THE IMPACT OF E-GOVERNMENT ON THE ECONOMY IN THE CONTEXT OF IMPROVING THE COSTS

STOICA Eduard Alexandru[1], PITIC Antoniu Gabriel[2]
MARTIN Florin Marius[3], BUCUR Călin[4]

Lucian Blaga University of Sibiu

Abstract

　　In this paper we will discuss the impact of e-Government on the economy. We will show you the benefits, in order to understand the importance of an increase of the investments in e-Government tools of the State. In fact, investments in e-Government solutions are fundamental, as we see in the countries that are already developed. These countries provide e-Government services in order to stay in the lead and invest in the continuous improvement of those services.

Keywords: *e-Government, social media, e-democracy, knowledge management*

JEL classification: *M15, Z130, H11*

1. Introduction

　　The public sector and its relations with the company have generated numerous analyses and discussions in recent years. Increasing demand for

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[1] *lecturer Ph.D., Faculty of Economic Sciences, Accounting Finance Department, Lucian Blaga University of Sibiu, Romania, eduard.stoica@ulbsibiu.ro*

[2] *teaching assistant Ph.D.c., Faculty of Engineering, Computer Sciences Department, Lucian Blaga University of Sibiu, Romania, antoniu.pitic@ulbsibiu.ro*

[3] *teaching assistant Ph.D.c., Faculty of Economic Sciences, Accounting Finance Department, Lucian Blaga University of Sibiu, Romania, florin.martin@ulbsibiu.ro*

[4] *Ph.D student, Faculty of Economic Sciences, Lucian Blaga University of Sibiu, Romania, calin.bucur@yahoo.com*

public services, budgetary constraints, personnel costs and new facilities offered by information technology have been the challenges of generating new concepts: "on-line Government", "e-Government", "electronic democracy".

The key element of the concept of "e-Government" is improving the relationship and streamlining the exchange of information between the public sector, on the one hand, and citizens and business environment, on the other hand. E-Government means providing electronic public services for citizens and business, a better and cheaper alternative which would allow the Government to be closer to the citizens and to adapt its services according to their requirements.

A complete solution of e-Government would respond to requirement such as:

- single point of contact for providing electronic services 24 hours a day, 7 days a week
- bridge crossing to digital society
- rebuilding citizen's trust in Government
- accelerating the economic growth
- establishing policies and governmental regulations
- creating a more participatory form of governance
- promoting solutions for distance learning

In recent years, e-government has become a subject of great interest among those who are passionate about the emergence of Web 2.0 technologies. This research analyses the recent literature published about Web 2.0, social media, social networks and how it has been used by the public sector. Key observations include literature themes such as the evolution of case studies of social media in literature, the evolution in time of policies and strategies and social media used in disaster management as an important role for Government. Other observations include the lack of tangible objectives for e-government, and the idea that still requires significant changes in Governmental culture, philosophy of control and resource management, which must be achieved before obtaining a real success in using social media.

For the implementation of the concept of "e-Government", a country must have adequate infrastructure, institutional systems and technology, a compatible legislative framework, human resources properly prepared and last, but not the least, strategic thinking and coordination. Operating as a multi-channel communication system between Government, citizens, business environments and service providers, e-Government solutions would allow

administrative bodies to provide increased access to information, the integration and centralization of data and applications, streamlining the decision-making process in public activity, increasing incomes, reducing costs.

For the successful implementation of "e-Government" is necessary to define a coherent architecture of applications and a predefined set of generic services and tools for the development, implementation and subsequently administration of applications. This architecture should be updated to ensure correspondence with users' requirements and with new technologies emerging.

Specific computer applications fits into the following list of public services for citizens and business environment (the list is minimal): income taxes; looking for a job; security/social protection; personal documents; registering a car; construction permits; statements to the police; public libraries; certificates of birth; marriage; death; enrollment in secondary and tertiary education; change of address; health services; e-transport; social contributions; corporate taxes; VAT; the registration of a new company; transmission of data to the statistical offices; customs declarations; public acquisitions.

The beneficial effects of the widespread use of information technologies and communications to the workplace, in relation to the authorities and public institutions, in everyday life (to shop, to instruct, to entertain or to solve various household activities etc.) are indisputable. These effects, however, should not be idealized as long as the current practice proved and the existence of numerous obstacles which can diminish and cancel these effects: the impossibility of social categories to have access to new information society services (for lack of adequate communication infrastructure or access terminals, the lack of culture necessary to use them or because of tariffs too high in relation to individual income) the distortions produced on the labour market, the inadequate services/information provided in relation to individual or groups interests, lack of security and confidence of information with undesirable effects on personal privacy of personal life or with the production of important material loss, dangerous informational contents to public moral, social ethic or individual security.

Considering that the research within the framework of e-Government in respect of the impact on the economy are relatively new (Stoica & Martin, 2011) an actual evaluation of the impact on the economy is difficult. In

addition, the investments of e-Government administrations were not large enough to generate a macro-economic effect. On the other hand, it is very important for the developing countries to invest in e-Government solutions (Stoica & Martin, 2011). Nowadays these can benefit from the information already established and communication technologies and therefore to increase the concentration on the main purpose of e-governance, to create benefits for citizens and business of end-users.

From the analysis carried out until this point regarding the importance of technologies (Martin & Stoica, 2011), we can clearly and easily imagine major impacts of e-Government. These include the improvement of services that are delivered to enterprises, particularly lower costs, easily imagined in public acquisitions (Stoica & Martin, 2011), a better control of public expenditures, an improved process of management and the increase of incomes for administration, through the implementation of software platforms with which can be collected more easily certain sums to the State budget. In the following paragraphs we will analyze in more detail some of these benefits.

2. Cost reduction and budgetary savings

Let's start from the most common economic impact that any service should bring: cost reduction and budgetary savings. E-government contributes to these benefits by reducing the cost of transactions for administrative procedures and by ensuring a better control of expenditures (the Romanian Government, 2009). Until July 2012 the Romanian Government's strategy for the new system of e-Governance, "eRomania" is on the implementation phase and is the only official document. The two items mentioned above, cost reduction and budgetary savings can be divided into two single impacts. In fact, on the one hand, there is the reduction of costs in the provision of services and, on the other hand, the control of government expenditures. These are the two direct economic impacts of e-government.

Despite the expectations of a clear reduction in costs of providing public services, the results of empirical research to date shows an impact and an improvement, rather weak in this direction. In fact, I realized that the cost reduction does not occur. Research by (Coursey & Norris, 2008) and (Muhammad, 2012) to assess of e-Government models, show clear results in this regard. I won't go through every detail of this study, nor all the results, but I will present evidence in support of our work. The study, which shows the

evolution of impacts on three time periods, divided by the cost impact in reducing personnel, an increase in the non-tax revenues and reducing administrative costs. As we can see in table 1 shown below, the results are disappointing in terms of reducing costs in the short-term.

Table 1 – Cost impact analysis (percent of total respondents)

Cost Impact	2000	2002	2004
Reducing the number of employees	0.7%	1.3%	2.6%
Non-tax revenues growth	0.6%	0.9%	1.3%
Reducing administrative costs	5.0%	7.9%	10.9%

Source: Processed after (Coursey & Norris, 2008) page 528

On the other hand, the development was slow and was asserted only a reduction in administrative costs. On the other side, nobody can deny that e-governance has an impact on costs and, in addition the data found could be considered as old as this area. We still believe that after the analysis made, the cost impact coming from the e-government solutions will be confirmed in the future discoveries in technology and governmental literature.

As in the case of every industry, it takes a critical mass of users to create economies of scale and, therefore, cost reduction. One of the reasons of this minor impact observed in the table above may be the fact that, initially, the costs are high. In fact, investments are needed in order to establish an efficient platform for the provision of services. For the purpose of testing a direct cost reduction, after the initial investment, it is very important that a number of users to be present. This will allow, for example, a reduction in the number of persons employed in the delivery of services through the traditional channel and then reducing the costs. Also, e-Government can help to control the governmental expenditures in a better way. For example, as specified (Ghilic-Micu, 2002) in the contents of e-Government brings together three paradigms: "technical paradigm", "managerial paradigm" and "functional paradigm".

The impact of cost reduction does not only affect the economy. The debt crisis in the Eurozone, which hits the PIIGS countries (Portugal, Ireland, Italy, Greece and Spain) and reaching to more solid countries like: France, Austria and Belgium, which have shown within the Governments of the most affected countries some issues directly related to the cost reduction. Most

obviously, the economic impact of e-Governance, are the political costs and the costs of tax evasion. In Greece and Italy, for example, the political costs are very high. This is due partly to the traditional and old-fashioned way tom provide public services. In this respect, many of the resources can be separated with the help of e-Governance. For example, e-Governance could help to better management of all political costs within a country. All the benefits, including various outgoings for reimbursement voucher for transport and for a car fuel and many other privileges guaranteed to the government officials, can be traced in a more efficient way and, moreover, could put an end to the abuses. Also, we could say that although it is still difficult in countries like Romania, the implementation of a simple utility of e-voting could offer important benefits to the country. Of course, this is just an example and, in addition, one of the suggestions to solve a small part of the puzzle that is needed to solve many problems in the way that politics and policymaking is implemented in this country.

3. Tax revenue

As specified in the section above, another problem for countries like Romania, Italy and Greece is the problem of tax evasion. In fact, many citizens who tried to avoid debs in the recent years have led Governments into a serious refinancing situation. This is one of the consequences of these states' incapacity and inefficiency in collecting taxes. A successful e-Government would have a major impact in raising income taxes for such countries. The modernization and creation of an efficient taxation system through the services of e-Government was and is a key priority for many countries. For example, the system of processing and completing the fees would help Governments in increasing transparency and reducing corruption, which would lead to a greater public trust.

4. The implementation of electronic government

The development of e-Governance is an essential matter, nowadays, for the development of society. E-Government projects should not attract citizens who are already connected to the Internet, it will also have to draw those who are less familiar with the technology and those who do not have an Internet connection. Governments should develop projects of integrated services network. In order to successfully implement these projects, more powers are needed, such as, project management skills and analytical skills,

analytical and technical skills, knowledge management, communication and presentation.

Figure1 – Skills that are needed for the development of e-Government
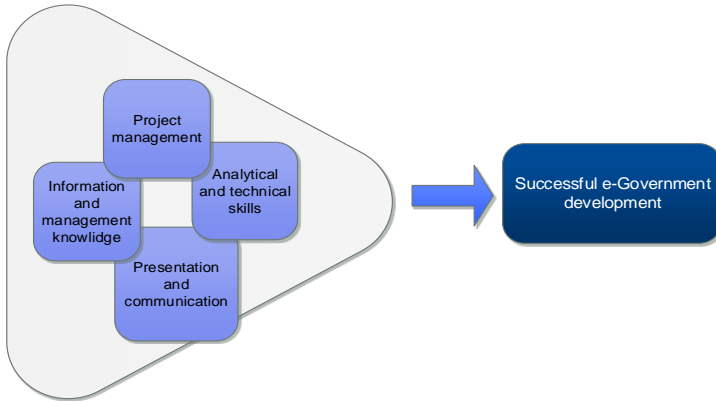
5. Project management

Surely it is obvious, and very important, that project management skills are badly needed, irrespective of the project's size for the implementation and development of the projects.

Project management is the art of planning, organizing, progress, estimation and allocation of resources, negotiation, tracking, measuring results and last but not the least, the communication. Managing a project also includes the ability to manage time, cost, scope, risk and quality. All these skills are absolutely necessary to guide the project and to achieve the specific objectives.

6. Analytical and technical skills

Like any development project, it is important to analyze and interpret what is happening at each stage of the process. Analytical skills involve a visualization capability, complex problem solving, decision making and the enforcement of decisions. In a process of the development of a project, we will begin by defining what the problem is and we are going to learn practices, policies and processes which are contributory factors. Throughout the process will be needed various tools, such as: valuable comments from some

reviewers which can bring an added value, processes of analysis, studies to determine the satisfaction of its clients, analysis of stakeholders, user's needs analysis, information flow, etc. Technical skills are more or less important depending on the complexity of the system to be developed, to all intents and purposes requirements of programs to be used.

7. Information and knowledge management

Information is a valuable resource. Therefore, depending on its content, quality, format, transmission, storage, accessibility, security, usability and preservation can determine its value.

Bearing in mind that many factors must be taken into consideration, information management is a skill that is required in many, but also various compartments. For example, the role of programmers in developing a project is to create formats, databases and files that are used to organize and represent information. Moreover, they are also in charge of the security interfaces to ensure the integrity and the usefulness of information.

In order to successfully develop e-Government projects, you have to set up a knowledge management approach. This notion implies procedural and structural, in fact, components, data modelling, artificial intelligence, etc.

8. Communication and presentation competences

Communication in respect of the project is a requirement that must be carried out throughout its implementation. Will be organized meetings and presentations, regarding the progresses, objectives, the results and the problems that may occur. For example, if there are new items in the project, you can organize meetings with the representatives of central or local public administration to gain support and funding. There are currently several different communication tools, such as email lists, newsletters, and you may want to use cloud solutions, which can process documents and information in a collaboratively way. In order to communicate important developments in a simple and clear manner, it is important to provide information ranked on categories of interest. However, this process should not be simplified in order not to lead to erroneous conclusions.

The ability of presentation, not only requires knowledge of the preparation and support of a speech, but also the ability to take complex data that can be passed to different types of audience. Different fundamental skills

are necessary for the Government to implement integrated services in a successful manner.

9. Conclusion

Those are the most important features to be addressed when someone want to talk about implementing e-Government. Many different abilities might also be required, depending on the type of challenge facing the development of a system of e-government. There is an impressive collection of intermediary steps to do. We should get familiar with the idea to continue to move on, even if the ultimate goal which stays in front of us is not clearly defined. We somehow expect that to be the right way and we realize when we arrived to the destination. How long we do not know the goal, we have a good collection of intermediary steps or pieces that seem to lead to a happy ending.

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