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BUSINESS BENEFITS FROM E-GOVERNMENT SERVICES: CASE OF SLOVENIA AND MACEDONIA

Abstract

Nowadays, governments around the world are operating in the dynamic environment where information and communication technology have dominant role. Using of information and communication technology by the governments generates delivery services in electronic form and changes their relations with the citizens and business community.
The purpose of this paper is to analyze e-Government services in Slovenia and Macedonia by focusing on government-business relationship with special emphasis of business benefits from the e-Government services.

Keywords: *e-Government, e-services, G2B, business benefits*

JEL Classification: L26, F2, H25

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1. Theoretical aspects of e-Government and their services

The process of using information and communication technology in the public sectors is happening rapidly in both developed and developing countries as e result of the new environment of the governments. The number of the citizens and companies that use different types of digital technology is increasing every day. As a result of this, many governments try to respond and adapt to the changes in the new environment and, therefore, they transform their activities by introducing information and communication technology. This is a process of transformation of the government into e-Government. This process takes high position on the agendas of many governments aiming at for better services and relations with citizens and businesses.

Today, the globalization development divides the world in two zones: stagnation and development zone. Those countries that failed in using modern information and communication technologies for their own development will nevertheless remain in the stagnation zone (Government of the Republic of Macedonia in 2005).

According to the definition of the World Bank (2009), e-Government refers to the use of information technologies by government agencies that contribute to the transformation of the relations with citizens, businesses, and other units of the government. This transformation of relations is relateed to better delivery of the government public services to citizens and businesses through electronic tools, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. The results of this transformation are: reduced corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

Turban, Ephraim and Wetherbe (2004) define e-Government as using the Internet technology in general and e-commerce, in particular delivering information and public services to the citizens, businesses and those working in the public sector. It is also an efficient way of conducting business transactions with citizens and businesses, and within the governments themselves.

By introducing information and communication technology in their activities and providing e-services to citizens and businesses, Governments directly or indirectly contribute to positive influence on societal development as a whole through the following (USAID, Ministry

of Information Society of the Republic of Macedonia & Metamorphosis Foundation 2010):

- Building a transparent and fair public administration,
- Increasing the effectiveness and productivity of the functionality of the institutions,
- Improving the quality of services provided by the public sector to citizens and the business community,
- Introduction of new types of relations between government and citizens, and government and businesses.

E-government services can be classified into three major categories depending on the parties that are involved into the delivery process:

- *Government-to-citizen (G2C)* includes all electronic interactions and activities between the government and its citizens (Lee 2005). These interaction and activities include: asking questions, receiving answers through Internet platforms, payments, receiving and completing forms and documents, and similar e-Government services.
- *Government-to-business (G2B)* that includes all electronic interaction and relationship that works in two directions between the government and the businesses. The government sells products to businesses and provides them with services, but businesses sell products and services to the government agencies as well (B2G) (Lee 2005). The key example for G2B e-services are e-procurement, e-taxes, and obtaining licenses.
- *Government-to-government (G2G)* includes all electronic activities between different government institution and its units. This category also includes activities between government units and their employees (e.g. e-training) also known as government-to-employees (G2E) activities.

The essential e-Government services of the European Commission for businesses are: electronic declaration of VAT and Corporate tax, e-registration of new companies, e-Public procurement, e-permits related with the environment and customs, electronic declaration of social contribution for employees and e-submission of data to the statistical office. The European Commission uses twenty basic e-Government services to benchmark the progress of the EU countries on

e-Government (Capgemini, IDC, Rand Europe, Sogeti & DTi 2010a; UNDP 2010). Eight of the 20 basic e-Government services relate to businesses, and twelve relate to citizens (Table 1).

Table 1: 20 basic public services

	G2B		G2C
1	Social Contribution for Employees	1	Income taxes
2	Corporate Tax	2	Job search
3	Value Added Tax	3	Certificates (births, deaths and marriage records)
4	Registration of a New Company	4	Announcement of moving (migrations)
5	Submission of Data to the Statistical Office	5	Social benefits (unemployment benefit, child supplement, health care payment, student supplements and grants)
6	Custom Declaration	6	Personal Documents (Identification document - ID, passport, driving license)
7	Environment-related Permits	7	Car registration
8	Public Procurement	8	Public libraries: review of catalogues and ordering
		9	Admission to higher education institutions
		10	Application for building permits
		11	Declaration to the police
		12	Health-related services

Source: Capgemini, IDC, Rand Europe, Sogeti & DTi (2010a)

The benchmarking is based on the core and proof-of-concept indicators. (Capgemini, IDC, Rand Europe, Sogeti & DTi 2010b). Core indicators include: online sophistication and full online availability of the 20 basic e-Government services, user experience, portal sophistication, e-Procurement visibility and availability. Proof-of-concept indicators are: e-procurement availability for the post-award phase, maturity of "life events" and availability and use of key enablers.

The indicators 'online sophistication' and 'full online availability' are maintained and assessed against the five-stage maturity model. The model reflects how businesses and citizens can interact with public authorities. Governments' service delivery processes are described according to the following stages: (i) information, (ii) one-way interaction, (iii) two-way interaction, (iv) transaction and (v) targetisation. The fourth and fifth levels can be referred to as 'full online availability'.

The most important indicator of successful government is the quality of the e-Government services which are offered to citizens and businesses. Lee & Lin (2005) defined the quality of e-Government services as overall customer assessment and judgment of e-Government service delivery in the virtual marketplace. For Janda, Trocchia and Gwinner (2002) the most relevant factors affecting e-Government service quality are:

- access,
- security,
- sensation and
- information/content.

Zeithaml's (2002) model of e-Government service quality includes eleven dimensions like: access, ease of navigation, efficiency, flexibility, reliability, personalization, security/privacy, responsiveness, assurance/trust, site aesthetics, and price knowledge.

The quality of the e-Government services influences the better acceptance rate of their users and their positive response regarding loyalty (Cristobal, Flavian, & Guinalıu 2007), trust (Al-Faouri & Al-Kasasbeh 2010) and satisfaction (Cenfetelli et al. 2008).

The delivery of e-Government services generates various types of benefits for citizens and businesses on one hand, and benefits for government institutions and units on the other hand. The most important and prime motivators for using e-Government services are the following benefits:

- Improved access of citizens and businesses to government services (British Columbia 2010).
- Reduced costs for the citizens, businesses and government agencies (Zaimes, Kalampouka & Emmanouloudis 2012).
- Increased end-user's convenience (AGIMO 2011).
- Increased transparency of government activities (Luna-Reyes et al. 2012).

- Improved efficiency and effectiveness of the government functions (Rao 2011).
- Strengthened legal system and law enforcement (Lan 2004).

Measuring e-Government user satisfaction and impact is therefore a key instrument in assessing progress towards the efficient and effective e-Government (Deloitte & Indigov 2008).

2. Case of Slovenia: Some benefits for the business sector from the e-Government services

Around 46% of the EU citizens use e-government services for different purposes and Slovenia with around 49% of its citizens is slightly above the EU average. In addition, 87% of enterprises in the EU-27 and 92% of the Slovenian enterprises use e-government services (Eurostat, 2012; Florjančič and Vičič, 2013).

The development of the e-Government services in Slovenia has positive impact on the business sector in the some areas. For example in:

- Setting up enterprises and self-employment
- Compulsory delivery of monthly and annual reports

Due to the de-bureaucratization processes regarding setting up enterprises and self-employment in 2005, the e-VEM portal was established (Republic of Slovenia 2013a), which means All at the One Place.

The establishing of self-employment is now possible through a website in one hour and establishing a simple enterprise with limited liability has become much easier. Unlike in the past, to establish an enterprise there is no need to visit different offices and obtain different permissions or pay high amounts at the notary offices. The establishment of an enterprise through the e-VEM portal has become fast and efficient with one visit at the administration office.

In Slovenia enterprises are obliged to report to the public institutions monthly (such as for wages) and annually (such as for balance sheets). In 2007, enterprises were forced to use electronic submission of all crucial tax reports to the **Tax Administration of the Republic of Slovenia** – eDAVKI or eTAXES (DURS, 2013). At the same time, the opportunity was made for the electronic submission to the Agency of the Republic of Slovenia for Public Legal Records and

Related Services (AJPES, 2013) and the Office for Pension and Health Insurance of Slovenia (ZPIZ, 2013). Due to DURS, for on-line reporting all enterprises as well as self-employed citizens have to obtain digital certificates, which are not free-of-charge. Individuals can also submit different reports on-line via the portal eDavki, but it is not obligatory. The digital certificates for individuals can be obtained free-of-charge.

Once a year, each of the e-government service suppliers in Slovenia conducts a survey of satisfaction of the users with the e-government services on its website. This is prescribed in the Article 34 of the Law on Public Agencies – conducting anonymous surveys. In this way, users of the e-government public services can have the opportunity to express their satisfaction with different public services (E-government 2013a, 2013b). Among them, there are also development and use of e-government sides, which are a part of the European e-government services such as project technology for electronic identification (STORK 2.0), project e-health (epSOS) and e-justice (e-CODEX), older pilot projects for e-business (SPOCS) and e-public procurement (PEPPOL, or Open PEPPOL ASBL). Further development of new instruments for integration in Europe is expected, such as infrastructure for digital services (e-identification and e-public procurement).

The use of e-services can save time and money, and increase flexibility, but on the other hand some persons still prefer personal contacts. One of the reasons for the not very common use of e-government services in Slovenia is the lack of trust in the e-government with generally long-lasting administration procedures. Therefore, the increase of the trust in the e-government services and in government services in general is one of the main factors for improving of the use and acceptance of the e-government services. Among other actions that should be taken to improve the use and acceptance of these e-government services are also education and promotion activities particularly among retired and elderly persons, who are also less familiar with the use of advanced information and communication services, including the e-government services.
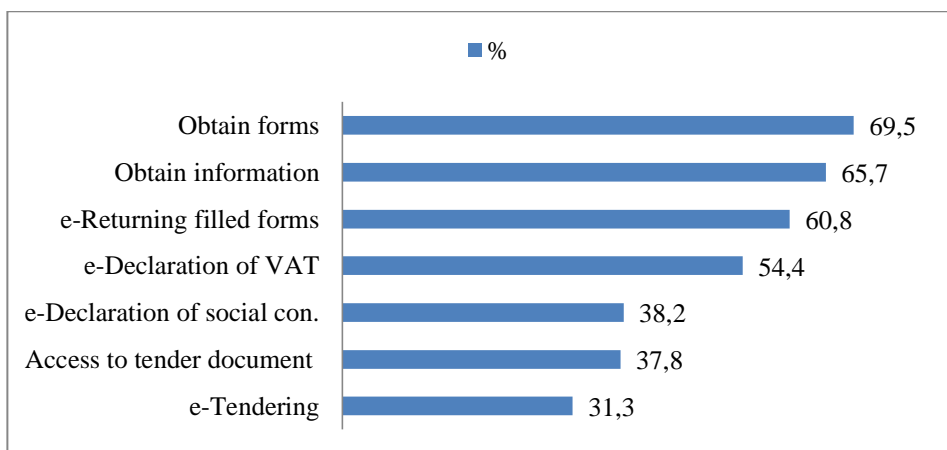
3. Case of Macedonia: Benefits of the business sector from the e-Government services

Policy papers and strategies for increased adoption and use of the e-Government services by the citizens and businesses in the country are drafted and positioned highly in the agenda of the Republic of Macedonia.

Macedonia intensively invests in the development of the e-Government services and other elements of the information society. A survey of the level of online sophistication of the e-Government services of eSEE (electronic South East Europe) member countries for the Republic of Macedonia shows a level of 60% of online sophistication of e-services, as well as 69% of online sophistication of G2B (the eSEE average is 52%), and 51% online sophistication of the G2C services (the eSEE average is 38%) (Janevski et al., 2010). Nevertheless, it is far from the level of availability and sophistication of e-Government services in the EU member countries. According to the surveys for online sophistication of the EU27+ countries (EU27 + Croatia, Iceland, Norway, Switzerland and Turkey), the level is 90%, while the average full online availability is 82% (Capgemini et al. 2010a). Regarding the use of different e-services of EU27+, the average of G2B is 94%, while for the G2C is 87%. However, the European Commission has targeted that 50% of the EU citizens will use G2C services and 80% of EU businesses will use G2B services by 2015 (EC 2010). Macedonia has not determined targets in terms of the penetration level of e-Government services.

According to the report of the State Statistical Office of Republic of Macedonia (2013), the business sector in the Republic of Macedonia in 2012 used e-Government services usually for obtaining forms – 65.7%, obtaining information from the public authorities' websites – 69.5% and electronic completion of files – 60.8% (Figure 1).

Figure1: Using of e-Government services by the business sector in Republic of Macedonia

■ %

Service	%
Obtain forms	69,5
Obtain information	65,7
e-Returning filled forms	60,8
e-Declaration of VAT	54,4
e-Declaration of social con.	38,2
Access to tender document	37,8
e-Tendering	31,3

Source: State Statistics Office of Republic of Macedonia (2013)

The five most used G2B applications in the Republic of Macedonia are: e-Tax, online employment registration, e-Procurement, EXIM – single system for import, export and transit of goods and tariff quotas, and the automated system for management of international cargo transport licenses – CEMT. According to the survey of the user satisfaction for these applications in the country made by Janevski, Stojanovski, & Jashari (2009), the registered users of e-Procurement expressed lowest level of satisfaction (with 3.5 on a 5-point scale). However, even this lowest level of satisfaction is quite satisfactory on the scale from 1 to 5 (Figure 2).

Figure 2: Satisfaction by the users of certain e-Government service
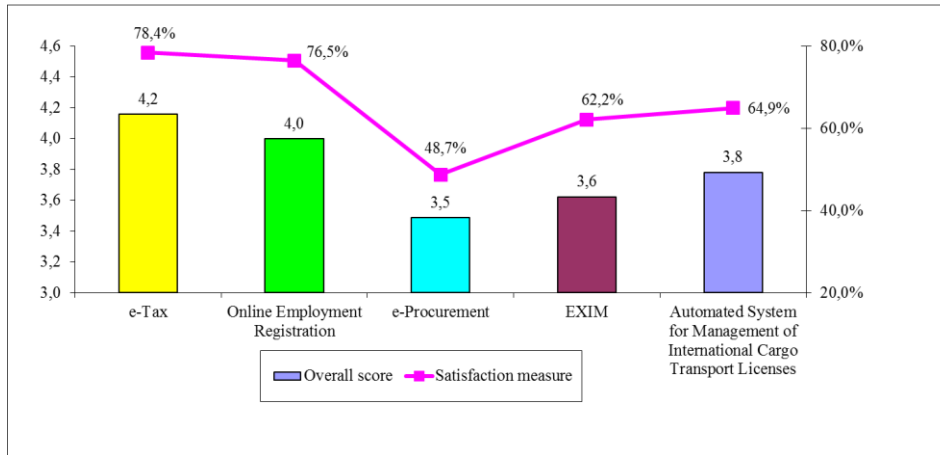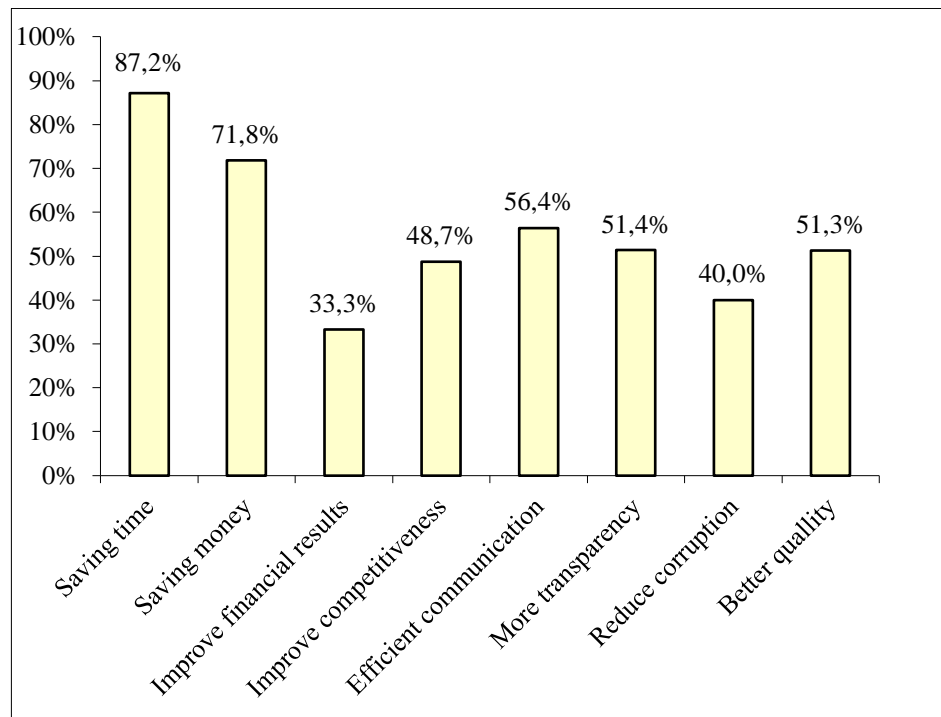

Source: Janevski, Stojanovski & Jashary (2009)

The highest level of satisfaction, 4.2, is awarded for the application of e-Tax.

The level of satisfaction for the e-Procurement application decreases with the size of the company, from 3.6 for large enterprises, down to 3.47 for micro enterprises.

Only 5% of the respondents (2 out of 39 companies) attributed a maximum score 5/5 for overall satisfaction.

Figure 3: Reported benefit from the e-Procurement

Source: Janevski, Stojanovski & Jashary (2009)

Two highest scores for the benefits perceived have been reported for 'saving time' (87.2%) and 'saving money' (71.8%). Only one third of the users believe that the use of e-Procurement could contribute to the improvement of their financial results, and only 40% of all users claim that the e-Procurement could reduce the corruption in the country, especially in the field of public procurement (Figure 3).

Understanding the future demand for development of new functionalities of the e-Procurement application expressed by the companies and their need for further improvement of the existing system gives us some ideas about the future demand and thus sustainability of the process of e-Procurement service delivery.77% of all respondents that answered the question "Do you reckon that the existing e-Procurement service needs further upgrades?" claimed that the existing Application needs further upgrades. But this is not the reason why the satisfaction level of the system is the lowest comparing to the other four services covered by the research.

The survey respondents provided many ideas on how to upgrade the existing e-Procurement Application. Some respondents focused on the improvement of the stability, accessibility and reliability of the application. Others emphasized the need for further simplification of the business procedures, especially increasing the level of interactivity and feedback by the responsible institutions. Many respondents mentioned insufficient training and the need for seminars for the users of the application. Some respondents also emphasized the lack of public awareness for the existence of the e-Procurement application and other e-services in the country as well.

Conclusions

The concept for the development of e-government services aimes at greater transparency, efficiency and effectiveness in the delivery of public services to the citizens and businesses, as well as improvement of the communication between the public, private and civil sector. Simplification of the business procedures, increased level of interactivity and feedback by the public authorities responsible for delivering e-Government services, improvement of the stability, accessibility and reliability of the e-Government services are necessary for obtaining more benefits for the business sector from using the e-Government services. The practical and legal requirements should be also taken into consideration for better e-environment in the society.

Further research could be directed towards the analysis of the fight against the corruption and contribution to favorable e-environment of the business sector. Also, it would be of great interest to work on building models of introducing public-private partnership in the process of establishment and delivery of e-Government services to citizens and businesses.

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