

INCREASING TRUST TOWARDS GOVERNMENT E-SERVICES

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ABSTRACT

E- services are very trendy topic these days. They are becoming more and more popular every day, a mainstream for public, as well as the private sector. The number of users of e-services is evidently growing every day, but not as fast as the technology is advancing. One of the main issues in e-services acceptance is the trust of the users towards the offered e-services. Since trust is the main challenge for increasing the usage of e-services, this paper will focus on addressing key aspects for increasing the trust of users towards the e-services, highlighting their exploitation in e-government concept.

INTRODUCTION

In the past years there has been a rapid increase of proliferation of electronic services (e – services) as a result of the explosive nature of the information technology development. Until recently, the Internet was all about e-commerce, and it was dominated by web sites and storefronts offering products. Nowadays we are in the next phase of the Internet evolution where e-services are what matters most.

Any asset, deed, effort or performance that is made available via the Internet to drive new revenue streams or create new efficiencies is considered to be an e-service.

There are different types of e-services. Every day we use e-services like e-mails, social networks, chats, blogs, collaboration workspaces that can be used for socializing and personal, as well as professional/business purposes. These types of services can be considered as accessory and usually do not have critical impact on our lives or business. On the other hand there are e-banking, e-procurement, e-auctions, e-government, e-healthcare, very specific e-services that process critical and important information and have crucial impact on our lives, private and business wise. This second group of services is more susceptible to trust issues.

E – services are widely spread and becoming part of our everyday life. However, no matter how useful and easily available they are, still what is most critical in the decision whether they will be used or not is the trust that users (citizens, business sector, public institutions, NGOs etc.) have in the particular service. Considering the nature of the e- service, which change the traditional face-to-face service model, a completely new approach towards the term trust is needed.

In a traditional, general sense of thinking, trust can be interpreted as a state of mind. Mayer et al. (1995, p. 712) defined trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". (Mäntymäki & Salo, 2010)

The new challenge arising in front of us is how to increase users' trust in the new approach of providing services, focusing on governmental e-services.

THE E-SERVICE CONCEPT

E-services are all about providing and consuming services with the benefits of: timesaving, cost reduction on both sides (provider and consumer/user), increased efficiency and effectiveness of service provider, as well as increased user satisfaction facilitated by utilization of ICT.

The concept of e-services is not only applicable for exploitation by the private sector (e-business), since its significance is much broader in the sense that can be applied for providing greater social advantage (e-government).

E- business is defined as all electronically mediated information exchanges, both within an organization and with external stakeholders supporting the range of business processes. (Caffey, 2005)

There are number of definitions for **e-government** among experts and researchers, and most of them point out that Electronic government is government that uses information communication technologies to offer the citizens and businesses the opportunity to interact and conduct business with government by using different electronic media. It is about how government organizes itself: its administration, rules, regulations and frameworks set out to carry out service delivery and to co-ordinate, communicate and integrate processes within itself. (Almarabeh & AbuAli, 2010)

OECD definition of the term "e-government" focuses on the use of new information and communication technologies (ICTs) by governments as applied to the full range of government functions. In particular, the networking potential offered by the Internet and related technologies has the potential to transform the structures and operation of government. (OECD, 2010)

The concept of e-government is applied in the bigger part of the world, and more often as an obligation rather than as a matter of choice. Although the governments all over the world embrace this new opportunity of providing their services and employ this concept in their governance, the same level of acceptance is not perceived on the user side.

THE CHALLENGES AND TRUST ISSUE

The previously mentioned issue in the users' level of acceptance is one of the most important concerns that governments have. Regardless the effort they invested in the development of these services, the numbers show devastating results. There is a „flat-lining“ of citizen use of e-government services compared to the growth of their online availability as well as enhancement of their sophistication.

According to EU statistical office “Eurostat”, all indicators of citizen online activity continue to show a year-on-year increase from 2004 to 2008, as exemplified by citizen use of the internet, apart from interaction with the public administration.

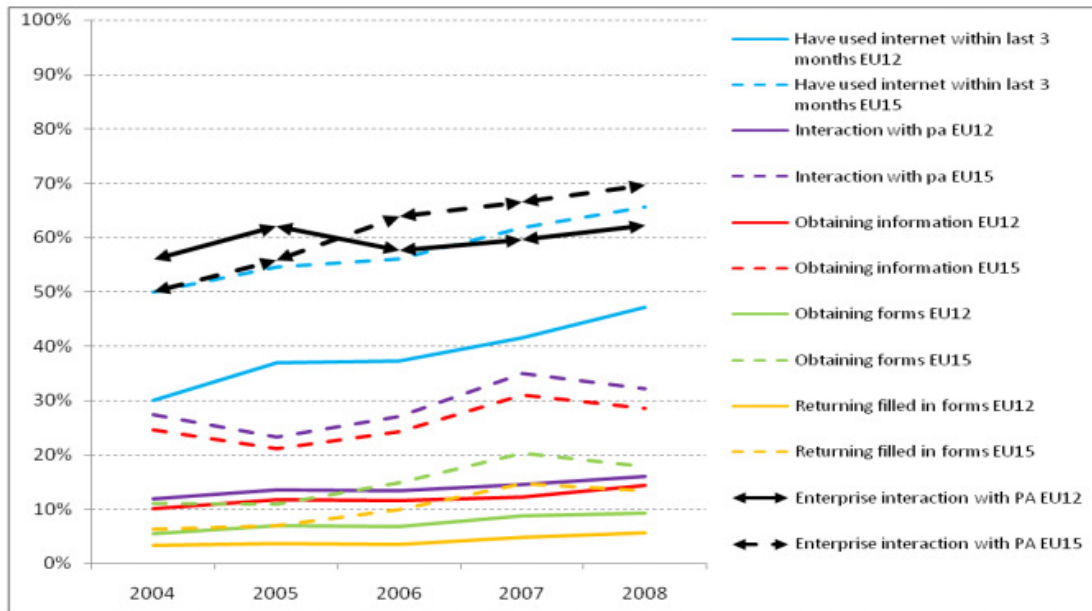


Figure 1. Percentage of citizens using the Internet and e-Government (Source: Eurostat 2009)

Overall progress in citizen e-government use between 2004 and 2008 has only been from 4% to 7% for EU15 and from 3% to 4% for EU12.

One of the fundamental explanations of the flat-lining regarding citizen usage of e-services is the low level of trust they have in e-services, especially the e-governmental services that process critical information. The origin of the insufficient trust is mostly derived from the specifics related to this subject, like involvement of sensitive and personal information, the risk from disclosure and misuse of important information and documents, and also the most common issue when it comes to e-services in general - the absence of physical contact, visual communication and tangibility.

Although governments all over the world develop and offer e-services following the best practices, experiences and benchmarks from more developed countries, they implement superior and innovative ICT solutions, but what is obvious is absence of appropriate bonding of the e-solutions with their internal organization and practices, user customization of the e-approach and more customer centric approach.

Although, the governments may have employed superior security controls and their operational effectiveness of the internal processes is on high level, there always seems to be a big gap between the real and perceived level of security and effectiveness from the users' perspective.

We see this issue of trust as crucial and of high priority to be addressed, when making an effort to achieve an increased level of e-service usage.

The concept of trust is extremely complex, attracting much attention from a number of different perspectives including the technological approach, social, institutional, philosophical, behavioral psychological, organizational, economic, game theoretic approach, e-commerce and managerial (Lewicki and Bunker 1996, Riedl 2004; Kim et al 2005). (Rana Tassabehji & Tony Elliman, 2006)

In the next chapter, we will try to elaborate one possible solution for increasing trust through focusing on the organizational aspects.

BUSINESS PROCESS REENGINEERING APPROACH FOR INCREASING TRUST IN E-SERVICES

Taking into consideration the previously elaborated issues, our proposal focuses on efficient resolution of those issues through achievement of customer centric approach by integration of organizational and IT perspective at strategic and operative level as a crucial success factor.

Different researches on this subject show that most e-government projects with the aim to provide e-services do not take business processes into consideration.

Since governments are mostly functional –oriented, they overlook the benefits from a redesign and reorganization in the direction of more user-oriented approach. The focus on the users can be achieved through their greater involvement in service development meaning users' interests and needs are what matters, rather than what is convenient for the government. This process is recently referred to as e-participation and is defined as users' direct engagement in service design. The recent trends show that users' inclusion in the preparation of the national e-government legislation through the process of regulatory impact assessment (RIA) is very beneficial and value adding. RIA encourages public consultation to identify and measure benefits and costs, and thereby has the potential to improve the transparency of governmental decision-making. The result of this process is improved and more consistent regulatory environment for both producers and consumers.

Users and other legitimate stakeholders should be invited more openly into a participative and empowering relationship with government in three main areas: 1) service design and delivery, 2) the workings and arrangements of the public sector and public governance more widely, and 3) in public policy and decision making. These approaches will empower users to become more involved in designing, delivering and personalizing services which they themselves consume. But this will also require back-office changes and more open, engaging and absorbent forms of governance which permit a plurality of stakeholders, intermediaries and channels in the service value chain. (Millard, Shahin, Pedersen, Huijboom & Broek, 2009)

Regarding this, the development of the e-government concept should be considered as holistic project and not individual creation of separate processes or services. That is why process modeling is an essential aspect in e-government projects, meaning implementation of integrated e-government services should adequately map external service structures to internal process structures. Government needs to take advantage of information and communication technologies, but above all advantage from new business models in order to improve efficiency and effectiveness of internal processes as well as change the nature and quality of government interaction with both citizens and business allowing seamless service delivery. In order to achieve this, the previously mentioned users' involvement and understanding of their needs and requirements is of great value and importance. (Al-Hakim, 2007)

Business Process Management (BPM) comprises a number of different tasks concerning organizational processes. Business Process Management is often used as a generic term for Business Process Reengineering (BPR), Quality Management or Implementation of Workflow Management Systems. Important parts of Business Process Management are the acquisition of relevant data and the illustration of models of the organization, the products and processes as well as the usage of resources like for example information technology. The analysis and simulation of the models deliver advice for the strategic optimization and quality assurance. (Palkovits, Orensanz & Karagiannis, 2004)

The process models help in understanding how processes work and how the functions of the newly introduced system (e-service) fit in overall process flow. They document the processes, support their analysis, facilitate simulation of various changes, and provide means to graphically communicate project team's understanding of process to users and management. (Shields, 2010)

The general attitude about process modeling and reengineering in governments is perceived as rather negative as it is often seen as time consuming, costly or as additional, not necessary work. That is why the first step is to increase the management awareness for the importance and benefits from the business process management and to gain their commitment in the implementation of the e-government project.

Based on our research we have concluded that the concept of e-government should be treated as a holistic project, and the importance and participation of an experienced project management team is crucial. For the successful execution of an e-government project, the best practices from the business sector related to ICT project management should be considered. This means creation of project management teams consisted of members with different profiles and skills coming from different departments and hierarchical levels. The leader of the e-government project should be an experienced project manager who will take into consideration the overall aspects of the e-governance and not an IT professional who will focus on the project from technical perspective.

THE IMPACT OF E-SERVICES

Why are e-services so important?

The benefits of introducing the e-service concept are numerous and mentioned on several instances in this paper. To demonstrate the importance of e-services in this chapter, an example of the impact from the implementation of such e-government service in Macedonia will be presented, as well as how important the BPR is in cases like this. The following example is referred to as implementation of e-Procurement System, a one-stop-shop for online public procurement in Macedonia. The presented results are part of the Annual Report for 2009 published by Public Procurement Bureau of Macedonia. (Ministry of Finance, Public Procurement Bureau of R. Macedonia, 2010)

For 2009 the public procurement market in Macedonia was about 47.5 billion denars (aprox. 770 mill euro) which represents 12% of the GDP of the country. These figures tell us the significance of the public procurement for the economy and growth rate in our country. Public Procurement Bureau (PPB) supported by the Government of Macedonia is doing many activities in order to improve and develop the public procurement area and to increase the efficiency and effectiveness of the outcome of the public procurement procedures. With its measures, PPB is aiming to improve the situation for both the public and private sector. One of the tools exploited in order to achieve abovementioned is conducting e-Procurement.

Today in Macedonia, a single, national and fully operational e-Procurement system is established. The system offers a secure, efficient and transparent preparation and administration of all tender-related documents, removes unnecessary paper work and enables secure data flow throughout the entire procurement process. It also provides a very efficient platform for a fully transparent and cost-efficient public procurement.

E-procurement in Macedonia started as a pilot project in 2005. The first version of the system was established in 2006. In 2007 an upgraded version of the system was established and IT and security audit was performed. In the period 2007-2008 all of the efforts were focused on testing and developing of the system and making it fully operational. In this period, changes in the legislation for public procurement were made. The Public Procurement Bureau prepared and adopted new legislative package for public procurement in Macedonia, which is fully harmonized with the European public procurement directives. Simultaneously with the legislative changes, the EPPS was upgraded and transformed into fully operational national e-Procurement portal. At the end of 2008 e-Procurement became fully supported by

the Government of Macedonia, and extensive promotion of the system started together with trainings and education for the interested stakeholders. In that time ESPP was optional for use.

At the same time, the Public Procurement Bureau of R. Macedonia has developed another system for e-procurement, but only for the e-Noticing stage - The Information System for Public Procurement (ISPP). This system was mandatory for use, and all of the public institutions were obliged to publish their tender announcements through the system. This portal was only for e-Noticing phase of the procurement procedure and since 2008 all of the tenders were published electronically in Macedonia. Here it must be pointed out that this does not mean that the whole awarding procedure was performed electronically, only the publishing of the notice.

In order to bring close this system to the users and to increase trust, numerous trainings and promotion events were undertaken (2008-2009 over 50 trainings sessions and workshops covering more than 1.000 individuals). Still the utilization of ESPP was not on a satisfactory level. The next step toward enabling greater usage of e-Procurement was decided to be redesign of the e-procurement process by integration of the two above mentioned systems.

The goal of the Public Procurement Bureau (PPB) was to increase the trust, efficiency and transparency, and make budgetary savings in the area of public procurement through re-design of processes, increased usage of ICT and continual awareness raising and training of stakeholders.

Today the system has over 1.000 registered public institutions (all of the state institutions and public enterprises in Macedonia) and more than 1.300 private companies (with daily registering rate of 10-20 companies). The system itself has become the unique and most transparent and reliable source for any information concerning the public procurement area in Macedonia.

From January 2010 – April 2010 over 70 procedures were conducted entirely electronically using the ESPP and over 200 e-Auctions were performed. Apart from publishing the announcements, in 2010 for approx 30% of the procedures, the entire tender documentations were published and easy accessible and free of charge for the private companies. This percent in the previous years was 0-5%. In first three months of 2010 three times more procedures were conducted electronically compared to whole 2009. All of the signed contracts for public procurement are published and publically accessible through the Electronic System for Public Procurement (ESPP) increasing the transparency of the process and reinforcing the users trust. The success of the e-procurement project in Macedonia and the increased usage of the e-procurement service were mainly achieved through business process redesign of the e-procurement process and increasing of the users' trust by awareness rising.

Based on the conducted assessment and analyses of the results, we can point out the real benefits for different users of the system.

For the public sector:

- increased transparency and efficiency - clear picture how public money is spent;
- increased trust from user side;
- significant money savings;
- time saving regarding the processing and evaluation of the bids;
- more efficient and standardized work procedures;
- expanded supplier base.

For the business community:

- increased competition and new business opportunities to become government suppliers;
- easier ways to get the necessary information and follow up processes;
- significantly reduced cost to bid.

For the society:

- accountability and trust in public spending;
- potential for corruption will be significantly reduced.

CONCLUSION

Trust is essential part of every aspect of our lives; a force that is driving our existence. Every innovation, new approach, discovery has to gain trust in order to become applicable and used in reality. The usage of e-services, especially e-government services is not different. Trust is even more important in this segment, because in the core of these services are very personal and identity related data that should be appropriately processed, stored, protected and managed. In order governments to receive recognition for the invested effort in building the e-government concept, they should establish trustworthy relationship with users.

In this paper, we proposed an approach that should help government come one step closer to increasing trust in their services through modeling its processes in a user centric model. Building the service around the customer and modeling processes in that same direction is trend that comes from business sector and is recognized as very useful and beneficial when applied by the public sector as well.

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