services

	% of total turnover in 2016 (new to market)	% of total turnover in 2016 (new to the firm)	% of total turnover in 2016 (existing ones)
R1	40%		60%
R2	70%		30%
R3	30%		70%
R4	25%	25%	50%
R5	100%		
R6	30%		70%
R7	100%		
R8	40%		60%
R9	100%		
R10	20%	20%	60%
R11	20%	30%	50%
R12	80%	10%	10%
R13	30%		70%
R14	20%	30%	50%
R15	40%	60%	
R16	40%	20%	40%
R17	30%		70%
R18	35%	25%	40%
R19	30%	70%	
R20	60%		40%
R21		40%	60%
R22	5%	25%	70%
R23	10%	20%	70%
R24	10%	20%	70%

Empirical results show that most of the innovations introduced by Kosovo SMEs are incremental considering the degree of novelty, even though most of them were new to the market. This is because when introducing radical innovations, which are more capital-intensive, SMEs are required to possess distinguished firm capabilities, and usually to make significant R&D investments. The risks and opportunities with incremental innovations are much lower; thus, many SMEs choose to use their fewer capacities on incremental innovations (Woschke et al., 2017). Nevertheless, Hoffman et al. (1998) argue that SMEs are capable of developing both incremental and radical innovations. Moreover, Amara et al. (2008) emphasize that as SMEs grow and possess more resources; they are capable of introducing more innovative products and bring higher novelty value.

7.4.3 Cooperation for innovation activities

Networking to develop different innovations was another component that was covered in the interview. Figure 7.29 shows that the innovation source of cooperation divided in the three categories, such as mainly your enterprise or enterprise group, international consultant and professor of University. In one case, the interviewed SME stated that they have cooperated with a professor of University of Prishtina at beginning stage, while another respondent for SMEs stated a continuous cooperation with consultancy from German technologists, who come in regular basis in Kosovo, with the outcome of new ideas about new products, or modification of existing ones. Hence, it is evident that most of the innovations have been developed only by firms, which means that innovation is not completely developed by external sources.

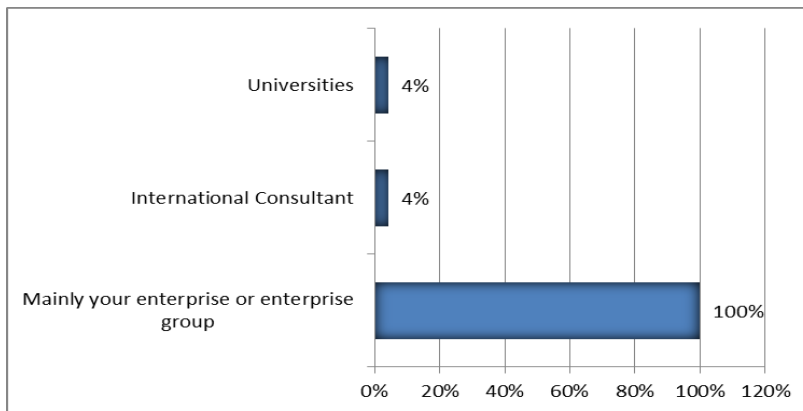


Figure 7.29 Innovation Source

The model of the parameter cooperation for innovation activities, and its constituent variables, is illustrated in Figure 7.30. The constituent variables are suppliers of equipment, materials, components, or software; clients or customers; competitors or other enterprises in your sector; consultants; universities; and other cooperation.

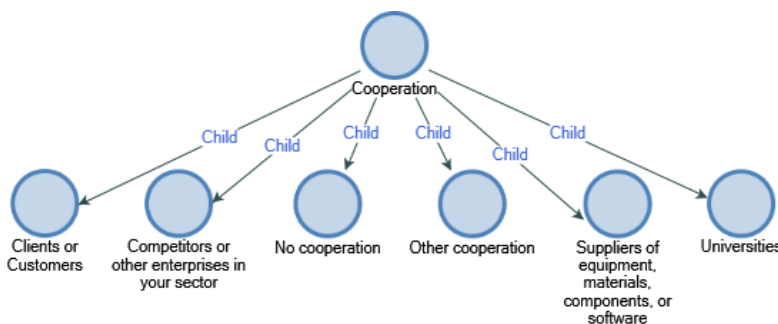


Figure 7.30 Model of the parameter Cooperation and its constituent variables

The frequency distribution of all source coded for the parameter Cooperation for innovation activities is shown in Table 7.11. The blue cell shading with number 1 indicates the responses that fall in the abovementioned types of cooperation. The results show that most of the interviewed firms cooperate with clients or customers; followed by suppliers of equipment, materials, components, or software; other cooperation; competitors or other enterprises in your sector; as well as Universities.

Table 7.11 Matrix Coding Query showing source coded frequency for model parameter Cooperation and its constituent variables

	A : Clients or Customers	Competitors or other enterprises in yo	C : No cooperation	D : Other cooperation	equipment, materials, compone	F : Universities
1 : R1	1	0	0	0	0	0
2 : R10	0	0	1	0	0	0
3 : R11	1	0	0	0	0	0
4 : R12	1	0	0	0	0	0
5 : R13	0	0	1	0	0	0
6 : R14	1	0	0	0	1	0
7 : R15	0	0	1	0	0	0
8 : R16	1	1	0	0	1	0
9 : R17	0	0	1	0	0	0
10 : R18	0	0	1	0	0	0
11 : R19	0	0	1	0	0	0
12 : R2	1	0	0	0	1	0
13 : R20	0	0	0	0	0	0
14 : R21	0	0	1	0	0	0
15 : R22	1	0	0	1	0	0
16 : R23	0	0	0	0	0	0
17 : R24	0	0	1	0	0	0
18 : R3	0	0	1	0	0	0
19 : R4	0	0	1	0	0	0
20 : R5	0	0	0	0	0	1
21 : R6	0	0	1	0	0	0
22 : R7	0	0	0	1	0	0
23 : R8	0	0	1	0	0	0
24 : R9	0	0	1	0	0	0

Figure 7.31 shows the most valuable cooperation partner for innovation activities. The empirical results indicate that for most interviewed enterprises clients are the most valuable cooperation partner (17%), followed by suppliers of equipment, materials, components or software (13%), consultants (8%), universities (4%) and other kind of cooperation (4%).

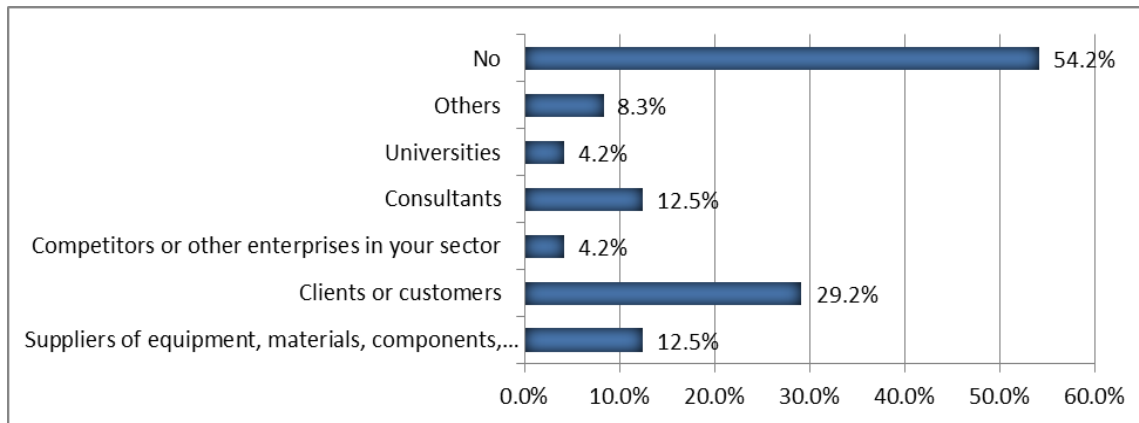


Figure 7.31 Most valuable cooperation partner for innovation activities

Scupola (2014) highlight the most important sources of innovation are customers, by expressing their needs and wants. Empirical findings show that not many firms have cooperated with others to introduce innovations. The results are in line with a study who concludes that innovators do not necessarily network with other parties to introduce innovations (Harrison, 2007). Nevertheless, empirical findings for Kosovo show that few firms have cooperated with universities as well as international consultants. This is consistent with the review of literature, highlighting that innovators are likely to have links with universities, and support from others (Chetty & Stangl, 2010). Moreover, other studies indicate significant relation between innovations and collaboration with customers and competitors (Lefebvre et. al., 2015). However, there are studies who agree that network, especially open innovation, is a must to develop innovation successfully and overcome difficulties that they encounter. Some studies agree that open innovation has significant impact to SMEs (Bianchi et al. 2010). Firms that are open to external sources, meaning that they collaborate with others to innovate are more likely to achieve innovation performance (Laursen & Salter, 2006). Moreover, Lee et al. (2010) highlights that the importance of intermediate organization which supports SMEs to find appropriate partners and contributed to building trust among network members.

7.4.4 Successful innovation

7.4.4.1 Positive effects of innovation

The model of the parameter Positive effects of innovation and its constituent variables is illustrated in Figure 7.32. The constituent variables include increased range of goods or services; entered new markets or increased market share; improved quality of goods or services; improved flexibility of production or service provision; Increased capacity of production or service

provision; Reduced labour costs per unit output; Reduced time to respond to customer or supplier needs; Reduced costs per unit output; and Improved employee satisfaction.

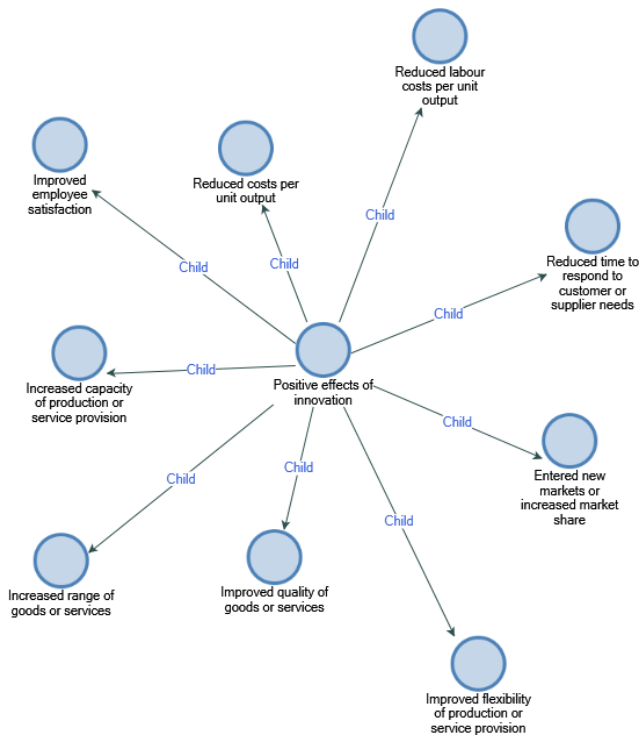


Figure 7.32 Model of the parameter Positive effects of innovation and its constituent variables

The frequency distribution of all source coded for the parameter Positive effects of innovation is shown in Table 7.12. The blue cell shading with number 1 indicates the responses that fall in the abovementioned constituent variables.

Table 7.12 Matrix Coding Query showing source coded frequency for model parameter Positive effects of innovation and its constituent variables

	A: Entered new markets or increased market share	B: Improved employee satisfaction	C: Improved flexibility of production or service provision	D: Improved quality of goods or services	E: Increased capacity of production or service provision	F: Increased range of goods or services	G: Reduced costs per unit output	H: Reduced labour costs per unit output	I: Reduced time to respond to customer or supplier needs
1: R1	1	0	0	1	1	1	0	0	0
2: R10	1	0	0	1	0	1	0	0	0
3: R11	1	0	0	1	1	1	0	0	1
4: R12	1	0	1	1	1	1	0	0	0
5: R13	1	0	0	1	0	1	0	0	1
6: R14	1	0	0	0	1	1	1	0	1
7: R15	1	0	0	0	1	1	0	0	1
8: R16	1	0	0	1	1	1	0	1	0
9: R17	0	0	0	1	0	1	0	0	1
10: R18	0	1	0	1	0	0	0	0	1
11: R19	0	0	0	1	0	1	0	0	0
12: R2	1	1	1	1	1	1	0	0	0
13: R20	1	0	0	1	0	1	0	0	0
14: R21	0	0	0	1	0	0	0	0	0
15: R22	1	0	0	1	1	0	0	0	0
16: R23	0	1	0	1	0	1	0	0	0
17: R24	0	0	0	1	0	0	0	0	1
18: R3	1	1	0	1	0	1	0	0	0
19: R4	1	0	0	1	1	0	0	0	1
20: R5	1	0	0	0	1	1	0	0	0
21: R6	1	0	0	1	0	1	0	0	0
22: R7	1	0	0	1	0	1	0	0	1
23: R8	1	0	0	1	0	1	0	0	1
24: R9	0	0	0	1	1	0	0	0	0

Figure 7.33 shows that the main positive effects of innovation include: improved quality of good and services (92%), increased range of goods or services (75%), entered new markets or increased market share (71%), increased capacity of production or service provision (46%) and reduced time to respond to customer or supplier needs (42%).

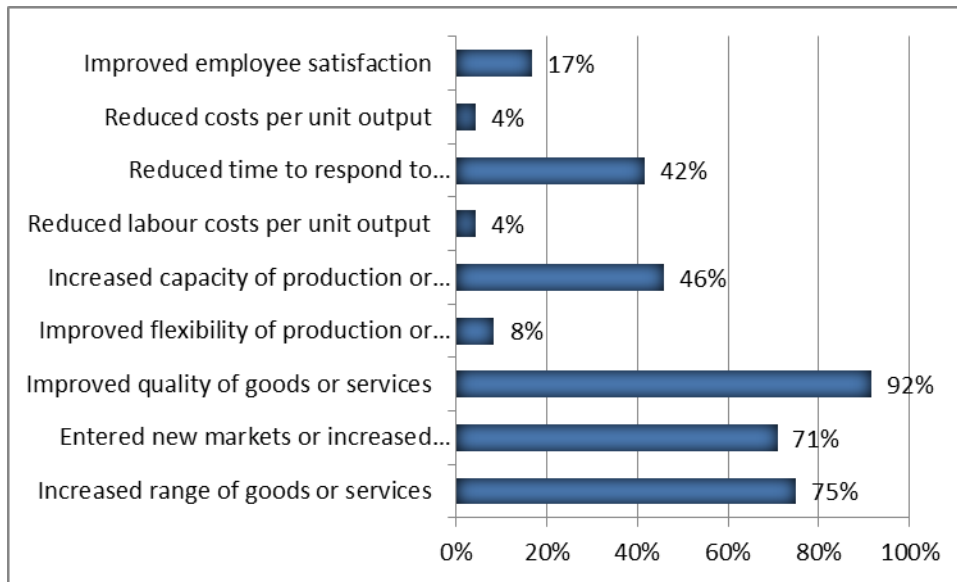


Figure 7.33 Positive effects of Innovation

Empirical results show that the main positive effects of innovation include: improved quality of good and services increased range of goods or services, entered new markets or increased market share, increased capacity of production or service provision and reduced time to respond to customer or supplier needs.

According to Laforet (2010), positive effects of innovation are increase number, speed and quality of product launched and developed, improved customer service, customer satisfaction, product customization, and gaining a foothold in the market; enhanced efficiency; quality transparency, cost benefit, process simplification; improved ways of working, and working environment and safety, which leads to employees' satisfaction.

7.4.4.2 Key Success Factors for innovation

The model of the parameter factors that have key success factors for innovation and its constituent variables is illustrated in Figure 7.34. The constituent variable comprises of alignment of innovation with business strategy; top management support and dealing with employees' resistance to change; knowledge management; training; passion to do something new; controlled risk; teamwork and creativity; budget for innovation; and any other market analysis.

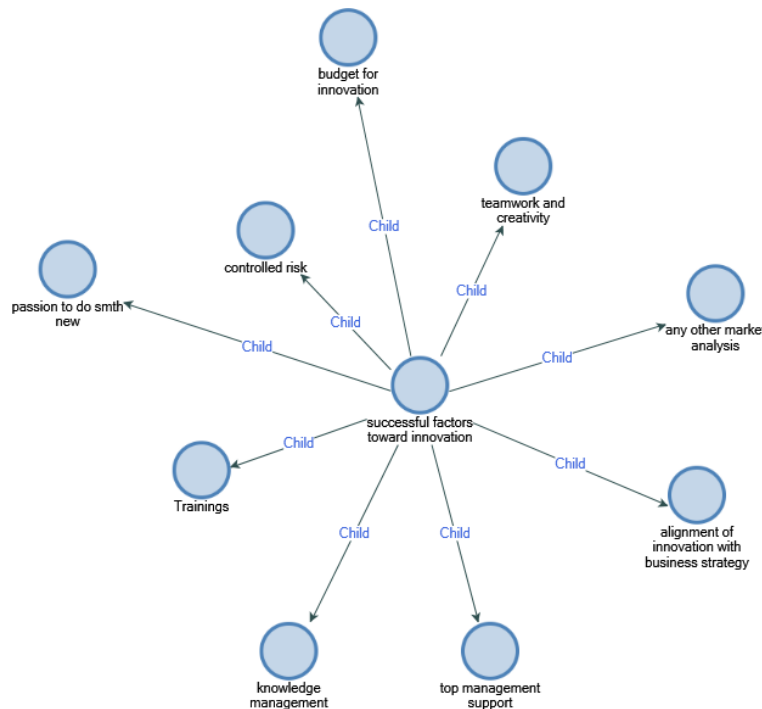


Figure 7.34 Model of the parameter factors that have Key success factors for innovation and its constituent variables

The frequency distribution of all source coded for the parameter Key success factors for innovation is presented in Table 7.13. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.13 Matrix Coding Query showing source coded frequency for model Key success factors for innovation and its constituent variables

	A : alignment of innovation with	B : any other market analysis	C : budget for innovation	D : controlled risk	E : knowledge management	F : passion to do smth new	G : teamwork and creativity	H : top management support	I : Trainings
1: R1	1	0	0	0	0	0	0	0	0
2: R10	0	0	0	0	0	0	1	0	0
3: R11	0	0	1	0	1	0	0	1	0
4: R12	0	0	0	0	0	1	0	0	0
5: R13	0	1	1	1	0	0	0	0	0
6: R14	0	0	1	0	0	0	0	0	0
7: R15	0	0	1	0	0	0	1	1	0
8: R16	0	0	1	0	0	0	0	1	0
9: R17	0	1	1	0	0	0	1	0	0
10: R18	0	0	1	0	0	0	1	0	0
11: R19	0	0	1	0	0	0	1	0	0
12: R2	1	0	0	0	0	0	0	1	1
13: R20	1	0	1	0	1	0	0	0	0
14: R21	0	0	1	0	1	0	1	0	0
15: R22	1	0	0	0	0	0	0	1	0
16: R23	1	0	1	0	0	0	0	1	0
17: R24	0	0	0	0	1	0	0	1	0
18: R3	1	0	0	1	0	0	0	0	1
19: R4	0	0	0	0	1	0	1	1	0
20: R5	0	0	0	0	1	0	0	1	1
21: R6	0	0	0	0	0	0	1	1	1
22: R7	1	0	0	0	1	0	0	0	1
23: R8	1	0	0	0	0	0	1	0	0
24: R9	0	0	1	0	0	0	1	0	0

Figure 7.35 shows Key success factors for innovation, where the most dominant factors were budget for innovation (50%) and teamwork and creativity (42%), top management support and dealing with employees’ resistance to changes (42%).

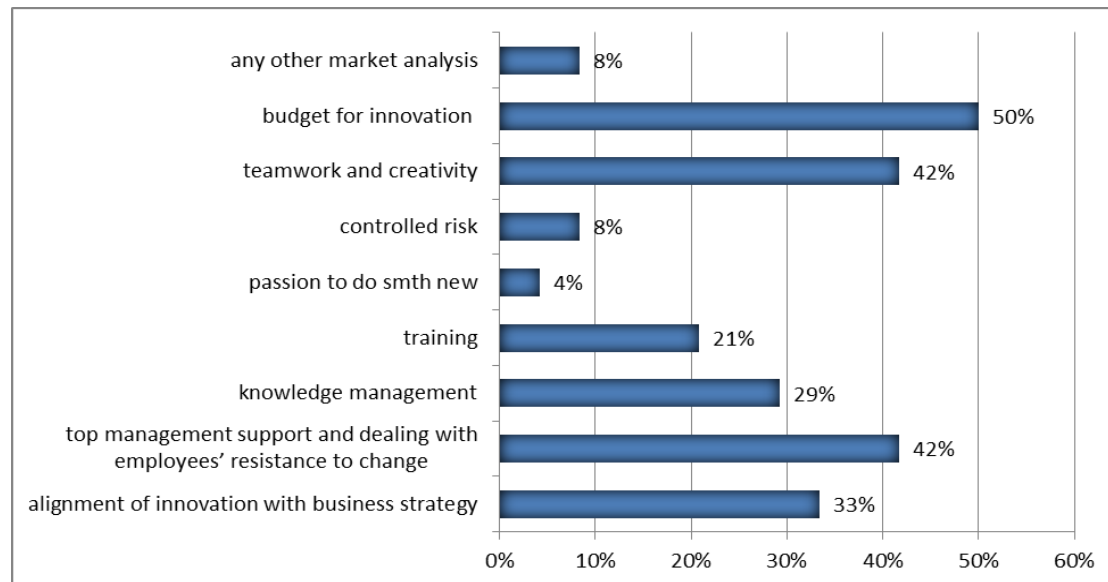


Figure 7.35 Key success factors for innovation

The top drivers of innovation in Kosovo SMEs were having budget for innovation and teamwork and creativity of employees, as well as top management support and dealing with employees' resistance to changes. Alignment of innovation with business strategy, knowledge management, providing training, passion to do something new, controlled risk, and any other market analysis are pointed out to a lesser extent to drive innovation. Read (2000) highlights that the main foundations of innovation include management support, customers, the market and employees.

7.4.4.3 Benefits of innovation

Word Cloud of innovation benefits has been presented in Figure 7.36, which are highlighted mostly quality services, turnover, reputation and others.



Figure 7.36 Word Cloud of Benefits of innovation

The model of the parameter Benefits of innovation and its constituent variables is illustrated in Figure 7.37. The constituent variable comprises of increased quality of services; reputation; and turnover, which are the three benefits that most interviewed enterprises highlighted.

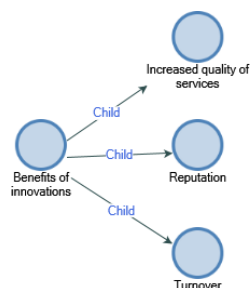


Figure 7.37 Model of the parameter Benefits of innovation and its constituent variables

The frequency distribution of all source coded for the parameter Benefits of innovation is shown in Table 7.14. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.14 Matrix Coding Query showing source coded frequency for model Benefits of innovation and its constituent variables

	A : Increased quality of services	B : Reputation	C : Turnover
1 : R1	0	1	1
2 : R10	1	0	1
3 : R11	0	1	1
4 : R12	1	0	0
5 : R13	0	0	1
6 : R14	1	0	0
7 : R15	0	1	1
8 : R16	1	0	0
9 : R17	0	1	1
10 : R18	0	0	0
11 : R19	1	0	0
12 : R2	1	0	1
13 : R20	1	1	0
14 : R21	1	0	0
15 : R22	1	0	0
16 : R23	0	1	1
17 : R24	1	0	0
18 : R3	1	0	0
19 : R4	1	0	1
20 : R5	0	0	1
21 : R6	0	0	0
22 : R7	0	0	0
23 : R8	1	0	1
24 : R9	1	0	0

Figure 7.38 shows that the main benefits of introducing innovations are increased quality of services (58%), followed by turnover (46%) and reputation (25%). Beside these, empirical results present other benefits generated from innovation, such as new customers, higher satisfaction among existing customers, higher speed of production, employees’ satisfaction with better salaries, as well as competitive advantage achievement.

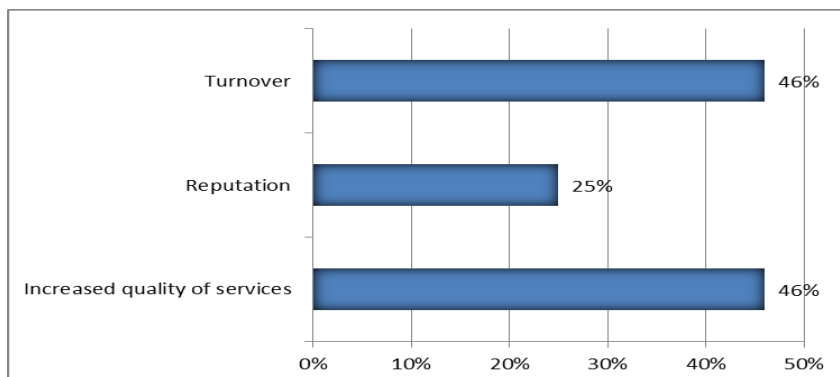


Figure 7.38 Benefits of innovations

The key benefits of introducing innovations include increased quality of services, followed by turnover and reputation. The empirical results are partly consistent with findings from Scozzi et al. (2005), who highlighted that the main platform of innovations are quality improvement, product marketing and cost reduction.

7.4.5 Hampering factors of innovation

7.4.5.1 Ongoing or abandoned innovation activities

Figure 7.39 shows ongoing or abandoned innovation activities, which means that 54% has either ongoing or abandoned innovation activities during the last three years.

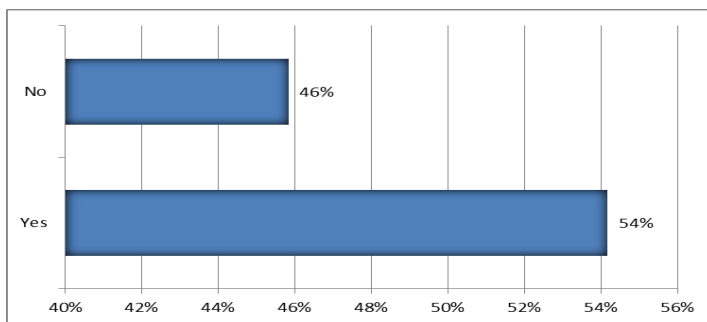


Figure 7.39 Ongoing or abandoned innovation activities

Empirical results show that many of the interviewed SMEs currently have ongoing innovation activities, or had to abandon them for different reasons. SMEs that have ongoing innovation activities are in the process of doing feasibility study, or in the process of testing certain products in order to come up with decision whether it is worth implementing them. Others stated reasons for abandoned innovation activities, such as cost factors, uncertain market demand, legal infrastructure, and lack of human skills.

Thus, it can be concluded that most of the interviewed firms have abandoned innovation activities in the conception stage, where market factors and cost factors were the main challenges that enterprises encountered. Other studies have similar results, highlighting lack of funds within enterprise and high innovation costs. This is followed by uncertain demand innovative goods or services, difficulties in finding cooperation partners for innovation, lack of qualified personnel, and a lack of information on markets (Duarte et al., 2017).

7.4.5.2 Hampering factors of innovation

The model of the parameter Hampering factors of innovation and its constituent variables is illustrated in Figure 7.40. The constituent variables include cost of innovation, market factors, knowledge factors and institutional factors

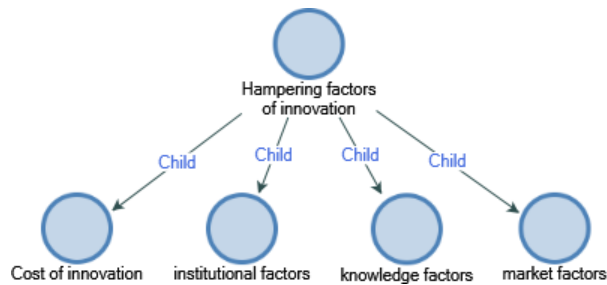


Figure 7.40 Model of the parameter Hampering factors of innovation and its constituent variables

The frequency distribution of all source coded for the parameter hampering factors of innovation is shown in Table 15. The blue cell shading with number 1 indicates that all responses fall in the abovementioned constituent variables.

Table 7.15 Matrix Coding Query showing source coded frequency for model parameter Hampering factors of innovation and its constituent variables

	A : Cost of innovation	B : institutional factors	C : knowledge factors	D : market factors
1 : R1	1	0	0	1
2 : R10	1	0	0	1
3 : R11	0	0	0	0
4 : R12	0	0	0	0
5 : R13	1	0	1	1
6 : R14	0	1	0	1
7 : R15	0	0	1	0
8 : R16	1	0	1	0
9 : R17	0	0	1	1
10 : R18	1	0	0	0
11 : R19	1	0	0	1
12 : R2	0	0	0	0
13 : R20	0	0	0	1
14 : R21	1	0	0	1
15 : R22	0	0	1	1
16 : R23	1	1	0	0
17 : R24	1	0	0	0
18 : R3	0	0	0	1
19 : R4	0	0	0	0
20 : R5	0	0	0	0
21 : R6	1	0	0	0
22 : R7	1	1	0	1
23 : R8	0	0	0	0
24 : R9	1	0	0	1

Figure 7.41 shows hampering factors of innovation, where market factors and cost factors are the main challenges that enterprises encountered when trying to introduce innovative activities. Other factors include knowledge and institutional factors.

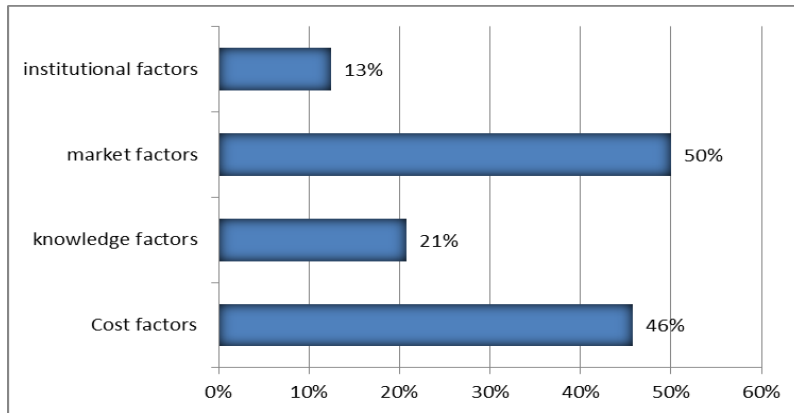


Figure 7.41 Hampering factors of innovation

The empirical results show that the main hampering factors for introduction of innovation include market factors and cost factors. Similar findings have been found also in literature. According to Gill and Biger (2012), the most common obstacles to innovation are financial constraints and market challenges. Other authors mentioned these hampering factors, such as lack of risk taking, inadequate managerial skills, lack of skilled labor, lack of networks and collaborations, and resistance to change (Laforet & Tann, 2006; Loewe & Dominiquini, 2006; O’Sullivan & Dooley, 2009). An important implication for developing countries with scarce resources is that government, rather than private sector, should have a key role in encouraging the provision of SME financing by implementing such policies (Wonglimpiyarat, 2015).

7.4.5.4 Challenges of innovation

The model of the parameter Challenges of innovation and its constituent variables is illustrated in Figure 7.42. The constituent variable comprises of Lack of skilled staff; cost of innovation, market demand and resistance to change, which are the main challenges that most interviewed enterprises highlighted.

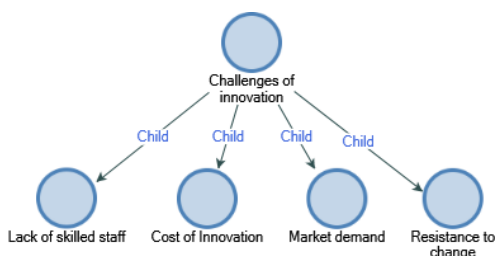


Figure 7.42 Model of the parameter Challenges of innovation and its constituent variables

The frequency distribution of all source coded for the parameter Challenges of innovation is shown in Table 7.16. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.16 Matrix Coding Query showing source coded frequency for model Challenges of innovation and its constituent variables

	A : Cost of Innovation	B : Lack of skilled staff	C : Market demand	D : Resistance to change
1 : R1	1	1	0	0
2 : R10	1	1	0	0
3 : R11	1	0	0	0
4 : R12	1	0	0	0
5 : R13	0	1	0	0
6 : R14	0	1	0	0
7 : R15	0	1	0	0
8 : R16	0	0	0	0
9 : R17	1	1	0	0
10 : R18	1	0	0	0
11 : R19	0	0	0	0
12 : R2	1	1	0	0
13 : R20	1	0	1	0
14 : R21	0	0	1	0
15 : R22	1	0	0	1
16 : R23	1	0	0	1
17 : R24	1	0	0	0
18 : R3	0	0	1	0
19 : R4	1	0	0	0
20 : R5	1	0	0	0
21 : R6	0	0	0	0
22 : R7	0	0	1	0
23 : R8	1	0	1	0
24 : R9	1	1	0	0

Figure 7.43 shows that the main challenge to innovation is cost of innovation (63%), followed by lack of skilled staff (33%), uncertain market demand (21%) and resistance to changes of employees (8%). Other challenges to innovation to interviewed SMEs in Kosovo comprise of legal infrastructure, lack of subsidies for innovation, equipment and training costs, dealing with employees' resistance to change; as well as offering quality products and services and obeying the laws as other informal firms provide them with lower price.

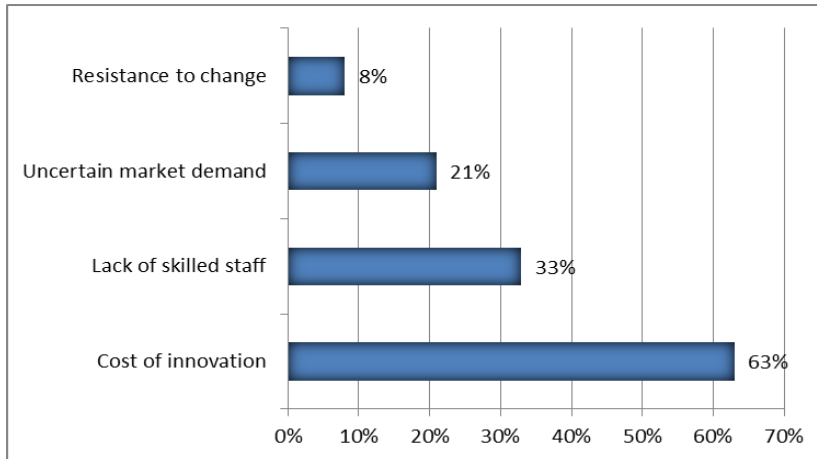


Figure 7.43 Challenges of Innovation

7.4.6 Innovation activities

7.4.6.1 Innovation activities

The model of the parameter Innovation activities, and its constituent variables, is illustrated in Figure 7.44. The constituent variables are in house R&D; extramural R&D; acquisition of machinery, equipment, and software; acquisition of other external knowledge; trainings; and market introduction of innovation.

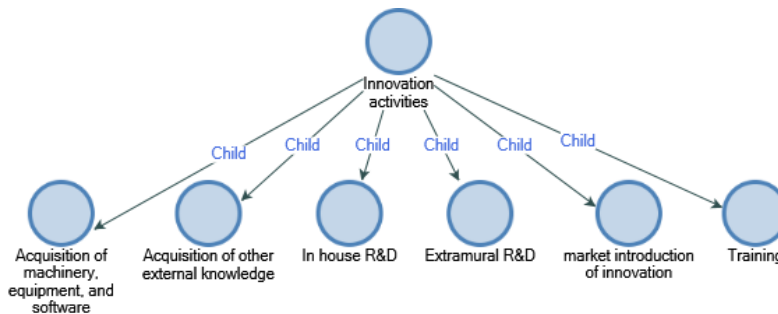


Figure 7.44 Model of the parameter Innovation activities and its constituent variables

The frequency distribution of all source coded for the parameter Innovation activities is shown in Table 7.17. The blue cell shading with number 1 indicates the responses that fall in the abovementioned innovation activities. The results show that many interviewed firms are engaged in more than one innovation activity.

Table 7.17 Matrix Coding Query showing source coded frequency for model parameter Innovation activities and its constituent variables

	A : Acquisition of machinery, eq	B : Acquisition of other external	C : Extramural R&D	D : In house R&D	E : market introduction of innov	F : Training
1 : R1	1	0	0	1	1	1
2 : R10	1	0	0	1	0	1
3 : R11	1	1	1	1	0	1
4 : R12	1	0	0	0	0	1
5 : R13	0	0	0	1	0	1
6 : R14	1	1	0	1	1	1
7 : R15	1	0	0	0	0	1
8 : R16	1	0	0	0	0	1
9 : R17	1	0	0	0	0	1
10 : R18	1	0	0	0	0	1
11 : R19	1	0	0	0	0	1
12 : R2	1	0	0	1	0	1
13 : R20	0	1	0	1	0	1
14 : R21	0	0	0	0	0	1
15 : R22	1	0	0	0	0	1
16 : R23	1	1	0	0	0	1
17 : R24	1	0	0	0	0	1
18 : R3	1	0	1	1	0	1
19 : R4	0	0	0	1	0	0
20 : R5	0	0	0	1	1	0
21 : R6	0	0	0	0	0	1
22 : R7	1	0	0	1	1	1
23 : R8	0	0	0	1	1	1

Figure 7.45 shows which innovation activities have been undertaken by firms mostly in percentage. The results shows that they have engaged mostly with trainings (92%), followed up by acquisition of machinery, equipment and software (67%), then in house R&D with 54%, market introduction of innovation (25%), acquisition of other external knowledge (17%) and Extramural R&D with only 8%.

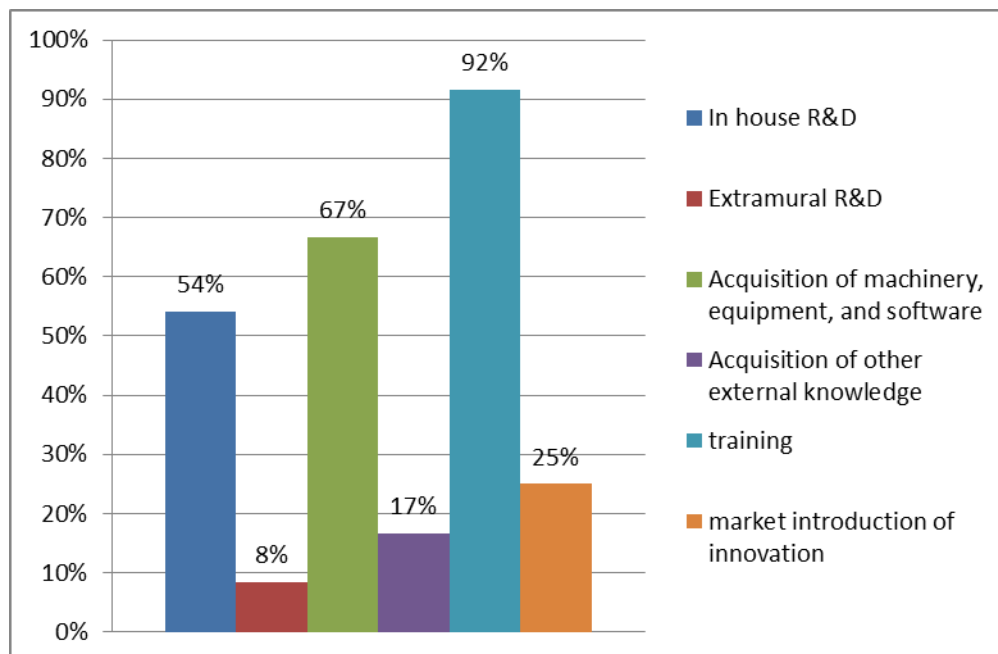


Figure 7.45 Innovation activities

Interviewed firms have been engaged mostly in following innovation activities, such as trainings, followed up by acquisition of machinery, equipment and software, then in house R&D, market introduction of innovation, acquisition of other external knowledge and extramural R&D. Other studies agree that trainings are very crucial toward successful change within organizations (del Val & Fuentes, 2003). Even though different studies conclude a direct relationship between R&D investment and innovation capacity, highlight that SMEs can innovate also with low levels of R&D expenditure (De Martino & Magnotti, 2017).

7.4.6.2 Information sources for innovation activities

The model of the parameter information sources, and its constituent variables, is illustrated in Figure 7.46. The constituent variables are Internal, market sources, institutional sources and internet search & others.

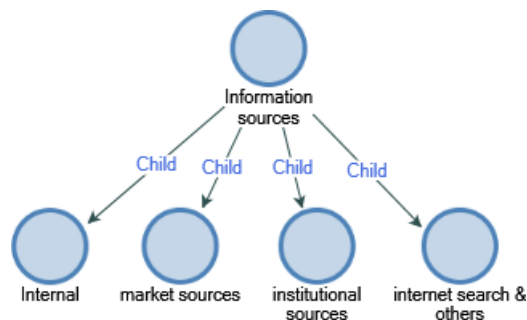


Figure 7.46 Model of the parameter Information sources and its constituent variables

The frequency distribution of all source coded for the parameter Information sources is shown in Table 7.18. The blue cell shading with number 1 indicates the responses that fall in the abovementioned information sources. The results show that most of the interviewed firms are focused on market sources which help them decide to introduce innovation. Other information sources involve internal sources, internet search & others, as well as institutional sources.

Table 7.18 Matrix Coding Query showing source coded frequency for model parameter Information sources and its constituent variables

	A : institutional sources	B : Internal	C : internet search & others	D : market sources
1 : R1	0	1	0	1
2 : R10	0	1	0	1
3 : R11	0	1	1	1
4 : R12	0	1	1	0
5 : R13	1	1	1	1
6 : R14	0	1	0	1
7 : R15	0	1	0	1
8 : R16	0	1	0	1
9 : R17	0	0	1	1
10 : R18	0	0	1	1
11 : R19	0	0	0	1
12 : R2	0	0	0	1
13 : R20	0	1	0	1
14 : R21	0	0	0	1
15 : R22	1	0	1	0
16 : R23	0	0	0	1
17 : R24	0	0	0	1
18 : R3	0	1	0	1
19 : R4	0	0	0	1
20 : R5	0	0	0	1
21 : R6	0	0	1	1
22 : R7	0	1	1	1
23 : R8	0	1	1	1
24 : R9	0	0	1	0

Figure 7.47 shows that 88% consider market sources, as the main information source when developing innovative activities, followed by internal sources (50%), internet search & others (42%) and institutional sources (8%).

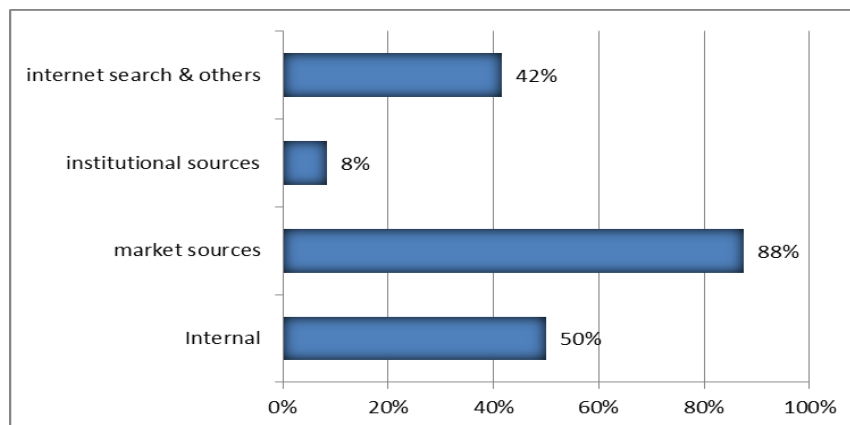


Figure 7.47 Information sources for innovation activities

SMEs in Kosovo consider market sources as the main information source when developing innovative activities, followed by internal sources, internet search & others, as well as institutional sources. Similar results are also found in literature. The most important sources of innovation include internal sources from peers, new employees or internally generated data and reports; as well as external sources such as peers; meetings, conferences; publications; and electronic information services (Maguire et al., 2015). Other findings from literature indicate that the main information source include interpersonal sources (Burke, 1996).

7.4.7 Subsidies for innovation

The model of the parameter subsidies for innovation, and its constituent variables, is illustrated in Figure 7.48. The constituent variables are Government, European Union and others.

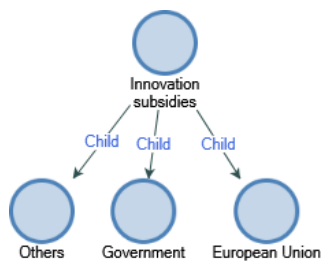


Figure 7.48 Model of the parameter subsidies for innovation and its constituent variables

The frequency distribution of all source coded for the parameter Innovation subsidies is shown in Table 7.19. The blue cell shading with number 1 indicates the responses that fall in the abovementioned innovation subsidies. The results show that seven of the interviewed firms have received one kind of subsidies for innovative activities, while only one of the interviewed firms has received three kinds of subsidies.

Table 7.19 Matrix Coding Query showing source coded frequency for model parameter subsidies for innovation and its constituent variables

	A : European Union	B : Government	C : Others
1 : R1	0	0	0
2 : R10	0	0	1
3 : R11	0	0	1
4 : R12	0	0	0
5 : R13	0	0	0
6 : R14	0	0	0
7 : R15	0	0	0
8 : R16	0	0	0
9 : R17	0	0	0
10 : R18	1	1	1
11 : R19	0	0	0
12 : R2	0	0	0
13 : R20	1	0	0
14 : R21	0	0	0
15 : R22	0	0	1
16 : R23	0	0	0
17 : R24	0	0	0
18 : R3	0	0	0
19 : R4	0	0	0
20 : R5	0	0	1
21 : R6	0	0	0
22 : R7	0	0	1
23 : R8	0	0	1
24 : R9	0	0	0

Figure 7.49 shows that interviewed firms has received subsidies mostly from others (29%), followed by European Union (8%) and Central Government (4%).

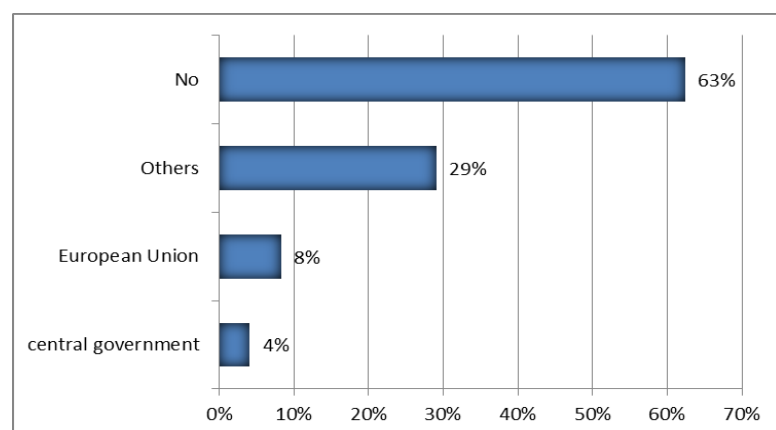


Figure 7.49 Subsidies for Innovation

Only 30% of interviewed SMEs in Kosovo benefited from subsidies to develop innovation. According to Rehman (2016), public support programs, such as subsidy or tax incentive for innovation activities have positive effect on firms' growth.

7.4.8 Innovative culture within the firm

7.4.8.1 Innovative culture within the firm

The model of the parameter Innovative culture and its constituent variables is illustrated in Figure 7.50. The constituent variable comprises of top management support, resistance to change associated with risk; ideas comes from owner; ideas comes from employees; ideas come from other, to understand better the innovation culture within the firm.

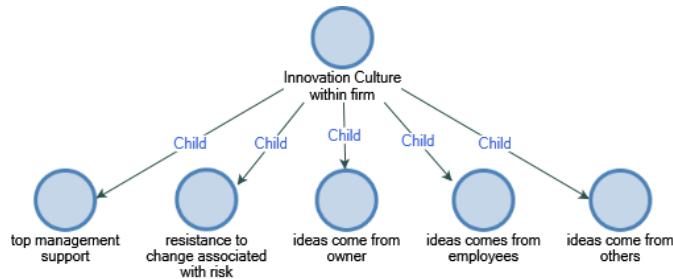


Figure 7.50 Model of the parameter Innovative culture within the firm and its constituent variables

The frequency distribution of all source coded for the parameter Innovative culture is shown in Table 7.20. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.20 Matrix Coding Query showing source coded frequency for model Innovative culture within firm and its constituent variables

	A: ideas come	B: ideas com	C: ideas co	D: resistar	E: top manager
1 : R1	0	1	1	0	1
2 : R10	0	1	0	0	0
3 : R11	1	1	0	0	0
4 : R12	0	1	1	1	0
5 : R13	0	1	0	0	1
6 : R14	1	1	1	1	1
7 : R15	0	1	0	0	0
8 : R16	1	1	0	0	1
9 : R17	0	1	1	0	1
10 : R18	0	1	0	1	1
11 : R19	0	1	0	0	1
12 : R2	1	1	1	0	1
13 : R20	1	1	1	0	1
14 : R21	0	1	0	0	0
15 : R22	1	1	0	0	1
16 : R23	0	1	1	1	1
17 : R24	0	1	0	1	1
18 : R3	0	1	0	0	1
19 : R4	0	1	1	1	1
20 : R5	0	1	1	0	1
21 : R6	0	1	0	0	1
22 : R7	1	1	1	0	1
23 : R8	0	1	1	1	1
24 : R9	0	1	0	1	1

Figure 7.51 shows that all interviewed enterprises claimed that ideas come from owner. Nevertheless, some stated that ideas come also from employees (46%) and from others, such as customers, suppliers, academics (29%). Top management support plays significant role when implementing innovation (79%). In most cases, there was no resistance to change; nevertheless, those that encountered such challenge, it was mitigated by having meeting and providing trainings to employees.

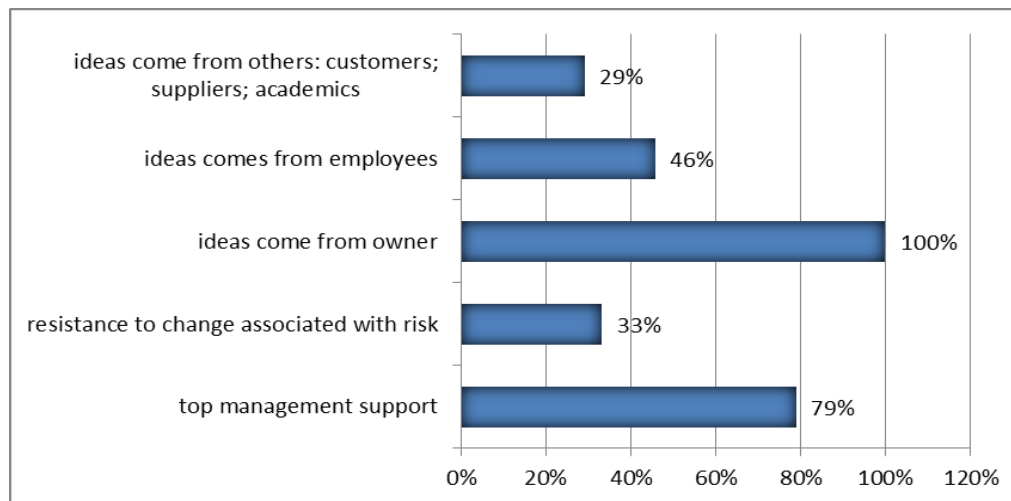


Figure 7.51 Innovative culture within a firm

Empirical results show that there is moderate innovative culture within interviewed firms. Some respondents claim that the organizational culture is developed in such a way, that employees are encouraged and have the obligations to discuss about their work challenges during the day, which helps them to come up with new innovative ideas and improve products and services given to clients. Other respondents state that good leadership from management plays a crucial part as it increases staff motivation and quality of work. Related to bonuses for innovation ideas, all respondents claimed that employees do not receive such bonuses, but many respondents said that employees are awarded with bonuses in the end of the year for the work performance but not for a specific idea they have given. Some stated that they do not provide bonuses to employees at this stage, as they are not grown up at that stage to afford it. Others state a lack of innovation proposals policies leads to no bonuses to employees. Many respondents claimed that they organize yearly meetings outside the office to discuss what went well and what went wrong, where employees are satisfied and they bring new innovative ideas and solutions. When employees' ideas are rejected, top management would always communicate different reasons for such a decision, which can be because of the specifics of organizations, or some other reasons.

Others claim that their innovative culture has improved by using different working methodologies, such as brainstorming, BRIEF, SLACK and SCRUM, where many feedbacks are exchanged in the process of developing new product or completing a certain job. Also, resistance to change is usually managed by continuous communication, meetings and trainings.

The primary sources of the innovative ideas mainly come from owners/managers in Kosovo. In rare cases, ideas come from employees or others, such as clients, suppliers, academics, etc. This situation requires SMEs to encourage employees and others to come up with original and innovative ideas, by implementing different internal reward policies, or more specifically internal innovation policy which would include the innovation proposals procedure and bonus related to that. Other studies emphasize that innovative ideas come from demographics, managers/owners, employees, industry/market structure analysis, fairs and exhibitions, customers, networking and competition (Scozzi et al., 2005; Laforet & Tann, 2006). The problem in Kosovo SMEs might be that the networking for innovation is not used at high extent; and there is a lack of skilled employees, so owners/managers do not trust them as a source for innovative idea.

Empirical results show that in most cases, there is top management support for innovations introduction in Kosovo and this is seem a success factor of innovation. Results are in line with literature that emphasize that top management support is crucial when dealing with introduction of innovation. According to Simoes & Esposito (2014), it is the leadership capability of managers to select the right communication style with different levels of employees to ease the process of change within firm. Moreover, Caldwell (1993) highlights the importance of communication in order to involve and encourage collaborators to participate in changing process related to any innovation.

About 30% of interviewed enterprises in Kosovo claim that there was some resistance to change but it has been managed by top management support and communication. Other studies agree that resistance to change seems to be a challenge more when strategic changes that involve transformational change occur within organizations. Thus, it can be concluded that resistance to change is more present when an organization introduced radical innovation rather than incremental one (del Val & Fuentes, 2003).

7.4.8.2 Linkage of innovation with organization strategy

The model of the parameter Linkage of innovation with organization strategy and its constituent variables is illustrated in Figure 7.52. The constituent variable comprises of strongly linked or somehow linked, to understand degree of innovativeness within the firm.



Figure 7.52 Model of the parameter Linkage of innovation with organization strategy and its constituent variables

The frequency distribution of all source coded for the parameter Linkage of innovation with organization strategy is shown in Table 7.21. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.21 Matrix Coding Query showing source coded frequency for model Linkage of innovation with organization strategy and its constituent variables

	A: Somehow	B: Strongly
1: R1	1	0
2: R10	1	0
3: R11	0	1
4: R12	0	1
5: R13	1	0
6: R14	1	0
7: R15	1	0
8: R16	0	1
9: R17	1	0
10: R18	1	0
11: R19	1	0
12: R2	1	0
13: R20	1	0
14: R21	1	0
15: R22	1	0
16: R23	1	0
17: R24	1	0
18: R3	1	0
19: R4	0	1
20: R5	0	1
21: R6	1	0
22: R7	0	1
23: R8	0	1
24: R9	1	0

Figure 7.53 shows linkage of innovation with organization strategy; where 29% of interviewed firms claimed that there is a strong link between business strategy and innovation, while 71% said that these two are linked at some extent. Some of the interviewed SMEs stated that the innovations are linked with the core values of the company, while some others claimed that they do not have written organizational strategy, but organizational goals are linked with profits and the number of new innovative products and services.

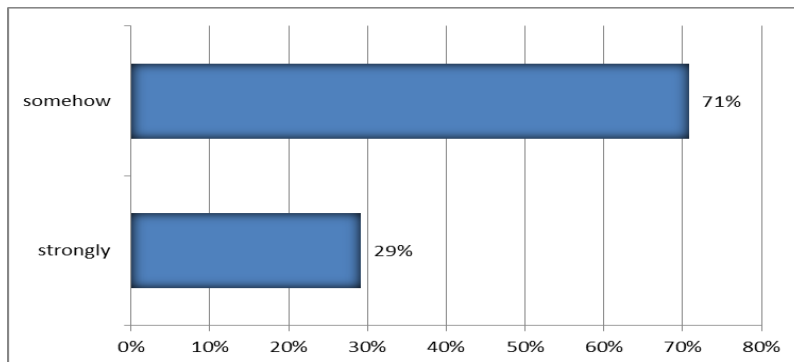


Figure 7.53 Linkage of innovation with organization strategy

In Kosovo SMEs, innovation with business strategy is linked at some extent, which shows that the main innovation strategy was reactive. This shows that Kosovo SMEs develop incremental innovations, which are followers and look for low-risk opportunities. This finding is not in accordance with other studies who claim that SMEs focus on proactive innovation strategy which offers them short term route to survival and long-term opportunity to achieve firm growth (Al-Ansari et al., 2013).

7.4.8.3 R&D employees

The model of the parameter R&D employees and its constituent variables is illustrated in Figure 7.54. The constituent variable comprises of Yes, to understand if interviewed enterprises have R&D employees.



Figure 7.54 Model of the parameter R&D employees and its constituent variables

The frequency distribution of all source coded for the parameter R&D employees is shown in Table 7.22. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.22 Matrix Coding Query showing source coded frequency for model R&D employees and its constituent variables

	Yes
1 : R1	0
2 : R10	0
3 : R11	0
4 : R12	0
5 : R13	0
6 : R14	1
7 : R15	0
8 : R16	0
9 : R17	0
10 : R18	0
11 : R19	0
12 : R2	0
13 : R20	0
14 : R21	0
15 : R22	0
16 : R23	0
17 : R24	0
18 : R3	0
19 : R4	1
20 : R5	0
21 : R6	0
22 : R7	1
23 : R8	0
24 : R9	0

Figure 7.55 shows that only 13% of interviewed firms have R&D employees.

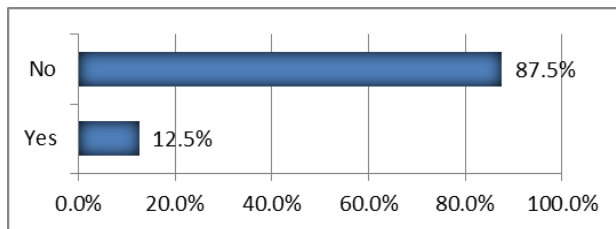


Figure 7.55 R&D employees

Some of the interviewed enterprises claimed that do not have R&D employee position, but they have several people in the organization who perform such responsibilities.

Most of Kosovo SMEs didn't disclose information related to investment in research and development; nevertheless, only two of them possess R&D employees. According to Tidd et al. (2005), there is a link between number of new innovations and commitment to R&D investment, which results to higher profits.

7.4.8.4 Intellectual property rights

The model of the parameter Intellectual property rights and its constituent variables is illustrated in Figure 7.56. The constituent variables comprises of apply for a patent, registered an industrial design and registered a trademark.

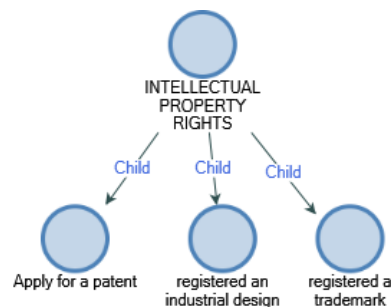


Figure 7.56 Model of the parameter Intellectual property rights and its constituent variables

The frequency distribution of all source coded for the parameter Intellectual property rights is shown in Table 7.23. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.23 Matrix Coding Query showing source coded frequency for model Intellectual property rights and its constituent variables

	A: Apply for a pate	B: registered a tradema	C: registered an ind
1: R1	0	0	0
2: R10	1	0	0
3: R11	0	0	0
4: R12	0	0	0
5: R13	0	0	0
6: R14	0	0	0
7: R15	0	0	0
8: R16	1	0	0
9: R17	0	0	0
10: R18	0	0	0
11: R19	0	0	0
12: R2	0	0	0
13: R20	0	0	0
14: R21	0	0	0
15: R22	0	0	0
16: R23	0	0	0
17: R24	0	0	0
18: R3	0	0	0
19: R4	0	0	0
20: R5	0	1	1
21: R6	0	0	0
22: R7	0	1	0
23: R8	0	0	0
24: R9	0	0	0

Figure 7.57 shows a very low percentage of interviewed enterprises falling in these three categories of intellectual property rights.

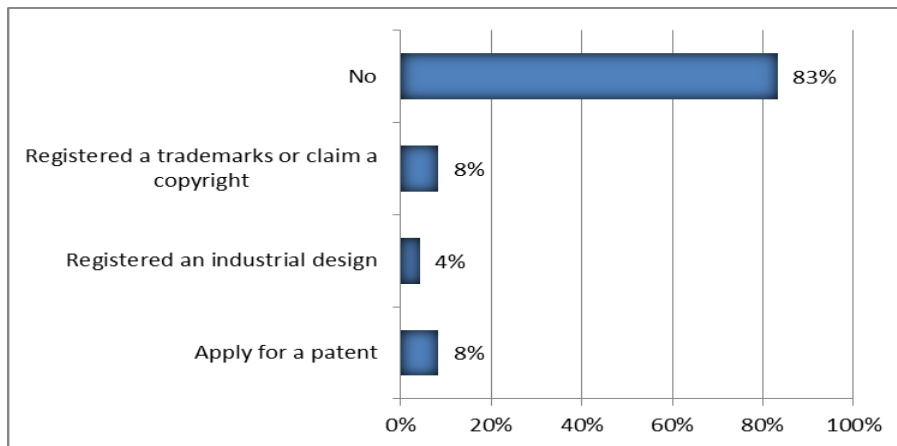


Figure 7.57 Intellectual property rights

One of the interviewed enterprise highlighted that they have registered a trademark and industrial design in Kosovo. Nevertheless, in Kosovo, they encounter a great challenge for intellectual property rights, as the procedures are very complex, and staff is not capable of giving instruction

about the procedure of getting them. In one case, a respondent claimed that they are in the process of receiving patent in Europe from World Property Office, as they aim to have their product sold firstly in Germany and then also in other places within Europe.

7.4.8.4.1 Patents for innovation

The model of the parameter Patents for innovation and its constituent variables is illustrated in Figure 7.58. The constituent variables comprise of Yes or No, to understand whether interviewed enterprises have received patents for innovation during 2014-16.

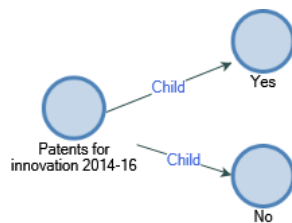


Figure 7.58 Model of the parameter Patents for innovation and its constituent variables

The frequency distribution of all source coded for the parameter Patents for innovation is shown in Table 7.24. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variables.

Table 7.24 Matrix Coding Query showing source coded frequency for model Patents for innovation and its constituent variables

	A: Yes	B: No
1 : R1	0	1
2 : R10	1	0
3 : R11	0	1
4 : R12	0	1
5 : R13	0	1
6 : R14	1	0
7 : R15	0	1
8 : R16	0	1
9 : R17	0	1
10 : R18	0	1
11 : R19	0	1
12 : R2	0	1
13 : R20	0	1
14 : R21	0	1
15 : R22	0	1
16 : R23	0	1
17 : R24	0	1
18 : R3	0	1
19 : R4	0	1
20 : R5	0	1
21 : R6	0	1
22 : R7	0	1
23 : R8	0	1
24 : R9	0	1

Figure 7.59 shows that only 8% of interviewed enterprises have received patents for innovation developed during 2014-16. Many respondents claim one problem for this might be the complex procedures to get a patent for an innovation in Kosovo along with lack of skilled employees. A specific respondent said that they have a publication in a scientific international journal, which was not costly, and shows that it is their work, and cannot be imitated.

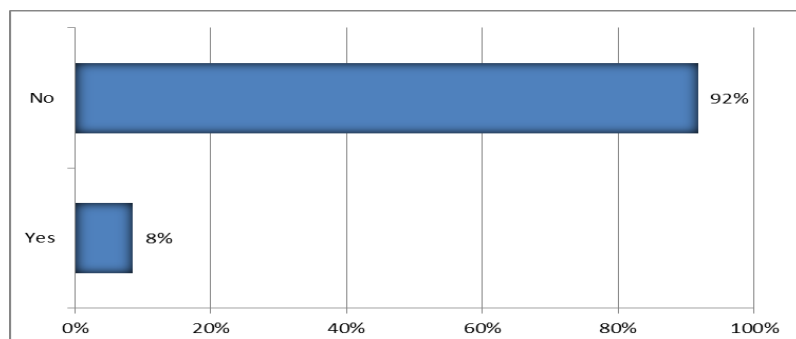


Figure 7.59 Patents for innovation

Empirical results show that only two of the interviewed firms have patents to protect their products. Similar results are also in literature. SMEs are more likely to exploit patents. Nevertheless, patents are expensive; thus not all SMEs protect their innovation with patents. In general, patents are used by SMEs to protect for imitation, as well as for monetary reasons (de Rassenfosse, 2012). SMEs may not be able to afford the expense of activities related to patenting, such as hiring external legal experts. Even if they patent their products, they do it to protect from imitation rather than for their own successful product development (MacDonald, 2004), or to protect specific technology areas (Spithoven et al., 2013). Thus patent system is designed for large firms who have distinct legal departments for IP issues (MacDonald, 2004). The use of industrial design is very low as well in sample of SMEs in Kosovo, only one firm have such right. However, some studies indicate that such rights are less used by SMEs (Hanel, 2006). Moreover, two of the interviewed firms have registered trademarks in our sample. This is common for SMEs as such rights are relatively cheap and easy to access offering protection to a product (Brem et al., 2017).

7.4.8.4.2 ISO Standards

The model of the parameter ISO Standards and its constituent variables is illustrated in Figure 7.60. The constituent variable comprises of Yes, to understand whether interviewed enterprises work in accordance with ISO standards.



Figure 7.60 Model of the parameter ISO Standards and its constituent variable

The frequency distribution of all source coded for the parameter ISO Standards is shown in Table 7.25. The blue cell shading with number 1 indicates that all responses fall within the abovementioned constituent variable.

Table 7.25 Matrix Coding Query showing source coded frequency for model ISO Standards and its constituent variable.

	A: Yes
1 : R1	1
2 : R10	0
3 : R11	1
4 : R12	0
5 : R13	0
6 : R14	0
7 : R15	0
8 : R16	1
9 : R17	0
10 : R18	0
11 : R19	0
12 : R2	1
13 : R20	1
14 : R21	0
15 : R22	0
16 : R23	0
17 : R24	0
18 : R3	0
19 : R4	0
20 : R5	1
21 : R6	0
22 : R7	0
23 : R8	0
24 : R9	0

Figure 7.61 shows that 29% of interviewed firms obtain various ISO standards. Different ISO standards that they have obtained include ISO 9001 and ISO 14001.

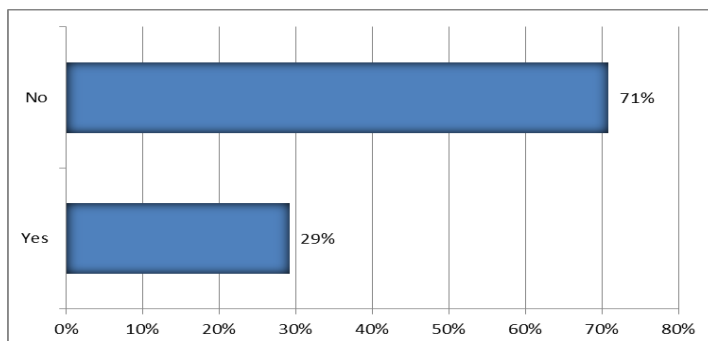


Figure 7.61 ISO Standards

Empirical results show that about 30% firms in Kosovo have been certified with various ISO standards. According to Ilkay and Aslan (2012), still there is no consensus about the impact of ISO 9001 on firm performance. Some studies conclude improved performance, while other do not claim any benefit or effect on performance. Thus further research is needed in this subject. Another study concludes that the process of certification with ISO standard 9000 represented an evolution in the way organization has been managed. It has been associated with cultural change in relation to the organization, communication and the quality system (Casadesús & Giménez, 2000). Nevertheless, the challenges of SMEs related to ISO standards are related to their size and scarce resources. Technical issues challenges have to do with the high implementation costs, inadequate resources and insufficient assistance from outside the company (Lo & Humphreys, 2000).

7.5 Summary

This chapter provided a summary the results and discussions from empirical data from qualitative research study. The findings of the research study were discussed in detail in order to investigate the conceptual model, as well as research hypotheses of this study. New insights and policy implications for academics and practitioners, as well as limitations of the study and suggestions for future research are presented in the next chapter.

The next chapter, Chapter 8, offers conclusions of the findings and policy implications for this study.

CHAPTER 8. CONCLUSIONS AND POLICY IMPLICATIONS

8.1 Introduction

Chapter 8 provides conclusions and analysis of this research investigation, which are in accordance with the overall aim, and objectives of this study. The overall aim of this research study was:

“To empirically investigate innovation at the level of SMEs and their impact on firm growth. It aims to identify the types of innovation used within SMEs in Kosovo, and the impact of innovation in SMEs growth.”

The nine research questions, which are directly related to the objectives of this research study, are considered against the research findings, and final conclusion was given. This is followed by policy implications, in terms of company’s management and government. Furthermore, the limitations of this research study and the identification of potential future areas for further research in the field of innovation and SMEs growth are presented. Finally, the main areas of knowledge contribution were reviewed for this research investigation.

8.2 Research Questions Analysis

The following section includes conclusions related to the main research question.

Is the introduction of different types of innovations associated with the growth of SMEs?

Each research question is presented followed by overall conclusions drawn from the questionnaire and the interviews conducted for the investigation. Considerations of previous studies are also used to develop the conclusions.

8.2.1 Research Question 1

RQ1: Which types of innovation (product, process, marketing and organizational) are predominant in SMEs that affect firm growth?

Questionnaire Investigation:

Empirical findings show that SMEs have introduced product/process innovation, organizational innovation and marketing innovation. The results present that most of the organizations have introduced organizational innovation (97), followed by product/process innovation (61), and marketing innovations (49). The logistic model estimation shows that product and marketing innovations are statistically significant and both of them have resulted to positively affect firm growth, while the p-value in case of organizational innovation resulted to be not significant. In case of the questionnaire, the SMEs were asked whether they have introduced product/process innovation; thus, these two types of innovations has been grouped, and we don't know how many SMEs have introduced only product innovations, or process one. Moreover, the literature review findings indicate that product innovation has an impact in firm growth, while for organizational and marketing innovations, there are mixed results. These results indicated that the interview stage of investigation was required in order to have a deeper understanding on types of innovations and impact on firm growth.

Interview Investigation: It was at this stage that a more detailed investigation was conducted to examine innovation types introduced by SMEs, including whether they have developed combined innovation, sales from innovation product and services in percentage, and average time to break even from innovation investment. Most of the respondents highlighted product (92%), process (50%) and organizational innovations (63%) than of marketing innovations (33%). This might be evidence of a greater level of engagement with product, organizational and process innovations in Kosovo SMEs. The interview results indicate positive relationship with firm growth in terms of sales, including organizational innovation even though it has intangible nature. More precisely, most firms achieved yearly sales from innovation of 20-40% (29%) and more than 40% (25%). There are many SMEs that have introduced combined innovation, meaning that the development of one innovation led to another one. Most of the interviewed enterprises have achieved average breakeven point for 1-6 months after they developed a certain innovation

It can be concluded from interview that difference among innovation types was examined, including the understanding of combined innovation within SMEs, and the specific contribution in firm growth in terms of sales from innovation. Any innovation is developed in order to complement at least one other form of innovation. Thus, implications are that firm should follow a multifaceted approach to innovation, which means new processes are introduced along with

new products (Doran, 2012). Overall, the research results are in course of many studies that conclude positive relationship between innovation and firm growth in terms of sales (Bayus *et al.*, 2003; Oke *et al.*, 2007; Chetty & Stangl, 2010; Ar & Baki, 2011; Rosli & Sidek, 2013). Organizational structure should be developed to encourage introduction of new innovations (Hansen & Birkinshaw, 2007). Overall, this research has provided substantial evidence of the positive relationship between innovation and SMEs growth.

8.2.2 Research Question 2

RQ2: What are the entrepreneurs and internal firm characteristics that affect firm growth?

Questionnaire Investigation:

In terms of entrepreneur characteristics, the research study was focused on the motivation to start a business, as well as other entrepreneurs' characteristics, such as education level, work experience, age and gender. From these variables, only work experience resulted to be significant that affect positively firm growth. The main motivation to start up was related to pull factors. The majority of owners were with secondary school education and Bachelor Degree. The average age of experience of owner is 8 years, before opening their own business. The average age of entrepreneur was 37 years and most of them were males. The logistic model estimation shows that firm age and trade sector are statistically significant, but negatively affect firm growth. The average age of the firm is 10 years old. Most of the firms came from trade and service sector.

Interview Investigation:

For the interviews, additional entrepreneur and firm characteristics were added. Thus, parameters relevant to entrepreneur include gender, age, education, work experience, start-up motivation and position in the enterprise while those related to firm include location, age of the firm, registration form, industry and firm size. Related to entrepreneur characteristics, most of the people interviewed were male, with the average age of 34 years old. Interestingly, related to education of entrepreneur, most of them had either master or bachelor degrees, which shows that they are highly educated. Similarly to questionnaire results, the average year of experience of entrepreneur was 7 years. Considering that the interviewed SMEs were all those that have developed at least one innovation in the last three years, it can be concluded that most of these

SMEs were established due to the positive factors which include pull factors, or in combination of pull and push factors. These include motivated entrepreneurs who have the capability to grab opportunity in the market. The majority of interviewed people were owner/manager, meaning that they held two positions within enterprise. Moreover, related to firm characteristics, most of them were located in urban areas. The average age of the firm was 8 years old and most of them were registered as Limited Liability Company. Most of the interviewed firms came from service sector. When analyzing the structure of SMEs, they are divided proportionally among micro, small and medium enterprises, while the turnover differs among them.

In conclusion to this research question, more or less similar parameters related to entrepreneur and firm have been investigated within questionnaire and interview. Segal et al. (2005) and Asah et al. (2015) argues that there is a predominance of business ownership driven by pull factors; thus, they are more likely to succeed and have a better chance of survival. There is an improved turnover growth with increased level of owners' education (Akinboade, 2015). The previous entrepreneur experience plays a significant role to firm growth (Gao & Hafsi, 2015). Previous research shows also that older top managers tend to be less likely to take risks and to invest in growth strategies compared to their younger counterparts (Hambrick & Mason, 1984; Mudambi & Treichel, 2005). Earlier studies show mixed results related to gender of entrepreneur and its effect on firm performance. Similarly, some studies show the age of the firm affects positively firm growth (Calantone et al., 2002), while other studies show negative relationship between them (Colombelli, 2015). Related to the industry that SMEs operate, if the industry dynamism is increasing, then innovation is more common on those firms, irrespective of which industry they are operating (Thornhill (2006). According to Krasniqi (2009), those people living in urban areas are as twice more likely to be involved in entrepreneurial activities than others living in rural areas. Firms that operate in the urban locations are more likely to grow than other firms (Krasniqi & Mustafa, 2016).

8.2.3 Research Question 3

RQ3: What kinds of innovations (incremental or radical) are developed by SMEs to improve firm growth?

Questionnaire Investigation:

The results of the empirical research show that the degree of innovation in most of Kosovo SMEs is improvement of existing products, meaning that their innovation developed is incremental. The logit model estimates show that the new to the firm innovations variable is significant, but it affects negatively the firm growth.

Interview Investigation:

Interestingly, the results from the interviews show that most of the innovations were new to the market, even though they are considered incremental innovations as well. The results from the interviews indicate also the percentage of annual turnover from new to the market innovation, new to the firm innovation, as well as from existing products and services.

The most interesting conclusion related to innovation degree is that in Kosovo, SMEs have developed new to the market innovations, but they were incremental. There are mixed results from review of literature; thus, more research should be conducted to understand the degree of novelty of innovations that should derive from SMEs.

8.2.4 Research Question 4

RQ4: What are the innovation sources used by SMEs that affect firm growth?

Questionnaire Investigation:

The empirical results show that 49% of SMEs have cooperated to develop innovation. From the logit model estimates, it was tested that SMEs cooperate with others to achieve firm growth; nevertheless, it came with non-significant value.

Interview Investigation:

In contrary, empirical results from interview show that the main source of innovation in Kosovo SMEs was developing innovation by themselves, with very few firms cooperating to bring new innovations.

It can be concluded that the empirical data shows contradictory results between the questionnaire and interviews. Even in literature, there are mixed results related to innovation source. Several studies conclude that cooperation is not a prerequisite for innovation development in SMEs

(Kemp et al., 2003). Yet, this might be a helpful tool for SMEs in Kosovo to succeed. It would be a way to share risks and benefits related to innovation, and they will be less hesitant to try new innovative opportunities (Scupola, 2014; Lefebvre et. al., 2015).

8.2.5 Research Question 5

RQ5: What are the driving factors for successful innovation to SMEs that affect firm growth?

Interview Investigation:

Successful innovation is crucial for SMEs in Kosovo to achieve firm growth. The detected effects of innovation include better quality of products and services, increased production capacity, enter new markets and others. In addition, main drivers of innovation are innovation budget, employees' skills, top management support and dealing with employees' resistance to changes. Moreover, the benefits of innovation can be huge and lead to higher turnover, better reputation, and higher quality products and services, ensuring competitive position in the market.

Thus, it can be concluded that SMEs in Kosovo understand that it is worth innovating beside the financial constraints and risks associated to that. Some of the positive effects of innovation are increase number, speed and quality of product launched and developed, improved customer service, quality transparency, cost benefit and others (Laforet, 2000). The main foundations of innovation include management support, customers, the market and employees. The empirical results are partly consistent with findings from Scozzi et al. (2005), who highlighted that the main platform of innovations are quality improvement, product marketing and cost reduction.

8.2.6 Research Question 6

RQ6: What are the hampering factors for innovation development that affect firm growth?

Interview Investigation:

The empirical results show that the majority of interviewed firms have abandoned innovation activities in the conception stage, where market factors and cost factors were the main challenges that enterprises encountered. There are many hampering factors to innovation, which may impede SMEs to come up with new innovations. The main ones include cost factors, market

factors, as well as lack of skilled human resources. These factors have resulted often to abandon innovation activities. Very often market was not ready for new products and services even though they added value because of the cost. Also, a major challenge is non-qualified staff, who is not fully motivated to provide their best, considering the moderate level of innovation culture within a firm.

It can be concluded that SMEs in Kosovo should find different ways to mitigate these hampering factors which are making them incapable of introducing innovations. Similar barriers to innovation have been identified also by other studies, such as lack of funds within enterprise and high innovation costs, uncertain demand innovative goods or services, difficulties in finding cooperation partners for innovation, lack of qualified personnel, and a lack of information on markets (Duarte et al., 2017). Some authors highlight that lack of collaboration for innovation development is considered impeding factor to innovation (Laforet & Tann, 2006; Loewe & Dominiquini, 2006; O'Sullivan & Dooley, 2009).

8.2.7 Research Question 7

RQ7: What kind of innovation activities is developed by SMEs and which are the most important information sources for innovation activities?

Interview Investigation:

There are various innovation activities that are conducted by SMEs to succeed. These include trainings, followed up by acquisition of machinery, equipment and software, then in house R&D, market introduction of innovation, acquisition of other external knowledge and extramural R&D. In addition, SMEs in Kosovo consider market sources as the main information source when developing innovative activities, followed by internal sources, internet search & others, as well as institutional sources.

Nevertheless, in Kosovo, SMEs has not invested in R&D at high extent. They only have trained staff in order to be capable to cope with changes in organization as a result of innovations. Trainings are very crucial toward successful change within organizations (del Val & Fuentes, 2003). Also, there is a direct relationship between R&D investment and innovation capacity; yet, SMEs can innovate also with low levels of R&D expenditure (De Martiono & Magnotti, 2017).

Moreover, the most important sources of innovation include internal sources from peers, new employees or internally generated data and reports; as well as external sources such as peers; meetings, conferences; publications; and electronic information services (Maguire et al., 2015).

8.2.8 Research Question 8

RQ8: Do SMEs receive subsidies for introducing innovation that affects firm growth?

Questionnaire Investigation:

Empirical results show that most of the respondents claim that the level of subsidies for innovation was very low too, where only 11.9% received some kind of subsidy in 2012, from EU funds, central government or local government. Moreover, the logit model estimates indicates non-significance value.

Interview Investigation:

Similar results are presented through interviews, as well. A challenge in Kosovo SMEs is that few SMEs (30%) have benefited from subsidies to innovation. Also, financial subsidies were small, and didn't cover the whole investment to innovation.

It can be concluded that SMEs in Kosovo have not benefited from subsidies at high extent. Nevertheless, some studies emphasize the positive impact between subsidies and SMEs growth (Harris & Trainor, 1995; Kim, 2000; Rehman, 2017). Subsidies are crucial for innovation development, not only from private parties, but it should be duty of government to implement such policies (Rehman, 2016).

8.2.9 Research Question 9

RQ9: How innovative is the organizational culture within SMEs?

Questionnaire Investigation: Several parameters were used to answer this question, such as innovative culture within the firm, linkage of innovation with organizational strategy, R&D, intellectual property rights and ISO Standards. Nevertheless, questionnaire includes only R&D activities. Empirical findings present the level of R&D innovation activities for the creation or

substantial modification of products, services or new processes during the past three years, which is only 13.2% in 2012, and it has non-significant value in logistic model estimates. This might be because small firms encounter difficulties on spending in R&D, as they are very costly and risky, as they don't possess capital and extensive resources and lower access to external funding compared to larger ones.

Interview Investigation:

In Kosovo, there is a moderate innovation culture within SMEs. None of the SMEs have internal innovation policy that would stimulate employees to bring new innovative proposals and improve firm growth. Mostly, ideas come from the owners, but there are cases that ideas come also from employees and others, such as customers, suppliers and academics. Nevertheless, when an innovation is introduced, the support from top management is very high, accompanied with communication, meetings and trainings. Thus, there are few cases of resistance to change by employees, which were managed well. Innovation is at some extent linked to organizational strategy, more has to be done in this direction. Very few SMEs in Kosovo have R&D employees; this can of responsibility usually is part of the job of other positions, which is a hindering factor to successful innovation. Also, there are few SMEs in Kosovo who have patents for their product or services, or register trademark or industrial design. This is because of the complicated legal procedure and because of their cost. Also, not many SMEs are certified with ISO standards as it seem something "luxury" to many SMEs, and do not know their importance.

Related to this research question, it can be concluded that the level of innovative culture within SMEs in Kosovo is moderate. Different studies emphasize that innovative ideas come from demographics, managers/owners, employees, industry/market structure analysis, fairs and exhibitions, customers, networking and competition (Scozzi et al., 2005; Laforet & Tann, 2006). The problem in Kosovo SMEs might be the lack of skilled employees, so owners/managers do not trust them as a source for innovative idea. Furthermore, it is the leadership capability of managers to select the right communication style with different levels of employees to ease the process of change within firm (Simoës & Esposito, 2014). Resistance to change is more present when an organization introduced radical innovation rather than incremental one (del Val & Fuentes, 2003). Related to innovation link with business strategy, different studies claim that SMEs focus on proactive innovation strategy which offers them short term route to survival and long-term opportunity to achieve firm growth (Kenny & Reedy, 2006; Al-Ansari et al., 2013).

There is a link between number of new innovations and commitment to R&D investment, which results to higher profits (Tidd et al., (2005). Even though patents are used to protect from imitation (de Rassenfosse, 2012), SMEs may not be able to afford the expense of activities related to patenting. Also, the industrial design rights are not used at high extent by SMEs (Hanel, 2006). On the other hand, registered trademarks are more common to SMEs, as they are cheap and easy to access offering protection to product (Brem et al., 2017). Besides that, there is no consensus in the review of literature about ISO standards and firm performance (Ilkay & Aslan, 2012). Moreover, recent studies indicate that very low levels of patent activities have been recorded by Western Balkans. Thus, it can be assumed that SMEs still do not recognize the role of patenting to protect intellectual property (Rocheska et al., 2017).

8.3 Research Methodology and Design

At the beginning of this research investigation, a conceptual framework was developed based on the key variables from the literature review, which included previous research studies. The main result of this led to the formulation of nine research question, which were subsequently investigation. Therefore, the conceptual framework was used as tool to organize the data collection through the sequential mixed methods model as shown in Figure 8.1.



Figure 8.1 Explanatory Sequential Model

Source: Creswell, 2009

The Explanatory sequential Model was suitable research design as it moved from exploratory to explanatory in nature and ensured that the research was conducted with considerable care (Creswell, 2009). This approach was efficient, considering that there was evolution of research journey, as the results were at a greater depth and offer valuable conclusions and contributions in this research study. In the final stage in this explanatory sequential model, the empirical findings from questionnaire and interviews were compared to answer the research questions, which resulted in a thorough investigation and suitable conclusions. It should be highlighted that the interviews provided a wider scope and details required to explain the impact of innovation in SMEs growth.

8.4 Policy implications

It is increasingly clear that SMEs play a major role in innovation development. The following are some implications from company's management and government.

The implications of results are important for policy makers since they show that the development of innovations is important for increasing firm performance.

8.4.1. Company's management

Management should improve their organizational culture and take actions to expand their knowledge about innovation by establishing network with customers, business groups and industries, as well as academic institutions. This will solve the problem of human skills and resource scarcity, as well as it will enable them to share the benefits and risks associated with introduction of innovation. Managers should use their resources and capabilities efficiently to implement innovation and be aware of the innovation challenges. Coordination of innovation activities should be done based on the conceptual model by focusing on entrepreneur and firm characteristics. More importantly, a stronger link between innovation and organizational strategy should be developed. Employees should be encouraged to bring innovative ideas by providing them various rewards, which can be regulated by internal innovation policy. In Kosovo, only employees who have more informal relationship with owner/manager are motivated to express innovative ideas. Also, the empirical findings reveal insights into Kosovo SMEs, which shows that innovation characteristics can improve business performance. This might further encourage SMEs managers to give higher efforts and try to develop different innovative ideas. They need to allow all employees to participate in the innovation process, and encourage them to look for new knowledge and skills outside their tasks. These implications should extend to other SMEs in comparable markets, which are in developing stage, so that they benefit from the experience of the Kosovo market. It is important that managers are capable of managing their resources to implement innovation activities by incorporating innovation as strategic goals, exploring new opportunities, allocating resources for R&D activities, orienting in technology to support innovation, as well as creating network with strategic partners for exploring new knowledge and improving capabilities and sharing benefits and risks associated with innovation. It should further encourage SMEs to strengthen innovation capabilities by supporting learning orientation and creativity among employees through continuous education and trainings. Strategic alliances

and cooperation with external sources, such as experts, academic institutions, suppliers, clients and others is necessary to have successful implementation of innovation.

8.4.2 Government

Government should establish national policies, regulatory framework and market conditions to improve competitiveness of SMEs through innovation. This includes infrastructure, institutional support, legal and regulatory frameworks, funding mechanisms, set-up and operation costs, education and research institutions and capacity building, and market restructure. It should establish flexible laws and incentives for SMEs. SMEs should have full access to resources and information and feedback from SMEs is required to formulate programs that suit their needs. Assistance to SMEs in relation development of new products and services to test in marketplace and having programmes in place to ease SMEs access to R&D. Policy-makers might be able to use these research findings as valuable input in creating regulations and introducing measures for promoting innovation activities of SMEs as an essential prerequisite for strengthening growth potentials of the Kosovo economy. Investment in human capital is needed to improve firm performance; thus, there should be established collaboration between universities and firms to understand the skills and capabilities that are needed that employees should possess when starting to work in a firm. In addition, intellectual property rights are not regulated at high level within Kosovo, which might discourage SMEs to adopt radical innovations. Thus, there is a need to have legal system in Kosovo that affirms the legitimacy of actions in relation to entrepreneurial activities.

There should be developed such policies that directly help SMEs activities, including government schemes offering consulting, training, funding, networking, and workshop to build strategic resources and capabilities in relation to innovation development in this changing environment. These government schemes should be offered to the SMEs with high growth potential, as it would enhance dynamism of private sector and hence, contribute to economic growth in Kosovo. A number of funds can be implemented, such as seed, community innovation grants, as well as financial support to academic research and development. Financial instruments to fund SMEs are of crucial importance to their growth, including access to R&D and reinforcement of patent and intellectual property protection to favor the commercialization and knowledge transfer from academic institutions to firms, and vice versa. Beside the government schemes, to cope with internal resource and capabilities constraints, firm co-operation may be

one of the best solutions to support them in bringing new innovations based on the market demand.

8.5 Limitations of the study

As for any research, there are some limitations that should be taken in account within all research investigation. First, although the sample is composed of an acceptable amount of data from SMEs in Kosovo, it could be seen the higher response rate of service sector, compared to manufacturing and trade sectors, which has an impact on the representativeness of our sample. Thus, the generalization of our findings to all SMEs in Kosovo is still limited, and should be interpreted with caution. Nevertheless, the sample does represent a broad range of SMEs, including micro, small and medium firms, which goes beyond the scope of some previous studies in innovation. Second, the data used in this study were gathered from single informants, which were owners and/or managers. This may results in self-report bias (Podsakoff et al., 2003). Yet, it is the owner-managers in SMEs who are able to provide the more accurate information and firm's innovation and SMEs growth (Branzei & Vertinsky, 2006). Whilst the methodological approach included survey and interview data collection methods, other types of data collection, such as observation and content analysis of specific innovative firm may have provided a wider perspective. The interviews occurred as a cross-sectional study; however, a longitudinal study may have produced differing results. One-shot approach was used for interviews, meaning that the researcher visited each organization at one occasion. Number of visits during a longer period of time could be used to make better investigation. Also, even though different dimensions of innovation and SMEs growth have been covered, this research study cannot claim to cover all relevant dimensions.

8.6 Future areas for research

The results from this research study open up avenues for future research. Future research should attempt to control these limitations, by better understanding how the innovation is carried out. It should include SMEs from broad range of industry sectors, cultural contexts and other geographical areas to increase the relevance of findings and be able to generalize our data. Collecting data from multiple respondents, with different function units and management levels can give a better balance, considering that this study included only senior level positions within SMEs. Moreover, to test the effectiveness of innovation development within SMEs, a future research study could investigate companies over time from the initial stage to the full

development of innovation. A study using longitudinal design might help to explain the findings further, as it would enable to assess the effectiveness of the innovation itself and the implementation process.

8.7 Contribution to the Knowledge

This research investigation has contributed to the field of innovations in SMEs growth in several ways:

The identification of different hypotheses is a distinctive contribution as they create a conceptual framework, allowing for the understanding of complex relationships between the various factors related to entrepreneur, firm and innovations across three sectors, such as service, trade and manufacturing. These variables were not considered altogether in previous studies; rather, researchers have focused on specific some of them. Thus, they provide a holistic framework for future studies in innovation and SMEs growth.

The study expands the previous knowledge and existing literature of innovation and its relationship with firm growth. This study is significant, as it has added a unique dimension to the innovation field of knowledge by researching SMEs in Kosovo, as developing country, which is different from other developed countries. This study reveals that the degree of innovation within Kosovo SMEs is incremental and it differs from other developed countries.

The use of mixed research approach, including quantitative and qualitative methods may lead for other studies in innovation and SMEs growth, which has up to now been dominated by a quantitative approach. This study included 268 respondents in the Questionnaire and 24 SMEs in the interview investigations. Thus, the integration of both methods allowed the researcher to address research questions in a comprehensive manner.

To the researchers' knowledge, this is the first empirical study of Kosovo SMEs in service, trade and manufacturing sectors that investigates firm, entrepreneur and innovation dimensions with firm growth.

A final contribution is based on the practical implications for SMEs to improve their performance in relation to the introduction of innovations. For example, a practical implication

can be stages of innovation development process as presented in Figure 3.3. This permits the planning and communication of actions to be undertaken in order to complete implementation of innovation successfully.

8.8 Summary

This chapter provided a summary of research questions, research methodology used, and contribution and implications of the study. The personal reflections of researcher on this study journey provided concluding remarks of this investigation.

REFERENCES

- Ahimbisibwe, G. M., Nkundabanyanga, S. K., Nkurunziza, G., & Nyamuyonjo, D. (2016). Knowledge absorptive capacity: do all its dimensions matter for export performance of SMEs? *World Journal of Entrepreneurship, Management and Sustainable Development*. 12(2), pp. 139-160.
- Aidis, R. (2005). Institutional Barriers to Small- and Medium-Sized Enterprise Operations in Transition Countries. *Small Business Economics*. 25(4), pp. 305-318.
- Akinboade, A. O. (2015). Determinants of SMEs growth and performance in Cameroon's central and littoral provinces' manufacturing and retail sectors. *African Journal of Economic and Management Studies*. 6(2), pp. 183-196.
- Al-Ansari, Y., Pervan, S., & Xu, J. (2013). Innovation and business performance of SMEs: the case of Dubai. *Education, Business and Society: Contemporary Middle Eastern Issues*. 6(3/4), pp. 162-180.
- Almus, M. & Nerlinger, E.A. (2000). Testing Gibrat's law for young firms – empirical results for West Germany. *Small Business Economics*. 15, pp. 1-12.
- Almus, M. (2002). What characterizes a fast-growing firm? *Applied Economics*. 34(12), pp. 1497-508.
- Alstete, J.W. (2003). On becoming an entrepreneur: an evolving typology. *International Journal of Entrepreneurial Behaviour & Research*. 8(4), pp. 222-34.
- Amara, N., Landry, R., Becheikh, N. & Ouimet, M. (2008). Learning and novelty of innovation in established manufacturing SMEs. *Technovation*. 28(7), pp. 450-463.
- Ar, I. M. & Baki, B. (2011). Antecedents and Performance Impacts of Product versus Process Innovation: Empirical Evidence from SMEs Located In Turkish Science and Technology Parks. *European Journal of Innovation Management*. 14 (2), pp. 172-206.
- Aragon-Sanchez, A & Sanchez-Marin, G 2005, 'Strategic orientation, management characteristics, and performance: A study of Spanish SMEs', *Journal of Small Business Management*, vol.43, no.3, pp. 287-308.
- Asah, F., Fatoki, O. O., & Rungani, E. (2015). The impact of motivations, personal values and management skills on the performance of SMEs in South Africa. *African Journal of Economic and Management Studies*. 6(3), pp. 308-322.
- Atuahene-Gima, K, 1996. Market orientation and innovation. *Journal of Business Research*. 35, 93–103.

- Axarloglou, K. (2003). The Cyclicalities of New Product Introductions. *The Journal of Business*. 76(1), pp. 29-48.
- Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and Medium Enterprises Across the Globe. *Small Business Economics*. 29, pp. 415-434.
- Babbie, E. (2005). The basics of social research. Thomson Wadsworth, Belmont CA
- Baer, M. & Frese, M. (2003). Innovation is not enough: climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organisational Behavior*. 24, 45–68.
- Basberg B.L. (1987). Patents and the measurement of technological change: A survey of the literature. In: *Research Policy*, Vol. 16, Iss. 2-4, pp. 131-141.
- Bayus, B. L., Erickson, G. & Jacobson, R. (2003). The Financial Rewards of New Product Introductions. *Management Science*. 49 (2), pp. 197-210.
- Bazeley, P. (2007). *Qualitative data analysis with NVivo*, Sage, London, UK.
- Becchetti, L., & Trovato, G. (2002). The determinants of growth for small and medium sized firms. The role of the availability of external finance. *Small Business Economics*. 19(4), pp. 291-306.
- Benzing, C., & Chu, M. H. (2009). A comparison of the motivations of small business owners in Africa. *Journal of Small Business and Enterprise Development*. 16(1), pp. 60-77.
- Benzing, C., Chu, H.M. & Callanan, G. (2005). Regional comparison of the motivation and problems of Vietnamese entrepreneurs. *Journal of Developmental Entrepreneurship*. 10, pp. 3-27.
- Benzing, C.M., Chu, H. & Kara, O. (2009). Entrepreneurs in Turkey: a factor analysis of motivations, success factors, and problems. *Journal of Small Business Management*. 47(1), pp. 58-91.
- Berglund, H. (2007). Researching entrepreneurship as lived experience, in Neergaard, H. and Ulhoi, J. (eds.) *Handbook of Qualitative Research Methods in Entrepreneurship*, Cheltenham: Edward Elgar.
- Bhatnagar, N., & Gopaldaswamy, A. (2017). The role of a firm's innovation competence on customer adoption of service innovation. *Management Research Review*. 40(4), pp. 378-409.
- Bhutta, S. K. M., Rana, I. A., & Asad, U. (2008). Owner characteristics and health of SMEs in Pakistan. *Journal of Small Business and Enterprise Development*. 15(1), pp. 130-149.

- Bianchi, M., S. C. Orto, F. Frattini. & P. Vercesi (2010). Enabling Open Innovation in Small- and Medium-Sized Enterprises: How to Find Alternative Applications for Your Technologies. *R and D Management*. 40(4), pp. 414-430.
- Biggeri, M., Gambelli, D., & Phillips, C. (1999). Small and medium enterprise theory: evidence for Chinese TVEs. *Journal of International Development*. 11, pp. 197-219.
- Block, J.H. & Wagner, M. (2007). Opportunity recognition and exploitation by necessity and opportunity entrepreneurs: empirical evidence from earnings equations, in Solomon, G.T. (Ed.). Proceedings of the Sixty-Sixth Annual Meeting of the Academy of Management. ISSN 1543-8643, Philadelphia.
- Blumentritt, T. & Danis, W. (2006). Business strategy types and innovative practices. *Journal of Management Issues*. 18(2), pp. 274-291.
- Bogenhold, D. & Staber, U. (1991). The decline and rise of self-employment. *Work, Employment and Society*. 5(2), pp. 223-39.
- Bolon, D. (1998). Bureaucracy, Institutional Theory and Institutionaocracy: Applications to the Hospital Industry. *Journal of Health and Human Services Administration*. 21(1), pp. 70-79.
- Braendle, U. C. Theories of the firm. Retrieved from http://bwl.univie.ac.at/fileadmin/user_upload/lehrstuhl_ind_en_uw/lehre/ss08/CSR/lecture_CSR_08_article_braendle_ToF.pdf
- Branzei, O. & Vertinsky, I. (2006). Strategic pathways to product innovation capabilities in SMEs. *Journal of Business Venturing*. 21(1), pp. 75-105.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in Psychology. *Qualitative Research in Psychology*. 3(2), pp. 77-101.
- Brem, A & Voigt, K-I. (2009). Integration of market pull and technology push in the corporate front end and innovation management-insights from the German software industry. *Technovation*. 29(5), pp. 351-367.
- Brem, A., Nylund, P. A., & Hitchen, E. L. (2017). Open innovation and intellectual property rights: How do SMEs benefit from patents, industrial designs, trademarks and copyrights? *Management Decision*. 55(6), pp. 1285-1306.
- Bryman, A. (2008). Social Research Methods. 3rd edition, Oxford: Oxford University Press.
- BSCK. (2011). Entrepreneurship and Small Business Development in Kosovo. Research Report. Retrieved from: <http://www.bsckosovo.org/publikimet/20120124100346631.pdf>
- BSCK. (2013). Entrepreneurship and Small Business Development in Kosovo in 2012. <http://www.bsckosovo.org/publikimet/20140205055101250.pdf>

- Burke, R. J. (1996). Information sources and their usefulness in a professional services organization. *Management Decision*. 34(1), pp.60-65.
- Bygrave, W. (2007). The entrepreneurship paradigm revisited', in Neergaard, H. and ParmUlhoi, J. (eds.) *Handbook of Qualitative Research Methods in Entrepreneurship*, Cheltenham: Edward Elgar.
- Calantone, R.J., Cavusgil, S.T. & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*. 31, pp. 515–524.
- Caldwell, R. (1993). Employee involvement and communication. *Journal of Strategic Change*. 2(3), pp. 135-138.
- Calvo, J.L. (2006). Testing Gibrat's Law for Small, Young and Innovating Firms. *Small Business Economics*. 26(2), pp. 117-123.
- Capelleras, J., Greene, F. J., Kantis, H., & Rabetino, R. (2010). Venture Creation Speed and Subsequent Growth: Evidence from South America. *Journal of Small Business Management*. 48(3), pp. 302 - 324
- Casadesús, M., & Giménez, G. (2000). The benefits of the implementation of the ISO 9000 standard: empirical research in 288 Spanish companies. *The TQM Magazine*. 12(6), pp.432-441.
- Castro, L.M., Montoro-Sanchez, A. & Ortiz-De-Urbina-Criado, M. (2011). Innovation in services industries: current and future trends. *The Service Industries Journal*. 31(1), pp. 7-20.
- Chamanski, A. & Waago, S. (2001). Organizational performance of technology-based firms – the role of technology and business strategies. *Enterprise and Innovation Management Studies*. 2, pp. 205-23.
- Chandler, G.N., & Hanks, S.H. (1994). Market attractiveness, resource-based capabilities, venture strategies, and venture performance. *Journal of Business Venturing*. 9 (4), pp. 331–349.
- Chetty, S.K. & Stangl, L. M. (2010). Internationalization and innovation in a network relationship context. *European Journal of Marketing*. 44(11/12), pp. 1725-1743.
- Chu, H.M., Benzing, C. & McGee, C. (2007). Ghanaian and Kenyan entrepreneurs: a comparative analysis of their motivations, success characteristics, and problems. *Journal of Developmental Entrepreneurship*. 12(3), pp. 295-322.
- Chun, H., & Mun, S. (2012). Determinants of R&D cooperation in small and medium-sized enterprises. *Small Business Economics*. 39, pp. 419-436.
- Cliff, J.E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*. 13(6), pp. 523-542.

- Clifton, K.L. & Handy, S.L. (2003). Qualitative Methods in Travel Behaviour Research. In Stopher, P. & Jones, P., eds. (2003). *Transport Survey Quality and Innovation*: Amsterdam: Pergamon, pp. 283-302.
- Clulow, V., Gerstman, J., & Barry, C. (2003). The resource-based view and sustainable competitive advantage: the case of a financial services firm. *Journal of European Industrial Training*. 27(5), pp. 220-232.
- Coad, A., & Rao, R. (2008). Innovation and firm growth in hightech sectors: A quantile regression approach. *Research Policy*. 37, pp. 633-648.
- Colombelli, A. (2015). Top management team characteristics and firm growth: Evidence from a sample of listed companies. *International Journal of Entrepreneurial Behavior & Research*. 21(1), pp. 107-127.
- Conner, K.R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management*. 17(1), pp.121-154.
- Cooper, A., Gimeno-Gascon, F. & Woo, C. (1994). Initial human and financial capital predictors of new venture performance. *Journal of Business Venturing*. 9(5), pp. 371-395.
- Covin, J.G., Slevin, D.P. & Heeley, M.B. (1999). Pioneers and followers: competitive tactics, environment, and firm growth. *Journal of Business Venturing*. 15(2), pp. 175-210.
- Cravens, D.W., Piercy, F. N., & Low, S. G. (2002). The innovation challenges of proactive cannibalisation and discontinuous technology. *European Business Review*. 14(4). pp. 57-267.
- Cravens, DW & Shipp, SH (1991). Market-driven strategies for competitive advantage. *Business Horizons*. 34(1), pp. 53-61.
- Creswell, J. W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Crumpton, M.A (2012). Innovation and entrepreneurship. *The Bottom Line*. 25(3), pp. 98-10.
- Cumming, B. S. (1998). Innovation overview and future challenges. *European Journal of Innovation Management*. 1(1). pp. 21-29.
- Curran, J. & Blackburn, R. (2001). *Researching the Small Enterprise*, London: Sage.
- Dacin, M. T., Goodstein, J. & Scott, W. R. (2002). Institutional Theory and Institutional Change: Introduction to the Special Research Forum. *The Academy of Management Journal*. 45(1), pp. 43-56.

- Damanpour, F., & Wischnevsky, J.D. (2006). Research on innovation in organizations: distinguishing innovation-generating from innovation-adopting organizations. *Journal of Engineering and Technology Management*. 23 (4), pp.269–291.
- Damanpour, F. & Evan, W.M. (1984). Organisational innovation and performance: the problem of organisational lag. *Administrative Science Quarterly*. 29 (3), 392–409.
- Damanpour, F., Szabat, K.A., & Evan, W.M. (1989). The relationship between types of innovation and organisational performance. *Journal of Management Studies*. 26 (6), 587–601.
- Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*. 18(3), pp. 301-331.
- Davidsson, P. (2008). *The Entrepreneurship Research Challenge*, Cheltenham: Edward Elgar.
- de Jong, J.P.J., & Marsili, O. (2006). The fruit flies of innovations: a taxonomy of innovative small firms. *Research Policy*. 35(2), pp. 213-229.
- De Jong, J. P. J., Bruins, A., Dolfsma, W., & Meijgaard, J. (2003). *Innovation in service firms explored: What, how and why? (Strategic Study B200205)*. Zoetermeer, The Netherlands: EIM Business & Policy Research.
- de la Torre, A., Pería, M.S.M. & Schmukler, S.L. (2010). Bank involvement with SMEs: beyond relationship lending. *Journal of Banking and Finance*. 34(9), pp. 2280-2293.
- De Martino, M., & Magnotti, F. (2017). The innovation capacity of small food firms in Italy. *European Journal of Innovation Management*. pp. 1460-1060.
- de Rassenfosse, G. (2012). How SMEs exploit their intellectual property assets: evidence from survey data. *Small Business Economics*. 39(2), pp. 437-452.
- del Val M. P., & Fuentes, C. M. (2003). Resistance to change: a literature review and empirical study. *Management Decision*. 41(2), pp. 148-155.
- Demsetz., H. (1988). The Theory of the Firm Revisited. *Journal of Law, Economics, & Organization*. 4(1), pp. 141-161.
- Deshpande, R., Farley, J.U., & Webster Jr., F. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrature analysis. *Journal of Marketing*. 57, pp. 23-27.
- Dewar, R.D., & Dutton, J.E. (1986). The adoption of radical and incremental innovations: an empirical analysis. *Management Science*. 32(11), pp. 1422-1433.
- Dibrell, C., Davis, P.S., & Craig, J. (2008). Fueling innovation through information technology in SMEs. *Journal of Small Business Management*. 46(2), pp. 203-218.
- Dickinson, P. G. (2008). Company formation and regulation compliance for SMEs (Estonia). *International Journal of Law and Management*. 50(3), pp.136-148.

- Doran, J. (2012). Are differing forms of innovation complements or substitutes? *European Journal of Innovation Management*. 15(3), pp. 351-371.
- Drucker, P.F., 1985. *Innovation and Entrepreneurship*. Butterworth-Heinemann, Oxford
- Duarte, AP. F., Madeira, M. J., Moura, D. C., Carvalho, J., & Moreira, J. R. M. (2017). Barriers to innovation activities as determinants of ongoing activities or abandoned. *International Journal of Innovation Science*.
- Dubini, P. (1989). The influence of motivations and environment on business start-ups: some hints for public policies. *Journal of Business Venturing*. 4(1), pp. 11-26.
- DuRietz, A. & Henreksson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics*. 14(1), pp. 1-10.
- Easterby-Smith, M., Thorpe, R. & Lowe, A. (2002). *Management Research: an introduction*, 2nd ed., London: Sage.
- Europe INNOVA. (2010). *Imp3rove: A European Project with Impact 50 Success Stories on Innovation Management*. Luxembourg: Publications Office of the European Union. Retrieved from https://www.improve-innovation.eu/wp-content/uploads/2010/07/50-Success-Stories-on-Innovation-Management_IMPxrove_50_Success_Stories_web.pdf
- European Commission (1995). Green Paper on Innovation, COM (95) 688, December 1995, Brussels. Retrieved from http://europa.eu/documents/comm/green_papers/pdf/com95_688_en.pdf
- European Commission (2005). *The new SME definition: user guide and model declaration*. Luxembourg: Office for Official Publications of the European Communities.
- European Commission. (2014). *Kosovo* 2014 Progress Report*. Retrieved from http://ec.europa.eu/enlargement/pdf/key_documents/2014/20141008-kosovo-progress-report_en.pdf
- European Commission. (2017). *COSME. Europe's programme for small and medium-sized enterprises*. Retrieved from <http://ec.europa.eu/growth/smes/cosme>
- European Union. (2015). *User Guide to the SME definition*. Publications Office of the European Union.
- Evans, J., S. (1991). Strategic Flexibility for High Technology Manoeuvres: A Conceptual Framework. *Journal of Management Studies*. 28(1), pp. 69-89.
- Fadahunsi, A. (2012). The Growth of Small Businesses: Towards A Research Agenda. *American Journal of Economics and Business Administration*. 4(1), pp. 105-115.

- Fahy, J & Smithee, A. (1999). Strategic marketing and resource based view of the firm. *Academy of Marketing Science Review*. 1999(10), pp.1-21.
- Farrell, K.A. & Hersch, P.L. (2005). Additions to corporate boards: the effect of gender. *Journal of Corporate Finance*. 11(1), pp. 85-106.
- Forsman, H. (2011). Innovation capacity and innovation development in small enterprises. A comparison between the manufacturing and service sectors. *Research Policy*. 40, pp. 739-750.
- Forster, N. (1994). The analysis of company Documentation', in Cassell, C. and Symon, G. (eds.) *Qualitative Methods in Organisational Research*, London: Sage.
- Gaglio, C. & Katz, J. (2001). The psychological basis of opportunity identification entrepreneurial alertness. *Small Business Economics*. 16, pp. 95-111.
- Galbreath, J. (2005). Which Resources Matter the Most to Firm Success? An Exploratory Study of Resource-Based Theory. *Technovation*. 25(9), pp. 979-987.
- Gallaher, M. P., & Petrusa, J. E. (2006). Innovation in the U.S. Service Sector. *Journal of Technology Transfer*. 31, pp. 611-628.
- Gao, Y., & Hafsi, T. (2015). R & D spending among Chinese SMEs: the role of business owners' characteristics. *Management Decision*. 53(8), pp. 1714-1735.
- Garcia, R., Calantone, R., 2002. A critical look at technological innovation typology and innovativeness terminology: a literature review. *Journal of Product Innovation Management*. 19(2), pp. 110–132.
- Gardet, E. & Mothe, C. (2012). SME dependence and coordination in innovation networks. *Journal of Small Business and Enterprise Development*. 19(2), pp. 263-280.
- Garg, V.K., Walters, B.A. & Priem, R.L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*. 24, pp. 725-744.
- GEM. (2011). The Global Entrepreneurship Monitor - Global Report 2011, Global Entrepreneurship Research Association, London.
- Geroski, P, Machin, S. & Van Reenen, J. (1993). The Profitability of Innovating Firms, *RAND Journal of Economics*. 24(2), pp. 198-211.
- Gianiodis, P.T., Ettl, J.E. & Urbina, J.J. (2014). Open service innovation in the global banking industry: inside-out versus outside-in strategies. *The Academy of Management Perspectives*. 28(1), pp. 76-91.
- Gibrat, R. (1931). *Les Inegalite's Economiques*. Paris: Librairie du Recueil Sirey.

- Gilbert, L. S. (2002). Going the distance: „closeness“ in qualitative data analysis software. *International Journal of Social Research Methodology*. 5(3), pp. 222.
- Gill, A. & Biger, N. (2012). Barriers to small business growth in Canada. *Journal of Small Business and Enterprise Development*. 19(4), pp. 656-668.
- Government of Kosovo. (2012). Answers to the questionnaire on the preparation of the Feasibility Study for a Stabilisation and Association Agreement. Retrieved from http://www.mei-ks.net/repository/docs/Answers_to_the_questionnaire_on_the_preparation_of_the_Feasibility_Study_for_a_Stabilisation_and_Association_Agreement.pdf
- Government of Republic of Kosovo. (2011). SME Development Strategy for Kosova 2012-2016. Retrieved from http://www.sme-ks.org/repository/docs/190711_SME_Strategy_Final_angl_441123573.pdf
- Grant, R.M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*. 17, pp. 109-122.
- Gray, C. (2006). Absorptive capacity, knowledge management and innovation in entrepreneurial small firms. *International Journal of Entrepreneurial Behavior & Research*. 12(6), pp. 345-360.
- Greve, H.R. (2003). *Organizational Learning from Performance Feedback: A Behavioral Perspective on Innovation and Change*, Cambridge University Press, Cambridge.
- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*. 133(2), pp. 662-676.
- Hallberg, K. (2000). A market-oriented strategy for small and medium-scale enterprises. The World Bank, International Finance Corporation, *Discussion Paper*, No.40.
- Hambrick, D. & Mason, P. (1984). Upper echelons: the organization as a reflection of its top managers. *The Academy of Management Review*. 9(2), pp. 193-206.
- Han, J.K., Kim, N. & Srivastava, R.K. (1998), Market orientation and organizational performance: is innovation a missing link? *Journal of Marketing*. 62(4), pp. 30-45.
- Hanel, P. (2006). Intellectual property rights business management practices: a survey of literature. *Technovation*. 26(8), pp. 895-931.
- Hansen, M. & Birkinshaw, J. (2007). The innovation value chain: a logic for fixing your company's innovation problems. *Harvard Business Review*. 85(6), pp. 121-37.
- Hardie, M., & Newell, G. (2011). Factors influencing technical innovation in construction SMEs: an Australian perspective. *Engineering, Construction and Architectural Management*. 18(6), pp. 618-636.

- Harris, R. & Trainor, M. (1995). Innovation and R&D in Northern Ireland manufacturing, a Schumpeterian approach. *Journal of Regional Studies*. 27(7), pp. 593-604.
- Hashi, I., & Krasniqi, B. (2010). Entrepreneurship and SME growth: evidence from advanced and laggard transition economies. *International Journal of Entrepreneurial Behaviour & Research*. 17(5), pp. 456-487.
- Havnes, P. A., & Senneseth, K. (2001). A panel study of firm growth among SMEs in Networks, *Small Business Economics*. 16(4), pp. 293-302.
- Hernández-espallardo, M. & Delgado-ballester, E. (2009). Product innovation in small manufacturers, market orientation and the industry's five competitive forces: Empirical evidence from Spain. *European Journal of Innovation Management*. 12(4), pp. 470-491.
- Hirsch-Kreinsen, H. (2008). Low-tech innovations. *Industry and Innovation*. 15 (1), pp. 19–43.
- Hisrich, R.D. & Brush, C. (1986). Characteristics of the minority entrepreneur. *Journal of Small Business Management*. 2(4), pp. 1-8.
- Hoffman, K., Parejo, M., Bessant, J. & Perren, L. (1998). Small firms, R&D, technology and innovation in the UK: a literature review. *Technovation*. 18(1), pp. 39-55
- Holmstrom, B & Tirole, J. (1989). The theory of the firm', in Handbook of Industrial Organization, eds R Schmalensee & RD Willig, Elsevier Science Publishers, Amsterdam. 1, pp.61-133.
- Hoogstra, G.J. & Van Dijk, J. (2004). Explaining firm employment growth: does location matter? *Small Business Economics*. 22(3-4), pp. 179-92.
- Howell, A. (2017). Picking 'winners' in China: Do subsidies matter for indigenous innovation and firm productivity? *China Economic Review*. 44, pp. 154-165.
- Hoxha, D., & Capelleras, J. (2010). Fast-growing firms in a transitional and extreme environment: are they different? *Journal of Small Business and Enterprise Development*. 17(3), 350-370.
- Hulkower, N. (2015). Costing innovation In The Value of Innovation: Impact on Health, Life Quality, Safety, and Regulatory Research. pp. 421-429.
- Hult, G.T., & Ketchen Jr., D.J. (2001). Does market orientation matter? A test of the relationship between positional advantage and performance. *Strategic Management Journal*. 22, pp. 899-906.
- Hunt, A. B. & Morgan, R. M. (1996). The Resource-Advantage Theory of Competition: Dynamics, Path Dependencies, and Evolutionary Dimensions. *Journal of Marketing*. 60(4), pp. 107-114.

- Hyytinen, A. & Toivanen, O. (2005). Do financial constraints hold back innovation and growth? Evidence on the role of public policy. *Research Policy*. 34(9), pp. 1385-1403.
- Ilkay, M. S. & Aslan, E. (2012). The effect of the ISO 9001 quality management system on the performance of SMEs. *International Journal of Quality & Reliability Management*. 29(7), pp. 753-778.
- Independent Evaluation Group. (2008). Financing micro, small, and medium Enterprises: An Independent Evaluation of IFC's experience with Financial intermediaries in frontier Countries. The World Bank. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/6485/448160PUB0Box327413B01official0use0only1.pdf?sequence=1>
- Isaga, N., Masurel, E., & Montfort, K. V. (2015). Owner-manager motives and the growth of SMEs in developing countries: Evidence from the furniture industry in Tanzania. *Journal of Entrepreneurship in Emerging Economies*. 7(3), pp. 190-211.
- Ittner, C.D. & Larcker, D.F. (1997). The performance effects of process management techniques. *Management Science*. 43, pp. 522-534.
- Johnson, A. G. (1995). *The Blackwell dictionary of sociology: A user's guide to sociologic a language*. Cambridge, UK: Basil Blackwell.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*. 33(7), pp. 14-26.
- Julienti, L., Bakar, A. & Ahmad, H. (2010). Assessing the relationship between firm resources and product innovation performance. *Business Process Management Journal*. 16(3), pp. 420-435.
- Kalantaridis, C., & Pheby, J. (1999). Processes of innovation among manufacturing SMEs: the experience of Bedfordshire. *Entrepreneurship & Regional Development*. 11, pp. 57-78.
- Keeble, D. (1997). Small firms, innovation and regional development in Britain in the 1990s. *Regional Studies*. 31(3), pp. 281-93.
- Kemp, R. M. G., Folkeringa, M., de Jong, J. P. J., & Wubben, E. F. M. (2003). Innovation and firm performance (Research Report H2000207). Zoetermeer: SCALES.
- Kim, R.P. (2000). R&D and firm size in the information and telecommunications industry of Korea. *Small Business Economics*. 15(3), pp. 183-192.
- Kirkwood, J. (2009). Motivational factors in a push-pull theory of entrepreneurship. *Gender in Management: An International Journal*. 24(5), pp. 346-364.

- Kirner, E., Kinkel, S., & Jaeger, A., 2009. Innovation paths and the innovation performance of low-technology firms – an empirical analysis of German industry. *Research Policy*. 38 (3), pp. 447–458.
- Klein K. J., & Knight, A. P. (2005). Innovation Implementation: Overcoming the Challenge. *Current Directions in Psychological Science*. 4(5). pp. 243-246
- Klein K. J., & Sorra J. S. (1996). The Challenge of Innovation Implementation. *The Academy of Management Review*. 21(4). pp. 1055-1080.
- Kleinbaum, D.G., Kupper, L.L. and Muller, K.E. (2007), *Applied Regression Analysis and Other Multivariable Methods*, Duxbury Press, Boston, MA
- Kleinknecht, A. (1989). Firm Size and Innovation: Observations in Dutch Manufacturing Industries. *Small Business Economics*. 1(3), pp. 215-222.
- Knippen, T. J., and Green, B. T. (1997). How to respond to Change, *Journal of Workplace Learning*. 9(1). pp. 17-19
- Knott, A.M. (2001). The dynamic value of hierarchy. *Management Science*. 47, pp. 430-448.
- Koen P.A., Ajamian G.M., Boyce S., Clamen A., Fisher E., Fountoulakis S., Johnson A., Puri P., Seibert R.A., Davidson J., D’Amoe R., Elkins C., Herald K., Incorvia M., Johnson A., Karol R., Seibert R., Slavejkov A, Wagner K. (2002). Fuzzy Front End: Effective Methods, Tools and Techniques. In: Belliveau P., Griffen A., Somermeyer, S. (Eds.): *The PDMA ToolBook 1 for New Product Development*, John Wiley & Sons. Inc., Hoboken, New Jersey, pp. 5-35.
- Koen P.A., Ajamian G.M., Burkart R., Clamen A., Davidson J., D’Amoe R., Elkins C., Herald K., Incorvia M., Johnson A., Karol R., Seibert R., Slavejkov A, Wagner K. (2001). Providing Clarity and a Common Language to the “Fuzzy Front End”. In: *Research Technology Management*, 44(2), pp. 46-55.
- Koga, T. (2005). R&D Subsidy and self-financed R&D: the case of Japanese high-technology start-ups. *Small Business Economics*. 24(1), pp. 53-62.
- Kohn, M. & Scott, J. T. (1982). Scale economics in research and development: the Schumpeterian hypothesis. *Journal of Industrial Economics*. 30(3), pp. 239-49.
- Konsti-Laakso, S., Pihkala, T., & Kraus, S. (2012). Facilitating SME innovation capability through business networking. *Creativity and Innovation Management*. 21(1), pp. 93-105.
- Kosovo Agency of Statistics. (2015). *Statistical Yearbook of the Republic of Kosovo for 2015*. Retrieved from <https://ask.rks-gov.net/media/1303/statistical-yearbook-of-the-republic-of-kosovo-2015-08102015.pdf>

- Kosovo Agency of Statistics. (2016). Statistical Yearbook of the Republic of Kosovo 2016. Retrieved from <http://ask.rks-gov.net/media/2577/statistical-yearbook-2016-ang.pdf>
- Kosovo Agency of Statistics. (2017). Statistical Repertoire of Enterprises in Kosovo Q4 – 2016. Retrieved from <http://ask.rks-gov.net/media/2829/statistical-repertoire-of-enterprises-in-kosovo-q4-2016.pdf>
- Kosovo Agency of Statistics. (2017). Statistical Yearbook of the Republic of Kosovo 2017. Retrieved from http://ask.rks-gov.net/media/3502/vjetari_statistikor_i_republik%C3%ABs_s%C3%AB_kosov%C3%ABs_-2017_-final.pdf
- Krasniqi, A, B. (2012). *Entrepreneurship and small business development in Kosovo*”, New York, US: Nova Science Publisher
- Krasniqi, B. (2009). Personal, household and business environmental determinants of entrepreneurship. *Journal of Small Business and Enterprise Development*. 16(1), pp. 146-166.
- Krasniqi, B. (2012). Building an Expanded Small Firm Growth Model in a Transitional Economy: Evidence on Fast Growing Firms. *Journal of East-West Business*. 18(3), pp. 231-273.
- Krasniqi, B., & Desai, S. (2016). Institutional drivers of high-growth firms: country-level evidence from 26 transition economies. *Small Business Economics*. 47(4), pp. 1075-1094.
- Krasniqi, B., & Kutllovci, E. (2008). Determinants of innovation: evidence from Czech Republic, Poland and Hungary. *International Journal Technoentrepreneurship*. 1(4), pp. 378-404.
- Krasniqi, B., & Mustafa, M. (2016). Small firm growth in a post-conflict environment: the role of human capital, institutional quality, and managerial capacities. *International Entrepreneurship Management Journal*. 12(4), pp. 1165-1207.
- Krasniqi, B., Shiroka-Pula, J., & Kutllovci, E. (2008). The determinants of entrepreneurship and small business growth in Kosova: evidence from new and established firms. *International Journal Entrepreneurship and Innovation Management*. 8(3), pp. 320–342.
- Kruegar, R.A. (1994). *Focus Groups: a practical guide for applied research*. California: Sage
- Lach, S. (2000). Do R&D Subsidies Stimulate or Displace Private R&D? Evidence from Israel. National Bureau of Economic Research Working Paper Series no. 7943.
- Laforet, S. & Tann, J. (2006). Innovative characteristics of small manufacturing firms. *Journal of Small Business and Enterprise Development*. 13(3), pp. 363-387.
- Laforet, S. (2011). A framework of organisational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behaviour & Research*. 17(4), pp. 380-408.

- Laursen, K. & A. Salter (2006). Open for Innovation: The Role of Openness in Explaining Innovation Performance among U.K. Manufacturing Firms. *Strategic Management Journal*. 27(2), pp. 131-150.
- Lee, S., Park, G., Yoon, B., & Park, J. (2010). Open innovation in SMEs—An intermediated network model. *Research Policy*. 39(2), pp. 290-300.
- Lefebvre L. A. & Lefebvre E. (1993). Competitive Positioning and Innovative Efforts in SMEs. *Small Business Economics*. 5(4), pp. 297-305.
- Lefebvre, E. & L. Lefebvre. (1992). Firm Innovativeness and CEO Characteristics in Small Manufacturing Firms. *Journal Engineering and Technology Management*. 9(3-4), pp. 243-272.
- Lefebvre, V., De Steur, H., & Gellynck, X. (2015). External sources for innovation in food SMEs. *British Food Journal*. 117(1), pp. 412-437.
- Lesáková, L. (2014). Evaluating Innovations in Small and Medium Enterprises in Slovakia. *Procedia-Social and Behavioral Sciences*. 110, pp. 74-81.
- Levy, M., & Powell, P. (1998). SME Flexibility and the Role of Information Systems. *Small Business Economics*. 11(2). pp. 183-196.
- Lewis, J. & Ritchie, J. (2003). Generalising from Qualitative Research. In Ritchie, J. and Lewis, J. (eds) *Qualitative Research Practice: a guide for social science students and researchers*. London: Sage.
- Lind, A.D., Mason, D.R. & Marchall, G.W. (2000). *Basic Statistics for Business and Economics*, 3rd ed., Irwin McGraw-Hill, Boston.
- Lofland, J. & L. H. Lofland. (1995). *Analysing social settings: a guide to qualitative observation and analysis*, 3rd edition, Belmont, Wadsworth.
- Li, H., & Atuagene-Gima, K. (2001). Product innovation strategy and the performance of new technology ventures in China. *Academy of Management Journal*. 44(6), pp. 1123-1134.
- Lin, C.Y. & Chen, M.Y. (2007). Does innovation lead to performance? An empirical study of SMEs in Taiwan. *Management Research News*. 30 (2), pp. 115-132.
- Littunen, H. & Tohmo, T. (2003). The high growth in new metal-based manufacturing and business service firms in Finland. *Small Business Economics*. 21(2), pp. 187-200.
- Lo, V., & Humphreys, P. (2000). Project management benchmarks for SMEs implementing ISO 9007. *Benchmarking: An International Journal*. 7(4), pp. 247-267.
- Loewe, P. & Dominiquini, J. (2006). Overcoming the barriers to effective innovation. *Strategy & Leadership*. 34(1), pp. 24-31.

- Madrid-Guijarro, A., Garcia-Perez-de-Lema, D. & Van Auken, H. (2013). An investigation of Spanish SME innovation during different economic conditions. *Journal of Small Business Management*. 51(4), pp. 578-601.
- Maguire, C., Kazlauskas, E. J., & Weir, A. D. (2015). Information Sources for Innovation. *In Information Services for Innovative Organizations*. 141-192.
- Mahemba, C. M., & Bruijn, E. J. D. (2003), Innovation Activities by Small and Medium-sized Manufacturing Enterprises in Tanzania. *Creativity and Innovation Management*. 12(3), pp. 162-173.
- Mani, S. (2004). Financing of innovation – a survey of various institutional mechanisms in Malaysia and Singapore. *Journal of Technology Innovation*. 12(2), pp. 185-208.
- Mansfield, E. (1962). Entry, Gibrat's law, innovation, and the growth of firms. *The American Economic Review*. 52(5), pp. 1023-1051.
- Martins, J. M., & Fernandes, M. T. (2015). Too small to innovate? Creating value with fewer Resources. *Journal of Business Strategy*. 36(2), pp. 25-33.
- McAdam, R., McConvery, T., & Armstrong, G. (2004). Barriers to innovation within small firms in a peripheral location. *International Journal of Entrepreneurial Behavior & Research*. 10(3). pp. 206-221.
- McClelland, E., Swail, J., Bell, J. & Ibbotson, P. (2005). Following the pathway of female entrepreneurs: a six-country investigation. *International Journal of Entrepreneurial Behaviour and Research*. 11(2), pp. 84-107.
- McCusker, K. & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*. 30(7), pp. 537-542.
- McGrath, R.G., Tsai, M.H., Venkataraman, S. & MacMillan, I.C. (1996). Innovation, competitive advantage and rent: a model and test. *Management Science*. 42, pp. 389-403.
- Menor, L.J., Tatikonda, M.V. & Sampson, S.E. (2002). New service development: areas for exploitation and exploration. *Journal of Operations Management*. 20(2), pp. 135-157.
- Ministry of Trade and Industry. (2005). Hulumtimi i Ndërmarrjeve të Vogla dhe të Mesme (NVM). Retrieved from http://mti-ks.org/repository/docs/anketa_shqip.pdf
- Ministry of Trade and Industry. (2013). Private Sector Development Strategy 2013 – 2017. Retrieved from http://www.mti-ks.org/repository/docs/2013_MTI_Strategjia_ZHSP_Eng_115534_268412.pdf
- Mishler, E.G. (2010). Validation in inquiry- guided research. The role of exemplars in narrative studies in Luttrell, W. (2010). *Qualitative Educational Research*. Routledge.

- Mitchell, B.C. (2004). Motives of entrepreneurs: a case study of South Africa. *The Journal of Entrepreneurship*. 13(2), pp. 167-183.
- Mohannak, K. (2007). Innovation networks and capability building in the Australian high-technology SMEs. *European Journal of Innovation Management*. 10(2), pp. 236-251.
- Moog, P. (2002). Human Capital and its Influence on Entrepreneurial Success. *Historical Social Research*. 27(4), pp. 157-180.
- Morone, P. & Testa, G. (2008). Firms Growth, Size and Innovation an Investigation Into: The Italian Manufacturing Sector. *Economics of Innovation and New Technology, Taylor and Francis Journals*. 17(4), pp. 311-329.
- Mowery, D. C. (1983). Industrial research and firm size, survival, and growth in American manufacturing, 1921–1946: An assessment. *Journal of Economic History*. 43(4), pp. 953–980.
- Mudambi, R. & Treichel, M.Z. (2005). Cash crisis in newly public Internet based firms: an empirical analysis. *Journal of Business Venturing*. 20(4), pp. 543-571.
- Mustafa M., Kutllovci E., Gashi P., & Krasniqi B. (2006). Small and Medium Business: The creation, management and business growth, Riinvest, Prishtine.
- Nagel R. (1993). Lead User Innovationen, DUV, Wiesbaden.
- Neely, A & Hii, J 1998, Innovation and Business Performance: A Literature Review, Judge Institute of Management Studies, University of Cambridge, Cambridge.
- Neergaard, H. & Ulhoi, J. (eds.) (2007) Handbook of Qualitative Research Methods in Entrepreneurship, Cheltenham: Edward Elgar.
- Niosi, J. (2003). Alliances are not enough explaining rapid growth in biotechnology firms. *Research Policy*. 32, pp. 737-50.
- North, D. & Smallbone, D. (2000). The innovativeness and growth of rural SMEs during 1990s. *Regional Studies*. 34(2), pp. 145-57.
- Nunes, M. P., Gonçalves, M., & Serrasqueiro, Z. (2013). The influence of age on SMEs' growth determinants: empirical evidence. *Small Business Economics*. 40(2), pp. 249-272.
- O'Sullivan, D. & Dooley, L. (2009). Applying Innovation. Sage, Thousand Oaks, CA.
- Oakley, A. (1981). Interviewing women: a contradiction in terms. In Roberts, H., ed. (1981), *Doing Feminist Research*. London: Routledge and Kegan Paul plc., pp. 30-61
- OECD (1996). SMEs: Employment, Innovation and Growth. The Washington Workshop. Retrieved from <http://www.oecd.org/cfe/smes/2090756.pdf>
- OECD & European Commission. (2005). OSLO Manual: Guidelines for collecting and interpreting innovation data. 3rd edition. OECD Publishing, Paris.

- OECD. (2013). Assessment of the Kosovo Innovation System. RCI Project Paper, OECD Development. Retrieved from <https://www.oecd.org/investmentcompact/Kosovo%20Innovation%20Report%20English%20Version.pdf>
- OECD. (2016). Best Practices On Business-Academia-Government Co-Operation For Innovation In Kosovo. Retrieved from <http://triplehelixgreece.eu/wp-content/uploads/2016/03/Best-Practice-TH-Cooperation-for-Innovation-Kosovo-DRAFT.pdf>
- Oke, A., Burke, G., & Myers, A. (2007). Innovation types and performance in growing UK SMEs. *International Journal of Operations & Production Management*. 27(7), pp. 735-753.
- Oliver, D. (2004). Human Capital Theory and Higher Education in Developing Countries. *Journal of Thought*. 39(1), pp. 119-130.
- Ortega-Argilés, R., Vivarelli, M., & Voigt, P. (2009). R&D in SMEs: A Paradox? *Small Business Economics*. 33(1), pp. 3-11.
- Otero-Neira, C., Lindman, M. T. & Fernández, M. J. (2009). Innovation and Performance in SME Furniture Industries: An International Comparative Case Study. *Marketing Intelligence & Planning*. 27(2), pp. 216-232.
- Onwuegbuzie, A.J., Johnson, R.B. (2006). The Validity Issue in Mixed Research. *Research in the Schools*. 13(1), pp. 48-63.
- Owualah, S. I. (1990). Venturing Into Small Business in a Developing Economy: Motivations and Constraints. *Savings and Development*. 14(4), pp. 415-424.
- Parker, SC., Storey, JD., & Witteloostuijn, A. (2010). What happens to gazelles? The importance of dynamic management strategy. *Small Business Economics*. 35(2), pp. 203-226.
- Pasanen, M. (2007). SME Growth Strategies: Organic Or Non-Organic? *Journal of Enterprising Culture*. 15(4), pp. 317-338.
- Penrose, E 1959, *The Theory of the Growth of the Firm*, Oxford University Press, Oxford.
- Peterson, R. A., Albaum, G., & Kozmetsky, G. (1986). The Public's Definition of Small Business. *Journal of Small Business Management*. 24(3), pp. 63-68.
- Pickernell, D., Packham, G., Jones, P., Miller, C. & Thomas, B. (2011). Graduate Entrepreneurs are Different: they Access More Resources? *International Journal of Entrepreneurial Behaviour and Research*. 17(2), pp. 183-202.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. & Podsakoff, N.P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*. 88(5), pp. 879-903.

- Porter, M.E. 1990, *The Competitive Advantage of Nations*, Free Press, New York.
- Pullen, A.J.J., De Weerd-Nederhof, P.C., Groen, A.J., Song, M. & Fisscher, O.A.M. (2009). Successful Patterns of Internal SME characteristics leading to high overall innovation performance. *Creativity and Innovation Management*. 18(3), pp. 209-223.
- Rehman, N. (2016). Innovation performance of Chilean firms, a bivariate probit analysis. *Journal of Entrepreneurship in Emerging Economies*. 8(2), pp. 204-224.
- Riahi-Belkaoui, A. (2003). Intellectual capital and firm performance of US multinational firms. *Journal of Intellectual Capital*. 4(2), pp. 215-226.
- Riesman, C.K. (1983). *Narrative analysis*. Newbury Park, CA: Sage.
- Riinvest Institute. (2001). *SME Financing and Development*. Retrieved from <http://www.riinvestinstitute.org/publikimet/pdf/39.pdf>
- Ritchie, J. & Lewis, J. (eds) (2003). *Qualitative Research Practice*. London: Sage.
- Robson, P. J. A & Bennett, R. J. (2000). SME Growth: The Relationship with Business Advice and External Collaboration. *Small Business Economics*. 15(3), pp. 193-208.
- Rocheska, S., Angeleski, M., Nikoloski, D., & Mancheski, G. (2014). Harnessing innovation potential of crowdsourcing. Proc. of the 8th International Scientific Conference CKS2014 “Challenges of the Knowledge Society”, Bucharest, Romania, May 16th-17th.
- Rocheska, S., Kostoska, O., Angeleski, M., & Mancheski, G. (2014). Determinants for adopting open innovation strategies in SMEs. *SMEs development and innovation: building competitive future of South-Eastern Europ.*, Faculty of Economics – Prilep, pp. 767-775.
- Rocheska, S., Kostoska, O., Angeleski, M., & Mancheski, G. (2014/5). User-Driven Innovation: Towards A New Innovation Paradigm. *Economic Review: Journal of Economics & Business*. 12(1).
- Rocheska, S., Nikoloski, D., & Angeleski, M. (2017). Factors Affecting Innovation and Patent Propensity of Smes: Evidence from Macedonia. *TEM Journal*. 6(2), pp. 407-415.
- Rodríguez-Gutiérrez, M.J., Moreno, P., & Tejada, P. (2015). Entrepreneurial orientation and performance of SMEs in the services industry. *Journal of Organizational Change Management*. 28(2), pp. 194-212.
- Rogers E.M. (2003). *Diffusion of innovations*, 5th edition, Free Press, New York.
- Rogers, M. (2004). Networks, Firm Size and Innovation. *Small Business Economics*. 22, pp. 141-153.

- Rosli, M.M. & Sidek, S. (2013). The Impact of Innovation on the Performance of Small and Medium Manufacturing Enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprise*. pp. 794-809.
- Rubin, H. & Rubin, I. (1995). Qualitative interviewing. The art of hearing data. London. Sage Publication.
- Ryzhkova, N. (2015). Does online collaboration with customers drive innovation performance? *Journal of Service Theory and Practice*. 25(3), pp. 327-347.
- Salavou, H., & Lioukas S. (2003). Radical product innovations in SMEs: the dominance of entrepreneurial orientation. *Creative and Innovation Management*, 12(2), pp. 94-108.
- Salavou, H., Baltas, G., & Lioukas, S. (2004). Organisational innovation in SMEs: the importance of strategic orientation and competitive structure. *European Journal of Marketing*. 38(9/10), pp. 1091-1112.
- Sandvik, I. L. & Sandvik, K. (2003). The Impact of Market Orientation on Product Innovativeness and Business Performance. *International Journal of Research in Marketing*. 20(3) (2013).
- Santamaría, L., Nieto, M.J., & Barge-Gil, A. (2009). Beyond formal R&D: taking advantage of other sources of innovation in low- and medium-technology industries. *Research Policy*. 38(3), pp. 507-517.
- Schultz, T. W. (1961). Investment in human capital. In J.Karabel & A. H. Halsey (Eds.) (1977). *Power and ideology in education* (pp. 313-324). New York: Oxford University Press.
- Schumpeter J.A. (1982). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, With a New Introduction by John E. Elliott, Reprint, Originally published: Cambridge, Mass.: Harvard University Press, 1934, Transaction Publishers, New Brunswick, New Jersey.
- Schumpeter J.A. (2002). New Translations from *Theorie der wirtschaftlichen Entwicklung*. In: *American Journal of Economics and Sociology*. 61(2), pp. 405-437.
- Schumpeter, J. A. (1934). *The theory of economic development*. R. Opie (Trans.). Cambridge, Harvard University Press. (New York: Oxford University Press, 1961.) Translation based on Schumpeter (1926).
- Schumpeter, J.A. (1939), *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*, Vol. 2, McGraw-Hill, New York, NY.
- Schumpeter, J.A. (1967). *The Theory of Economic Development*, 5th ed., Oxford University Press, New York, NY.

- Scott, W.R. & Meyer, J. (1983). The organization of societal sectors. In John W. Meyer and W.R. Scott (eds.) *Organizational Environments: Ritual and Rationality*. Beverly Hills, CA: Sage Publications.
- Scozzi, B., Garavelli, C. & Crowston, K. (2005). Methods for modeling and supporting innovation processes in SMEs. *European Journal of Innovation Management*. 8(1), pp. 120-137.
- Scupola, A. (2014). The relation between innovation sources and ICT roles in facility management organizations. *Journal of Facilities Management*. 12(4), pp. 368-381.
- SEE Transnational Cooperation Programme. (2014). Fostering Evaluation Competencies In Research, Technology And Innovation In The See Region. Retrieved from www.southeast-europe.net/document.cmt?id=522
- Segal, G., Borgia, D. & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour & Research*. 11(1), pp. 42-57.
- Shane, S. & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*. 25, pp. 217-226.
- Shane, S. (2000). Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organization Science*. 11, pp. 448-469.
- Shepherd, D. & De Tienne, D. (2005). Prior Knowledge, Financial Reward, and Opportunity Identification. *Entrepreneurship Theory and Practice*. 29(1), pp. 91-112.
- Shrader, C.B., Blackburn, V.B., & Iles, P. (1997). Women in management and firm financial performance: an exploratory study. *Journal of Managerial Issues*. 9, pp. 355-372.
- Silverman, D. (2008). *Doing Qualitative Research: a comprehensive guide*, Los Angeles, California: Sage.
- Simoës, P. M. M., & Esposito, M. (2014). Improving change management: how communication nature influences resistance to change. *Journal of Management Development*. 33(4), pp. 324-341.
- Slater, S.F. (1997). Developing a customer value-based theory of the firm. *Journal of Academy of Marketing Science*. 25(2), pp. 162-167.
- Smith, J. & Osborn, M. (2003). Interpretive phenomenological analysis. In J.A. Smith (Ed.) *Qualitative psychology: A practical guide to research methods* (pp.51-80). London: Sage.
- Specht G. & Beckmann C. (1996). *F&E-Management*. Schäffer-Poeschel, Stuttgart.
- Spithoven, A, Vanhaverbeke, W., & Roijackers, N. (2013). Open innovation practices in SMEs and large enterprises. *Small Business Economics*. 41(3), pp. 537–562.

- Stevenson, H. H. & Gumpert, D.E. (1985). The Heart of Entrepreneurship. *Harvard Business Review*, 85(2), pp. 85-94.
- Storey, D. (1994). *Understanding the Small Business Sector*, London: Routledge.
- Subramanian, A., Nilakanta, S. (1996). Organisational innovativeness: exploring the relationship between organisational determinants of innovation, types of innovations, and measures of organisational performance. *Omega*. 24(6), pp. 631-647.
- Sweetland, S. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research*, 66(3), pp. 341-359.
- Swierczek, F. & Ha, T.T. (2003). Motivation, entrepreneurship and the performance of SMEs in Vietnam. *Journal of Enterprising Culture*. 11(1), pp. 47-68.
- Szeto, E. (2000). Innovation capacity: working towards a mechanism for improving innovation within an inter-organizational network. *The TQM Magazine*. 12 (2), pp.149–158.
- Tambunan, T. (2007). Development of SMEs in a Developing Country: The Indonesian Story. *Journal of Business and Entrepreneurship*. 19(2), pp. 60.
- Taneja S., Pryor, G. M., & Hayek, M. (2016). Leaping innovation barriers to small business longevity. *Journal of Business Strategy*. 37(3). pp. 44-51.
- Teece, D. (2010). Technological innovation and the theory of the firm: The role of enterprise-level knowledge, complementarities, and dynamic capabilities, in *Handbooks in Economics*, eds BH
- Terziowski, M. (2010). Innovation Practice and its Performance Implications in Small and Medium Enterprises (SMEs) in the Manufacturing Sector: a Resource-Based View. *Strategic Management Journal*. 31(8) pp. 892-902.
- Thompson, P., Jones-Evans, D. & Kwong, C. (2009). Women and home-based entrepreneurship, evidence from the United Kingdom. *International Small Business Journal*. 27 (in press).
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and low-technology regimes. *Journal of Business Venturing*. 21(5), pp. 687-703.
- Thorpe, R. (2011). Writing up a PhD: how to coherently present your thesis. Institute for Small Business and Entrepreneurship Doctoral Workshop, Leeds, 18 May, 2011.
- Tidd, J., Bessant, J. & Pavitt, K. (2005). *Managing Innovation: Integrating Technological, Market and Organizational Change*, Wiley, New York, NY.
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2016). Network competence in Finnish SMEs: implications for growth. *Baltic Journal of Management*. 11(2), pp. 207-230.

- Trading Economics. (2017). Kosovo GDP Annual Growth Rate. Retrieved from <https://tradingeconomics.com/kosovo/gdp-growth-annual>
- UNDP (2012). Kosovo Human Development Report 2012. Retrieved from <http://hdr.undp.org/sites/default/files/khdr2012-eng.pdf>
- Ur Rehman, N. (2016). Innovation performance of Chilean firms, a bivariate probit analysis. *Journal of Entrepreneurship in Emerging Economies*. 8(2), pp. 204-224.
- Varis, M. & Littunen, H. (2010). Types of Innovation, Sources of Information and Performance in Entrepreneurial SMEs. *European Journal of Innovation Management*. 13(2), pp. 128-154.
- Verheul, I., Thurik, R., Hessels, J. & Van der Zwan, P. (2010). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Scientific Analysis of Entrepreneurship and SMEs*. 11(1), pp. 1-23.
- Vives X. (2008). Innovation and Competitive Pressure. *The Journal of Industrial Economics*. 56(3), pp. 419-469.
- Wagner, J. (1992). Firm Size, Firm Growth, and Persistence of Chance: Testing GIBRAT's Law with Establishment. *Small Business Economics*. 4(2), pp. 125-131.
- Walker, R.M. (2008). An empirical evaluation of innovation types and organizational and environmental characteristics: towards a configuration framework. *Journal of Public Administration Research and Theory*. 18(4), pp. 591-615.
- Wallsten, S. J. (2000). The Effects of Government-Industry R&D Programs on Private R&D: The Case of the Small Business Innovation Research Program. *Rand Journal of Economics*. 31(1), pp. 82-100.
- Watson, J. (2007). Modeling the relationship between networking and firm performance. *Journal of Business Venturing*. 22(6), pp. 852-874.
- Wennekers, S. & Thurik, R. (1999). Linking Entrepreneurship and Economic Growth. *Small Business Economics*. 13(1), pp. 27-55.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*. 5(2), pp.171-180.
- Wilson, C. N., & Stokes, D. (2005). Managing creativity and innovation: The challenge for cultural entrepreneurs. *Journal of Small Business and Enterprise Development*. 12(3), pp. 366-378.
- Wöhrl, R., Hüsig, S. & Dowling, M. (2009). The interaction of R&D intensity and firm age: empirical evidence from technology-based growth companies in the German 'Neuer Markt'. *Journal of High Technology Management Research*. 20, pp. 19-30.

- Wolcott, R.C., and Lippitz, M.J. (2007). The Four Models of Corporate Entrepreneurship. *MIT Sloan Management Review*. 49(1), 75-82.
- Wooldridge, J.M. (2012). *Introductory Econometrics: A Modern Approach* 5th ed., Mason: South-Western.
- Wonglimpiyarat, J. (2015). Challenges of SMEs innovation and entrepreneurial financing. *World Journal of Entrepreneurship, Management and Sustainable Development*. 11(4). pp. 295- 311.
- Woodward, R, (2006). Knowledge Based Entrepreneurship in two transition countries, European Association for Comparative Economics Studies (EACES) 9th Bi-Annual Conference: Development Strategies – A comparative view.
- World Bank Group. (2015). Country Snapshot. Retrieved from <http://www.worldbank.org/content/dam/Worldbank/document/eca/Kosovo-Snapshot.pdf>
- World Bank. (2013). Western Balkans Regional R&D Strategy for Innovation. Retrieved from <http://www.worldbank.org/content/dam/Worldbank/document/eca/Western-Balkans-R&D-Kosovo.pdf>
- World Bank. (2016). *Doing Business 2016: Measuring Regulatory Quality and Efficiency*. Washington, DC: World Bank Group. DOI: 10.1596/978-1-4648-0667-4. http://www.doingbusiness.org/~media/giawb/doing%20business/documents/profiles/country/KS_V.pdf
- Woschke, T., Haase, H., & Kratzer, J. (2017). Resource scarcity in SMEs: effects on incremental and radical innovations. *Management Research Review*. 40(2), pp. 195-217.
- Xu, Q, Chen, J, Xie, Z, Liu, J, Zheng, G & Wang, Y. (2007). Total innovation management: A novel paradigm of innovation management in the 21st century. *Journal Technology Transfer*. 32(1/2), pp. 9-25.
- Yang, H., Song, H. M., & Yu, A. P. (2014). Theoretical analysis and empirical study on competitive advantages of service-oriented manufacturing-based on the data of 200 manufacturers in Jiangsu province. *Management Review*. 26(3), pp. 89-99.
- Yang, J. (2010). The knowledge management strategy and its effect on firm performance: a contingency analysis. *International Journal of Production Economics*. 125(2), pp. 215-223.
- Zahra, S. & George, G. (2002). Absorptive capacity: a review, re-conceptualization and extension. *Academy of Management Review*. 27(2), pp. 185-203.

APPENDICES

3. Location/ location of the activity (where the enterprise operates, please encompass the right answer):

1. Only in one location in Kosovo,
2. Two or more locations in Kosovo,
3. Kosovo and abroad
4. Export 100% of production outside Kosovo.

4. The foundation year of company (Please indicate the year when the enterprise has begun to work):_____.

5. Your enterprise is (please encompass the right answer):

- 1) Individual business

- 2) Joint ownership-partnership
- 3) Limited Liability Company
- 4) Joint Stock Corporation

6. Please specify the proportion of foreign capital in company (from 0% - 100%):

_____ %

7. The responsibility of your business as a legal entity is:

- 1. Full Liability Company,
- 2. Limited Liability Company

8. What percentage of the property possesses the largest owner in this company, if there is more than one owner?

	%
The largest percentage held from the owner	

9. If the number of founders is higher than 1 what is the relationship between them (you can have more than one answer; please encompass the right answer/s):

- 1. Family ties
- 2. The professional Links
- 3. Investment / Joint Financing
- 4. Other (please indicate)_____

10. Have you been employed before you start up your business?

- 1. Yes 2. No

11. Did you have any experience in the field where you start up your business?

- 1. Extended experience
- 2. Limited experience
- 3. No experience

12. If Yes, (in the above, 1 & 2) please indicate in numbers how many years of experience did you had? (Write the correct number) _____.

13. What was the main reason for starting up your business?

1. I always wanted that my dream of having my company to come true
2. Dispute with my previous employer – partner
3. I have been unemployed and had to do something to earn a living
4. I spotted a business opportunity, and I decided to act upon it and establish my company
5. I inherited it from my family

6. Other (specify) _____

14. Did you have any written business plan before start up your business?

1. Yes 2. No

15. Do you currently have a written business plan?

1. Yes 2. No

16. Please specify qualification and gender structure of founders:

	Description	M	F	Age		Qualification				Elementary School,
				When Start up	Currently	”Ph.D.”	“Mr”	The graduate	High School	
A	The Founder 1									
B	The Founder 2									
C	The Founder 3									
D	The Founder 4									
E	The Founder 5									

17. The enterprise is led by (please encompass the right answer):

- 1) The owner / co-owner
- 2) Director / Manager
- 3) Both (owner and manager)

18. Does your company have the quality standards or accreditation or is in the implementation process (e.g. ISO series)?

- 1. Yes
- 2. No

19. If yes, what standards and / or accreditations:

_____.

III. BUSINESS ACTIVITIES, ORGANIZATION, TURNOVER AND STRUCTURE OF ASSETS

1. Which is the main activity of the company (please indicate only one answer):

1.a. Manufacturing (if manufacturing specify the business activity below from 1-10):

Business activity within the industry sector:		% of sales by sector

1. Agro-industry	
2. Metal processing and electrical equipment	
3. Material construction	
4. Chemical industry, plastic and of rubber	
5. Textile industry, leather and footwear	
6. Wood processing	
7. Graphic and of paper industry	
8. Building Construction (e.g. the production of bricks, etc.)	
9. Construction service (e.g. masonry etc.)	
10. Agriculture (farmers)	
11. (Other, specify) _____	
1.b. Trade (if trade specify the business activity below):	
The commercial activity:	% of trading activity
<hr/>	<hr/>

1. The retail

2. The wholesale

1.c. Service (if service specify the business activity below from 1-5):

The service activity:	% of trading activity
-----------------------	-----------------------

1. Transportation
2. Financial
3. Hotels and Tourism
4. Professional Training and Consultancy
5. Information Technology
6. (Other, specify) _____

2. How do you evaluate your business in 2012?

1. Better than 2011,
2. No differences,
3. The worse than 2011

3. What is your business expectations in 2013 (please encompass the right answer)?

1. Better than 2012,
2. I do not expect differences,
3. Worse than in 2012

4.

4.1. Compared with the previous 12 months, firms turnover is:	4.2. Compared with the previous 24 months, firms turnover is:	4.3. Compared with the previous 36 months, firms turnover is:
1. Decreased	1. Decreased	1. Decreased

2. No differences	2. No differences	2. No differences
3. Increased	3. Increased	3. Increased

5. Compare to the first year of operation the firms turnover has increased approximately? _____%.

6. What do you think of growth in the sector in that you operate?

- a. Increasing b. No differences c. Decreasing

7. What do you think for the profitability of firms, in general, in the industry or sector in which your company operates?

- a. Very high profitability
b. Not very high profitability
c. Not very low profitability
d. Very low profitability

8. What is the value of total assets? (in Euros)

No.	Title	2012	2011
A	Working capital (finished goods, raw material, etc)		
B	Building and premises		
C	Machinery and equipment		
D	Transportation vehicle		
E	Land		

F	Other assets (specify)		
---	------------------------	--	--

EXPORT

9. Are you an exporting enterprise: 1. YES

(If NO go to question 20, please circle the right answer)

10. If YES, approximately how much export your firm had in the year (please indicate the amount in €, below)?

Export 2012	Export 2011	Export 2010
_____ €	_____ €	_____ €

11. In which year you have started to export (please indicate the year)? _____

12. What is the participation of export value in total sales in 2012 (total turnover)? _____%

13. Which are the main barriers to export? (Range in priority basis, 1 = is not an obstacle, 2 = Minor obstacle, 3 = obstacle, 4 = High obstacle, 5 = Major obstacle)

please write numbers next to the text:

- 1) Tariff barriers (tariff amount) _____
- 2) The culture of doing business in the country of destination _____
- 3) Lack of personal documentations (e.g. Visa) _____
- 4) Lack of Banks efficiency _____
- 5) Lack of information on market _____
- 6) Quality certificate _____
- 7) Delays in the border _____

8) C

ost of
transpor
t _____

9) T

he work
of
customs
agent

10) O

peration
of the

Food

and

Veterin

ary

Agency

11) O

t

h

e

r

(

s

p

ecify) _____

2. NO

14.

Please indicate the name of country where you export your products	% of exports according to the country

1.

15. Please indicate:

15.a. The number of visits abroad in 2012

15.b. Number of months in your career that you spent abroad

16. What are the beliefs of your company on the products / services internationalization?

(5 = totally agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = totally disagree) please

write numbers next to the text:

1. Internationalization is a desirable task for my company. _____
2. Our company to export services _____
3. The general manager has favourable attitude towards internationalization. _____
3. The general manager supports the internationalization of the company. _____

17. Does the firm internationalisation influence on these area: (please write numbers next

to the text: 5 = completely agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = disagree

completely).

1. Profit increase. _____
2. Company Development. _____
3. The security of your company's investments. _____
4. Development of markets. _____
5. The security of your company's market. _____

18. Indicate to which extent each of the following advantages have supported your firm to compete more successfully: (please write numbers next to the text: 5 = completely agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = disagree completely).

1. Technological competence. _____

2. The image of the company. _____

3. Adequate financial assets. _____

19. How is your company's internationalization associated with the company's strategic motivations: (please write numbers next to the text: 5 = completely agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = disagree completely).

1. Our initiative to enter international markets is a result of strategic plan. _____

2. Our Internationalization is a result of our desire to benefit from the high growth potential markets _____

3. Internationalization is a result of our desire to be recognized as an international service provider. _____

20. Did your firm had import in 2012 (if no, skip to Chapter IV)?

1. YES 2. NO

21. Which is the percentage of the total purchasing value of raw materials that your company imports? (Please indicate the amount in Euros)?

1) 2012 _____%; and 2) 2011 _____%.

22.

22.1. Compared to with the previous 12 months, your firms profit has:	22.2. Compared to with the previous 24 months, your firms profit has:	22.3. Compared to with the previous 36 months, your firms profit has:
1. Decreased	1. Decreased	1. Decreased
2. No difference	2. No difference	2. No difference
3. Increased	3. Increased	3. Increased

23. Which are the reasons that your firms profit has increased?

- 1. Sales Increased 1. YES 0. NO
- 2. New products 1. YES 0. NO
- 3. Cost Reductions 1. YES 0. NO
- 4. We have been more productive 1. YES 0. NO
- 5. Improvement of the main tools 1. YES 0. NO
- 6. Improvement of the workers skills 1. YES 0. NO
- 7. Management Improvement 1. YES 0. NO
- 8. Other specify? _____

24. Which were the reasons for the decrease of the firms profit?

- 1. Sales decreased 1. YES 0. NO
- 2. Cost increased 1. YES 0. NO
- 3. Customers unpaid debts 1. YES 0. NO
- 4. Other specify? _____

IV. OBSTACLES / BARRIERS TO BUSINESS

1. Range according to your opinion factors that represent an obstacle for your business:

1 = is not an obstacle, 2 = Minor obstacle, 3 = obstacle, 4 = High obstacle, 5 = Major obstacle), please write numbers next to the text:

Nr	Naming	1	2	3	4	5	9(NA)
1	Taxes too high						
2	The work of tax administration (bureaucracy)						
3	Inadequate and insufficient laws						
4	Law enforcement						
5	Strong competition						
6	Corruption						
7	Tax evasion						
8	Crime, robbery and anarchy						
9	Informal Economy / black Economy						
10	Access to finance						
11	Insufficient capacity						
12	Political instability						

13	Managerial skills						
14	Business licensing						
15	Employee skills						
16	Transport						
17	Power supply						
18	Supply with material, machines and equipment						
19	Lack of market demand						
20	Delaying payments (collection of debts)						
21	Lack of information concerning business						
	Other (specify) _____						

V. TRENDS FOR GROWTH AND DEVELOPMENT

1. Have you made investments in 2012 (if no, skip to question 6):

1. YES

2. NO

2. What is the value of the investment you have made in 2012 and 2011 (write amount in €)?

1) 2012

2) 2011

The value of investing (€)

3. Investments in 2012 you have provided with (write in %):

	Please indicate	%
1	With your internal sources	
2	With loans from local bank,	
3	With loans from foreign banks	
4	Donation from foreign donors (NGO)	
5	Borrowings from family or friends	
6	Informal market capital	
7	Through Foreign Direct Investment	
8	Other (specify) _____	
	TOTAL	100 %

4. Investments in 2012 are made in (please encompass the right answer):

1. Manufacturing activities,
2. Trade activities,
3. Service activities
4. Other (specify) _____.

5. Investments are made in:

No.	TITLE	2012	2011
A	Working capital (finished goods, raw material, etc)		
B	Building and premises		
C	Machinery and equipment		
D	Transportation vehicle		
E	Land		
F	Other assets (specify)		

6. How much is approximately the value of _____ expected investments in 2013? _____euro

7. In the future you intend to develop your economic activity in (please encompass the right answer):

1. The continuation of the current business
2. Investment in a new field
3. Both

4. Yet not determined

8. If you plan to invest in a new field that will be (write)? _____.

9. Have you received bank loan?

1. YES
2. NO. I haven't applied?
3. NO. I have applied but my application was rejected?

10. If you have received loan please provide the following information to your last taken loan:

1. What was the total amount of loan? _____ (€)
2. It is confidential
3. When? (Year) _____
4. What was the loan duration? (in months) _____
5. What was the interest rate? (in %) _____

11. If you had more than one loan, please indicate:

- a. No. of received loans: _____
- b. The year of your first loan ever taken: _____

12. Was it required to pledge collateral for loan?

1. YES
2. NO

13. If YES what is used as collateral? _____

1. Mine or my family's Real Estate
2. Firms Real Estate
3. Something else _____ (specify what)

14. What was the total value of the collateral? _____ (Euro).

15. If you have circled question 9.2 (No. I haven't applied for a loan) the reason was:

1. I did not need a loan - company had sufficient capital
2. Application procedures was very complex
3. High interest rates
4. Collateral requirement too high
5. Repayment period was not sufficient
6. I did not know how to apply
7. I was not confident that my loan application would be approved

8. Other _____

16. If you have circled question 9.3 (NO. I have applied but my application was rejected), the reason was (please encompass all relevant options):

1. The lack of collateral
2. The lack of business plan
3. The absence of documents required by the bank
4. Other (Please specify)_____.

17. If you had bank loan, the lending conditions were (1 = very unfavourable and 5 = favourable): _____.

18. During the year 2012 which were the main sources to finance working capital (stocks, short-term payments)

- | | |
|--|---------|
| 1. Personal savings | _____ % |
| 2. Profit Held | _____ % |
| 3. Borrow from family and friends | _____ % |
| 4. Loans from Banks | _____ % |
| 5. Loans from special programs to support SMEs | _____ % |
| 6. Loans from informal capital market | _____ % |
| 7. Loans from local suppliers from supplier | _____ % |
| 8. Loans from external supplier | _____ % |
| 9. Late payment of taxes and contributions | _____ % |
| 10. Other (Please specify) | _____ % |

19. To what extent do you believe at your associates?

20. Are relationships of trust with other companies and / or organizations an important factor to compensate certain assets that your company miss?

- 1) Not important 2) Neutral 3) Very important

21. Social contact with friends, family or business associations is:

1) Not important

2) Neutral

3) Very important

VI. INNOVATIONS

1. During the past three years, have you undertaken any research and development activity to create new or substantial modification of products / services / processes?

1. YES;

2. NO;

2. During the past three years have you created any product / service / process completely new from your firm or any substantial modification of products / services / processes of your firm?

1. YES;

2. NO;

3. If yes, what was the number of new products or services _____ introduced in business?

4. New products introduced in the market during the past three years have been:

a. New products for the market (not existed in Kosovo market previously).

b. New products just for your firm (Imitation of current products on the Kosovo market).

5. Development and design of new innovative products introduced in the market during the past three years are made by:

a. Mainly from your enterprise.

b. Your enterprise in cooperation with other enterprises

c. Your enterprise in collaboration with academic institutions (Institute for Research and Development, University Research Institute, and other similar)

d. Mainly by enterprises and institutions outside your enterprise

6. Please specify the costs that you have made in activities to createing or substantially modification of products / services or new processes, as a percentage of sales of the last period.

(Activities may have been as follows: Research and development of new products or processes within the enterprise or in cooperation with other enterprises, purchase of new machinery or equipment in creating new products or processes, purchasing software or knowledge external as well as training of staff.)

Percentage of total sales that have been invested in innovative activities: _____ %

7. Has your company received any subsidy for the creation or a substantial modification of products / services or new processes

a. European Union funds

- | | |
|-----------------------|----------------|
| | 1. YES / 2. NO |
| b. Central Government | 1. YES / 2. NO |
| c. Local Government | 1. YES / 2. NO |

8. Indicate if your company during the last three years has taken any action to protect intellectual property rights

- | | |
|--|----------------|
| a) Has applied for patent | 1. YES / 2. NO |
| b) Has registered a new commercial brand or any new design | 1. YES / 2. NO |

9. Please rank the following factors of importance about your activities on the creation or substantial modification of products / services or new processes during the last three years.

5 = most important, 4 = very important, 3 = important, 2 = less important, 1 = not important

Please write numbers next to the text:

Nr	Factors	1	2	3	4	5	9(NA)
1	Information obtained from the market (suppliers, competition, customers)						
2	Information obtained from institutions (Universities and public research institutes)						
3	The importance of your staff experience in creating new products / services or processes:						
4	The ideas generated by your staff in creating products / services or new work processes:						
5	The time dedicated by your staff during working hours as an individual or group effort in generating any new idea or other activities relevant to improving work processes, or the creation of any new product / service:						
6	If you applied any new work process, evaluate the importance of the increased production flexibility and reduce cost of production						
7	Factors that hinder innovation:						

Rate of importance factors that have hindered the creation of the innovative activities or substantial modification of products / new processes.

From 1 - major obstacle, to 5 - did not suggest any obstacle.

7a	Cost of financing						
7b	Cost of innovation						
7c	The lack of staff knowledge						
7d	The lack of information on technologies and markets						
7e	Uncertain demand and market dominated by large Enterprises						
7f	There is no need for new products because we have produced them previously						
7g	Lack of demand for new products						

10. Please indicate if, during the last three years your firm had activities related to creation of products / services, new processes or their substantial modification, which ended unsuccessful, or are still in progress but unfinished.

1. YES
2. NO

11. During the past three years, has your company made any full or substantial change in organizational management structure?

1. YES;
2. NO;

12. During the past three years have your company introduced a completely new way of marketing your product which has not been present on the market?

1. YES;
2. NO;

13. Range according to the importance to your firm the following Strategic Goals (5-Very Important to the 1- Not important):

- 1) Product Quality _____
- 2) The image _____
- 3) Qualitative Services _____
- 4) Market share _____
- 5) Position in the industry _____
- 6) Penetration into the International markets _____

14. Do you know the size of the market where your firm operates (please encompass the right answer)?

- 1) Yes, we know
- 2) No, we do not know

15. How is the intensity of competition in the industry in which your firm operates (please encompass the right answer)?

- 1) Very high
- 2) High
- 3) Average
- 4) Below the average
- 5) Low
- 6) None of the above

16. Do you have any permanent partners from abroad? 1. YES 2. NO

17. If yes, your cooperation is concerned with:

1. Import,
2. Export
3. Joint Investment
4. Technical Assistance
5. Representation
6. Cooperation in the other countries markets
7. Franchising
8. Other (specify) _____.

18. Are you looking for a partner from abroad to realize your business plans?

1. YES

2. NO

VII. TAXES

1. In your opinion, what percentage of the turnover of a business similar to yours reports to the tax administration? _____ (Write percentage).

2. How do you consider the tax rates?

a. Too high

b. High

c. Average

d. Low

e. Ref NA (No answer)

3. From 1 to 10, where 1 is unreasonable and 10 fully reasonable, how do you estimate the tax evasion in Kosovo? _____.

4. How many times a month your business has visits from the Tax Administration?

_____.

5. Which are the main obstacles to the tax payment (you may encompass more than one answer):

1. High taxes

2. The lack of habit of paying taxes

3. The lack of proper control

4. Because others do not pay (inequality)

5. Other (specify) _____

6. Are you informed for the purpose of use of the collected taxes from tax administration and customs, respectively for Kosovo budget?

1. I am fully informed

2. I am partially informed

3. I am not informed.

VIII. ENTERPRISE INFORMATIZATION

1. Do you have computer? 1. YES 2. NO

2. If yes, how many computers you have? _____.

3. If NO do you plan to buy a computer: 1. YES 2. NO

4. You use Computer for (questions 4-7 are only for those who have computer):

1. Financial Records
2. Planning
3. Processing of text (text processor)
4. Market research
5. Production /operation / management
6. Quality control
7. For anything else, (specify)_____

5. Do you use the internet: 1. YES 2. NO

6. If YES, Internet is used for (please encompass the right answer):

1. Market research
2. Promotion
3. The sale of products
4. Communication by E-mail
5. For other business purposes (specify _____)

7. Do you have web site (your Web Mail)? 1. YES 2. NO

8. Do you perform business transactions via the Internet (sale / purchase) as?

1. Business to business
2. Business to client

9. Have you advertised your firm's goods / services and prices in your Web-page?

1. YES

2. NO

10. Do you order online?

1. YES

2. NO

11. Do you have licensed software?

1. YES

2. NO

12. Which software do you use the most during your business activity? (Please indicate) _____

IX. PERSONNEL

1. With how many employees did you start your business? _____

2. How many employees your company had at the end of 2010? _____

3. How many employees your company had at the end of 2011? _____

4. How many employees your company actually have at the end of 2012(in numbers)?__

5. Employees of your enterprise are:

Description		Number of employees		Total
		1. M	2. F	
1	Full time employees			
2	Permanent part time employees			
3	Seasonal employees – with contract			
4	Seasonal employees without contract			
5	Total			

6. Qualification structure, gender and salaries of employees:

	Qualification	Number of workers with this title	1) M	2) F	Personal income monthly for this category in €
1	Doctor of Science				
2	Master's degree				
3	University degree				
4	High school				
5	Secondary school education				
6	Unqualified				
7	Total				

7. Describe the management structure:

		1.M	2.F	Age		Qualification structure
--	--	-----	-----	-----	--	-------------------------

	Description			(Indicate years)			The	High	elementary
1	General Director								
2	Finance Director								
3	Technical director								
4	Director of Marketing								
5	Director for R & D								
6	Other								

8. Have you employed new workers in 2012?

1. YES

2. NO

9. If yes, what is the structure of the workers qualification you have employed in 2012?

	Qualification	Number of workers	1. M	2. F	Personal income monthly (insert amount in €)
1	Doctor of Science				
2	Master's degree				

3 University degree

4 High school

5 Secondary
school
education

10. Evaluate the level of how you feel satisfied with your employees work compared to their qualifications from 1-5 (1 not satisfied at all, 5 - very satisfied).

	Qualification:	Evaluation of workers.
1	Foreign University (abroad)	
2	Foreign University (in Kosovo)	
2	Public University of Prishtina	
3	Kosovo Private Universities	

11. How important to you is your employee certification: (1 - not important at all, 5 very important).

12. Do you intend to recruit new employee during 2013?

1. YES

2. NO

13. If yes, what would be the appropriate level of education? (Please write the right answer)

1) The unqualified _____ specify number

- 2) Primary school _____ specify number
3) High school _____ specify number
4) Under Graduate _____ specify number
5) Masters _____ specify number
6) Doctorate _____ specify number

14. Have you or any other manager of your company attended any training course for business or management: 1. YES 2. NO

15. Did you or any of your managers had managerial experience before starting to work in this company?
1. YES 2. NO

16. Are you a member of any business association?
1. YES 2. NO

17. Do you have use consultants (consulting for business from any public or private institution)?
1. YES 2. NO

18. If YES, who has been the provider of these services?

19. Have you been satisfied with the (consultancy)?
1. YES 2. NO

20. In which field you have used consultancy?

Appendix B – Letter of Permission to use survey data from BSCK



Date: October 16, 2015

Letter of Permission

Subject: Permission to use SMEs database on Entrepreneurship and Small Business Development in Kosovo in 2012 for Lura Rexhepi Mahmutaj

BSC Kosovo grants the permission to Lura Rexhepi Mahmutaj, to use the survey data of SMEs conducted in 2012 by BSC Kosovo for her Phd thesis on the “Impact of Innovation in SMEs growth” 2, under the following conditions:

- Lura Rexhepi Mahmutaj will use this survey data only for her PhD Thesis and will not sell or use it with any compensated or curriculum development activities.
- Lura Rexhepi Mahmutaj will include the copyright statement on all copies of the instrument.
- Upon our request, Lura Rexhepi Mahmutaj will send a copy of her dissertation before publication.

Regards,

Prof. Dr. Besnik Krasniqi, Founder & Director

Business Support Center Kosovo
Address: Rr.Bedri Pejani Nr.1
10000 Prishtinë, Republika e Kosovës.
Email: krasniqibesnik@hotmail.com
Tel: 00 377 45 300 554
Web: www.bsckosovo.org

Appendix C – Interview Guide

Innovation Questionnaire for Interviews (Adapted by OECD, 2012)

The study aims to examine the impact of innovation in SMEs performance. The interview will take approximately 45 minutes to 1 hour of your time.

These questions are intended to collect information about product and process innovation as well as organizational and marketing innovation during the last three-year period 2014-2016 inclusive. Most questions cover new or significantly improved goods or services or the implementation of new or significantly improved processes, logistics or distribution methods. Organizational and marketing innovations are also covered.

A product innovation is the market introduction of a new good or service or a significantly improved good or service with respect to its capabilities, such as improved software, user friendliness, components or sub-systems. The innovation (new or improved) must be new to your enterprise, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your enterprise or by other enterprises.

A process innovation is the implementation of a new or significantly improved production process, distribution method, or support activity for your goods or services. The innovation (new or improved) must be new to your enterprise, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your enterprise or by other enterprises.

An organizational innovation is the implementation of new or significant changes in firm structure or management methods that are intended to improve your firm's use of knowledge, the quality of your goods and services, or the efficiency of work flows.

A marketing innovation is the implementation of new or significantly improved designs or sales methods to increase the appeal of your goods and services or to enter new markets.

Person we should contact if there are any queries regarding the form:

Name: _____

Job title: _____

Organization: _____

Phone: _____

Fax: _____

E-mail: _____

**1. GENERAL INFORMATION ABOUT
THE ENTERPRISE**

THE ENTERPRISE RESPONDENTS PERSONAL DATA

1. Sex:
 - a. Female
 - b. Male

2. Age (write age years):

3. Professional qualification:
 - a. Primary school
 - b. Secondary School
 - c. Bachelor degree
 - d. Postgraduate Education

4. Occupation:

5. Position in the enterprise:
 - a. Owner
 - b. General Director
 - c. Manager
 - d. Other (specify)

6. Have you been employed before you start up your business?
 - a. Yes
 - b. No

7. Did you have any experience in the field where you start up your business?
 - a. Extended experience
 - b. Limited experience
 - c. No experience

8. If Yes, please indicate in numbers how many years of experience did you had?

9. What was the main reason for starting your business? Was it because of push or pull factors?

THE ENTERPRISE DATA

1. The main office of your enterprise is:

2. The Enterprise operates in:
 - a. Urban area
 - b. Rural area
 - c. Urban and Rural area

3. The foundation year of company:

4. Your enterprise is:
 - a. Individual business
 - b. Joint ownership-partnership
 - c. Limited Liability Company
 - d. Joint Stock Corporation

5. Main industry:
6. Average number of employees in year 2016:
7. What was your enterprise’s total turnover for 2016?
8. What was your enterprise’s total number of employees in 2014 and 2016?

9.

Compared with the previous 12 months, firms turnover is	Compared with the previous 24 months, firms turnover is:	Compared with the previous 36 months, firms turnover is
1. Decreased	1. Decreased	1. Decreased
2. No differences	2. No differences	2. No differences
3. Increased	3. Increased	3. Increased

20. PRODUCT (GOOD OR SERVICE), PROCESS, ORGANIZATIONAL, AND INNOVATION

2.1 During the three years 2014 to 2016, did your enterprise introduce innovation in

product, process, organizational or marketing innovation?

2.2 Has the development of an innovation impact on the development of other innovation (eg innovation product development result in the development of innovation in the process?)

2.3 Who developed these innovations?

- a. Mainly your enterprise or enterprise group
- b. Your enterprise together with other enterprises or institutions
- c. Mainly other enterprises or institutions
- d. Others

2.4 Were any of your innovations during the three years 2014 to 2016:

- a. New to the enterprise
- b. New to the market

2.5 Please give the percentage of your total turnover in 2016 from:

Goods and service innovations introduced during 2014 to 2016 that were new to your market %

Goods and service innovations introduced during 2014 to 2016 that were only new to your firm %

Goods and services that were unchanged or only marginally modified during 2014 to 2016 (include the resale of new goods or services purchased from other enterprises) %

Total turnover in 2016 %

21. INNOVATION ACTIVITIES AND SUBSIDIES

3.1 During the three years 2014 to 2016, did your enterprise engage in innovation activities?

3.2 During the three years 2014 to 2016, did your enterprise receive any financial support for innovation activities?

4. SOURCES OF INFORMATION AND CO-OPERATION FOR INNOVATION ACTIVITIES

4.1 During the last three years 2014 to 2016, how important to your enterprise's innovation activities were each of the following information sources?

- a. Internal;
- b. market sources;
- c. institutional sources; or
- d. any other sources: mainly internet search

4.2 During the three years 2014 to 2016, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?

4.3 Which type of co-operation partner did you find the most valuable for your enterprise's innovation activities?

4.4 Sales with new products/services ≤ 1 year on the market (in % of total sales)

4.5 What is your average time for your new product/service to break-even?

5. POSITIVE EFFECTS OF INNOVATION DURING 2014-2016

5.1 What are the effects of innovations introduced during the three years 2014 to 2016?

6. FACTORS HAMPERING INNOVATION ACTIVITIES

6.1 Did your enterprise have any innovation activities to develop product or process innovations that were abandoned during 2014 to 2016 or still ongoing by the end of 2016?

6.2 During the three years 2014 to 2016, how important were the following factors for hampering your innovation activities or projects or influencing a decision not to innovate?

- a. Cost factors;
- b. knowledge factors;
- c. market factors;
- d. institutional factors,
- e. other reasons not to innovate

7. INTELLECTUAL PROPERTY RIGHTS

7.1 During the three years 2014 to 2016, did your enterprise:

a. Apply for a patent, b. registered an industrial design, c. registered a trademarks or claim a copyright, d. No

7.2 Do you have patents for any innovation conducted throughout the years 2014 to 2016?

7.3 Does your organization works according to any ISO Standards? If yes, which ones?

8. INNOVATIVENESS (INNOVATIVE CULTURE)

8.1 Describe your innovation culture within your firm!

8.2 How well is your innovation process linked with your organization's strategy?

8.3 Do you have any R&D employees, if yes how many?

8.4 Discuss three most important successful factors toward innovation?

8.5 Describe the organizational change with introduction of innovation, including its benefits and challenges!

Thank you very much for your participation

Thank you for your time and commitment in making this survey a success. All participants will receive, on request, a personalized summary of the study's results designed to help you understand your performance versus your peers, and to identify innovation performance levers. Please note that all data will be reported anonymously, and we will strictly maintain confidentiality with respect to your company's specific survey data.

1. GENERAL INFORMATION ABOUT THE ENTERPRISE

THE ENTERPRISE RESPONDENTS PERSONAL DATA

2. Sex:

b. Female **b. Male**

3. Age (write age years): **37**

3. Professional qualification:

e. Primary school

f. Secondary School

g. Bachelor degree

h. Postgraduate Education

5. Occupation: Economist

5. Position in the enterprise:

e. Owner

f. General Director

g. Manager

h. Other (specify): **Co-Founder & Chief of Operation Officer**

6. Have you been employed before you start up your business?

c. Yes

d. No

7. Did you have any experience in the field where you start up your business?

d. Extended experience

e. Limited experience

f. No experience

8. If Yes, please indicate in numbers how many years of experience did you had?

9. What was the main reason for starting your business? Was it because of push or pull factors?

Market opportunity. They were inspired by work experience and education received in the USA. The CEO has lived 10 years in the USA and has studied Computer Science and Management. There was a very big necessity to have such services in our market; the desire to be back in Kosovo and contribute in economic growth, as well as the expertise and experience to challenge myself with managing my own business.

THE ENTERPRISE DATA

1. The main office of your enterprise is: USA, they have two branches: one in Kosovo and another one in Albania

2. The Enterprise operates in:

d. Urban area

e. Rural area

f. Urban and Rural area

3. The foundation year of company: 2014

4. Your enterprise is:

e. Individual business

f. Joint ownership-partnership

g. Limited Liability Company

h. Joint Stock Corporation

5. Main industry: Service (Research engine)

6. Average number of employees in year 2016: 55

7. What was your enterprise's total turnover for 2016? Didn't disclose this information

8. What was your enterprise's total number of employees in 2014 and 2016? 8(2014) and 55 (2016)

9.

Compared with the previous 12 months, firms turnover is	Compared with the previous 24 months, firms turnover is:	Compared with the previous 36 months, firms turnover is
1. Decreased	1. Decreased	1. Decreased

2. No differences	2. No differences	2. No differences
3. Increased	3. Increased	3. Increased

22. PRODUCT (GOOD OR SERVICE), PROCESS, ORGANIZATIONAL, AND MARKETING

2.1 During the three years 2014 to 2016, did your enterprise introduce innovation in product, process, organizational or marketing innovation?

Product Innovation:

- Online search engine and a news aggregator that uses natural language processing to finally make the Albanian web accessible to all.
- Then they continued with a program that goes to all canals in Albanian language, gather all news, and classifies them in categories: example sport, culture, health and others.
- Then we started to develop advertising, which companies could advertise for free their products and services.
- Then they developed Adnetwork, which is the most effective and simplest solution to Internet advertising.
- They also developed a Lab, which is a startup factory, made for Internet entrepreneurs who lack access to resources and market. As a startup factory, the Lab provides the space, mentoring, networking, technology, talent visibility, and funding to competent Internet entrepreneurs, creating solutions for the Kosovo, Albania, and FYR Macedonia market. Entrepreneurs will have an opportunity to transform their technology ideas/products into successful online businesses and solve real problems for society.

Organizational innovation:

- SCRUM Methodology: agile methodology that is known for programmers' team.

2.2 Has the development of an innovation impact on the development of other innovation (eg innovation product development result in the development of innovation in the process?)

Yes, one of the co-founder is responsible for research and development, and he developed an application, something like word association (process innovation). He developed a code, from which one could compete with another person with middle intelligence. The code is competitive like one person (middle knowledge) during a game in TV shows. The findings from this innovation has resulted the

implementation of adNetwork (product innovation) as here the association is with key words (eg. football, sport, a specific sport team). It is also published in an International journal.

2.3 Who developed these innovations?

- e. **Mainly your enterprise or enterprise group**
- f. Your enterprise together with other enterprises or institutions
- g. Mainly other enterprises or institutions
- h. Others

2.4 Were any of your innovations during the three years 2014 to 2016:

- a. New to the enterprise
- c. **New to the market**

2.5 Please give the percentage of your total turnover in 2016 from:

Goods and service innovations introduced during 2014 to 2016 that were new to your market

100%

Goods and service innovations introduced during 2014 to 2016 that were only new to your firm

%

Goods and services that were unchanged or only marginally modified during 2014 to 2016 (include the resale of new goods or services purchased from other enterprises)

%

Total turnover in 2016 %

23. INNOVATION ACTIVITIES AND SUBSIDIES

3.1 During the three years 2014 to 2016, did your enterprise engage in innovation activities?

Yes, In house R&D, Acquisition of machinery, equipment, and software; Trainings and market introduction of innovation.

3.2 During the three years 2014 to 2016, did your enterprise receive any financial support for innovation activities?

USAID for a lab, only a symbolic financial support

4. SOURCES OF INFORMATION AND CO-OPERATION FOR INNOVATION ACTIVITIES

4.1 During the last three years 2014 to 2016, how important to your enterprise's innovation activities were each of the following information sources?

e. Internal;

f. market sources;

g. institutional sources; or

h. any other sources: mainly internet search

4.2 During the three years 2014 to 2016, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions?

StartupYard (from Czech) how was organized the work

4.4 Which type of co-operation partner did you find the most valuable for your enterprise's innovation activities?

StartupYard (from Czech) how was organized the work

4.4 Sales with new products/services \leq 1 year on the market (in % of total sales)

More than 40%

4.5 What is your average time for your new product/service to break-even?

1-6 months

5. POSITIVE EFFECTS OF INNOVATION DURING 2014-2016

5.2 What are the effects of innovations introduced during the three years 2014 to 2016?

Increased range of goods or services; Entered new markets or increased market share; Improved quality of goods or services; and reduced time to respond to customer or supplier needs.

6. FACTORS HAMPERING INNOVATION ACTIVITIES

6.3 Did your enterprise have any innovation activities to develop product or process innovations that were abandoned during 2014 to 2016 or still ongoing by the end of 2016?

Yes, there are cases when we come up with an idea, but it is very costly, and we think the market is not ready to pay for such service, or the legal infrastructure, so we do not develop such service. Example, in 2014, we wanted to develop electronic payment system, which was very costly, and that time we didn't have that kind of money, as it was the starting point of our business. It was very difficult to get a license from central bank in Kosovo, and the legal aspect was complicated to get the right for this activity. Also, the market was not developed at that point, as they were afraid to do electronic payment. Now we are much better financially, but still, other new ideas come, and every idea is evaluated by cost and benefit analysis, and in that way, we decide whether it is convenient to go with it.

6.4 During the three years 2014 to 2016, how important were the following factors for hampering your innovation activities or projects or influencing a decision not to innovate?

- f. Cost factors;
- g. knowledge factors;
- h. market factors;
- i. institutional factors,
- j. other reasons not to innovate

7. INTELLECTUAL PROPERTY RIGHTS

7.1 During the three years 2014 to 2016, did your enterprise:

a. Apply for a patent, b. registered an industrial design, c. registered a trademarks or claim a copyright, d. No

7.2 Do you have patents for any innovation conducted throughout the years 2014 to 2016?

No, but we have publication in journal, and this was not costly, and this work is only ours

7.3 Does your organization works according to any ISO Standards? If yes, which ones?

No

8. INNOVATIVENESS (INNOVATIVE CULTURE)

8.1 Describe your innovation culture within your firm!

The key to innovation culture are top management support; ideas come from owner; ideas come from employees, and ideas come from clients.

The staff is pretty much young, and they don't face problems to work in different ways, having new responsibilities by introducing new products. Changes are part of our daily work. It is a company with high growth, and most of the information can be accessed in the internet, so they need to have online research skills and work dedication to succeed. SCRUM Methodology: agile methodology that is known for programmers' team. The development of new ideas in such organization is not a problem, but their implementation is a problem and we always need to do cost and benefit analysis before making such decision. Most of products exist in developed countries, so we only do different analysis before implementing them. We discuss in several meetings, and the ideas which are not relevant for a certain time are postponed. The SCRUM Methodology has product owners, project managers, and there can be done so many analysis and many feedbacks while in the process of developing new innovation

8.2 How well is your innovation process linked with your organization's strategy?

Strongly linked. The innovations are linked with the core values of the company. Everything we do, we try to make more innovative. Nevertheless, we do not have yearly business plan, as we need to go with technology trends, and cannot work according to a certain plan.

8.3 Do you have any R&D employees, if yes how many?

1 employee, which is also co-founder

8.4 Discuss three most important successful factors toward innovation?

Alignment of innovation with strategy; young staff and their creativity, knowledge management

8.5 Describe the organizational change with introduction of innovation, including its benefits and challenges!

Benefits: The main advantage is that there was not such search machine before; working with new internal methodology.

Challenges: To operate in Kosovo market, which is not so developed; the legal infrastructure doesn't promote online services, there are payment delays of our clients which makes more difficult to operate; also people's awareness about paying services is still not so developed, so they are not willing to pay so much for the expertise one has.

Thank you very much for your participation

Thank you for your time and commitment in making this survey a success. All participants will receive, on request, a personalized summary of the study's results designed to help you understand your performance versus your peers, and to identify innovation performance levers. Please note that all data will be reported anonymously, and we will strictly maintain confidentiality with respect to your company's specific survey data.

Appendix E – Types of Innovation introduced by Kosovo SMEs

	Product Innovation	Process Innovation	Organizational Innovation	Marketing Innovation
R1	Aqua park (service innovation); two caretakers that look after children playing outside while clients eat at restaurants (service innovation)	Purchasing of high technology water slides (polinwaterpark); Rides that are designed and engineered for maximum safety with highest level of ride experience.	Organizational structure changes	
R2	Production of cubes is the first not only in Kosovo, but also in the region	Composition of these stones is much different from the composition of other stones. Also, they have done innovation in logistics	Organizational structure changes, considering that the machines has ease their work	
R3	They are the only one in Kosovo certified to offer world known Online Software for managing finance and accounting, which are all in the cloud platform. They are authorized from the international company to make changes and adapted to local needs in accordance to the requirements of Tax Administration of Kosovo.			Significant changes in your relations with other firms, such as through partnerships
R4	Integrated marketing communication services to ensure client's communications are effective in all media and across all markets.	"Lead the Change" approach" that simplified the delivery of the service to clients	BRIEF methodology to better use or exchange information and knowledge within your enterprise	
R5	3D Printing service		Organizational structure changes	
R6	Cloud system, (Asset valuations of licenses): it is application that can be linked through Google drive, where the client is served within a minute for any information or report that he needs.			
R7	Online search engine and a news aggregator that uses natural language processing to finally make the Albanian web accessible to all. Then they continued with a program that goes to all canals in Albanian language, gather all news,		SCRUM Methodology: agile methodology that is known for programmers' team.	

	<p>and classifies them in categories: example sport, culture, health and others.</p> <p>Then we started to develop advertising, which companies could advertise for free their products and services.</p> <p>Then they developed Adnetwork, which is the most effective and simplest solution to Internet advertising.</p> <p>They also developed a Lab, which is a startup factory, made for Internet entrepreneurs who lack access to resources and market. As a startup factory, the Lab provides the space, mentoring, networking, technology, talent visibility, and funding to competent Internet entrepreneurs, creating solutions for the Kosovo, Albania, and FYR Macedonia market. Entrepreneurs will have an opportunity to transform their technology ideas/products into successful online businesses and solve real problems for society.</p>			
<p>R8</p>	<p>Online Virtual products: Graphic design and illustrations.</p> <p>Another product in combination with service was in 2015: It was installed in Antweb in Belgium. It is shopping mall, product that helps people with disabilities to go to one specific shop inside the center. It is navigation system, if you are in the first floor, it tells which doors to use that enables you to go for example to the third floor (outsourcing)</p> <p>Another one is the system for management of cash box locker in banks. It is installed in 200 bank branches in Europe, and now it will</p>		<p>Adoption of SCRUM Methodology</p>	

	<p>go also in China for the first time. In digital way (online), you can monitor the contract, and manage things you have in cash box locker.</p>			
<p>R9</p>		<p>Processing of the nuts fruits, where the cleaning of the shells of fruit nuts was earlier made by man (hand) and as a result the process was tedious and slow. They have made themselves the machine to break fruit nuts, which has significantly reduced the time and cost of processing the fruit. Currently, it operates with a capacity to break about 170 kg of nuts per hour with very small electricity costs (2 kWh), compared to the performance of an average worker who can break somewhere 1-2 kg per hour. Other competitors do them by hands, or there are very expensive machines (around 400 000), which is not affordable to buy.</p> <p>Seeds waste was sold to pellet producers, and now they have done an agreement with a company that prepares for waxing cream, which is sold for higher price. Still it is impossible to sell all 7 tons of seeds waste to this company, but what is left is sold again to pellet producers</p> <p>The second innovation is the aqua-punic: the combination of aquaculture (raising fish) and hydroponics (the soil-less growing of plants) that grows fish and plants together in one</p>	<p>Changes in organizational structure as the work has been simplified, and creation of alliances with restaurants selling fish.</p>	

		integrated system. The fish waste provides an organic food source for the plants, and the plants naturally filter the water for the fish. These fishes have been sent to one restaurant.		
R10	<p>Offering integrated services in one place can be seen as innovation. These services include business consulting, public policy, IT Solutions, Research Analysis and Diligence.</p> <p>They are also using a hybrid method, where IT team in Kosovo develops software in cooperation with employees in a US company, and then the US company sells the software to other companies in the US. They introduce the software and they customize their products to the client needs.</p> <p>Another innovation is the development of loyalty card that rewards you in the form of points for each Euro you spend. You can use accumulated points as a discount for future purchases to our partners. The card is a loyalty program built to reward customers. This program enables collection of points and then spending them to the partners involved in this system.</p>		<p>It also uses GPS system with tablets, in order to monitor its employees, if they are really conducting the interviews efficiently.</p> <p>Adoption of SLACK methodology.</p>	
R11	Install high-class equipment and finishing machinery which greatly increases the variety, quality and efficiency of printing services	Purchasing printing machines and equipment of latest technology		
R12	Recently, our fitness, in addition to the opportunity to use the exercise space, the fitness also provides the assistance service from the fitness trainers, which it offers free of charge to all clients. In addition,	Offered its customers top-quality brands of world-renowned brands that make the exercises even more effective.		In addition to the use of social networks for advertising its work, the company has started to use video to show how to do some exercises (which has been beneficial to other people

	they offer the service of receiving a Personal Fitness Assistant within our fitness which, besides the added care during the exercises, also provides advice about the diet to be followed by the client, which has shown to be very successful and has increased the clients' satisfaction. It is 24 hours open. It also has sauna at additional cost.			besides the company) as well as the positive changes that their clients had after the exercises. In addition, they cooperate with many popular faces of Kosovo and Albania.
R13	Adapting Digital Marketing; Viral Video; Promotions in youtube.		Changes in organizational structure, as they established a special department that was responsible only for video clips in internet.	
R14	Production of work uniforms for both men and women	Significantly distribution methods	Changes in organizational structure	
R15	Integrated services: Electricity maintenance; water maintenance; heating and air condition maintenance; home electro equipment; as well as other services such as: repairs on doors; windows; cupboards and others. The working hours are 08:00-17:00; nevertheless for some urgent home defects, it is at client's disposal for 24 hours.		Changes in organizational structure	Customers' loyalty: provide them gifts for children during New Year; Have continuous meeting with regular clients to discuss the problems and turn them into opportunities.
R16	Improved translation services due to the purchases of software because they focus on achieving quality.	Purchasing a Quality Assurance Software through which improvements in translations can be carried out such as spellcheck control, syntax etc. Another Software they purchased controls double space, typos etc. With this, we have achieved to have mistakes' level of only 7.23%. The software for Project Management: Project Management System through which is carried out the payment management, as well	Changes in organizational structure: The number of project managers has increased. It is one manager that is responsible for managing the company; another manager is responsible for quality control, and the last one is responsible for 5-6 clients.	Innovation in Marketing: We have started to do our marketing with international companies, which has resulted to re-branding.

		as jobs being performed by different employees.		
R17	<p>Providing more specific diagnosis as a result of purchasing new medical equipment.</p> <p>Patients' consultation with doctor, every day for a specific hour by phone.</p>			
R18	<p>OMNIBUS (research service) is new product, which is a method of quantitative marketing research where data on a wide variety of subjects is collected during the same interview.</p>	<p>They used computer assisted tablet ASKIA Software for survey (market research industry) buying new software to easy the process.</p> <p>Market research facility: To ensure that your surveys run smoothly, focus group unit with one-way-mirror offers room for 16 respondents and can be rearranged to accommodate several mini-groups. Additional rooms, equipped with state-of-the-art office technology, as well as a comfortable client lounge round off the picture of a modern market research facility.</p>	<p>Use of GPS to know where employee is, and ensure that the interview is being held by the employees who work in the field.</p>	
R19	<p>Offering ecological cleaning products, by selling them, and providing service. Every service done is accompanied with a call to clients, to ask about its satisfaction</p>			

R20	<p>They bring continuously new bakery products to customers. They bring German technologists as consultants 3-4 times a year, that help them come up with new quality bakery products and ensure that the process of testing them is efficient. It involves many times focus group in order to make a decision to bring a certain product or not (about appearance, taste, price of the product how much they would pay).</p> <p>Their bread products are of high quality: free of additives, ensuring that clients' daily intake of bread is highly beneficial for health – mind and body.</p>			<p>It rewards its loyal customers through the Loyalty Card. For every product they buy, the personnel stamp the empty circles on clients' card, with the exact number of products they have bought in that moment. After they have collected 9 stamps, they can get one the following products for FREE.</p>
R21	<p>Tax Consultations for individual, businesses and NGOs; Financial accounting, Managerial accounting; Finance Management. Now they have started to do financial statements for medium business as well, as it is requested from TAK.</p>			
R22	<p>The company has launched new services on tax reviews. Recently, it has started to offer business consulting and IT consulting.</p>	<p>Started using sophisticated online Software, where they have 5 clients using it.</p>	<p>The online software has simplified their work as the clients enter data there, and then this company will perform accounting duties. This not only has shorten the time of entering data, but it also reduced the risk of making mistakes in numbers.</p>	<p>The company's web development, which was done on October 2016, is seen as marketing innovation, considering that it increased the number clients operating in Kosovo. Moreover, in their web, they have also news and articles related to accounting, finance, tax services, as well as business consulting, which increases the number of people visiting their website.</p>
R23	<p>They added a new service of maternity.</p>	<p>They have bought very sophisticated software for hospitals which is Hospital Management system, called ICD 10, standard which is the latest state of the art and the latest technology system in</p>	<p>The staff is composed of international and local professionals making this hospital unique. They have done organizational innovation, considering that a major restructure has happen, adding some departments, such as security and</p>	

		health care.. No other hospital in Kosovo uses such software. And this software has been adjusted to the needs of the hospital.	support department. Also administration department has been developed, as those logistics responsibilities before were under finance department. In some cases one person doing two positions was also a conflict of interest.	
R24		Software development by themselves for their own needs; Advanced control technology through GPS system to better manage employees		Advanced control technology for online orders.