e-Government – Assisting Reformed Public Administration in Romania

Author*:

Andreea GATMAN

*A*bstract. *The adoption of web-based technologies in order to deliver government services has become a global trend in public administration. e-Government also means that governments have to act as a private entity and compete for best delivered services towards citizens due to the societal challenges and shifting relations. But such transformation has significant implications, such as answering in a collaborative, intelligent manner to the needs and demands of the citizens, to the different categories of users including the elderly, women, men, youngsters, or disadvantaged groups. The construction and management of the virtual space becomes an essential element of modern public administration. The assumption is that Governments become more efficient in an electronic "version". In order to evaluate their e-Government projects governments' need to point towards the value added that technology is bringing in terms of impact. To conduct such an evaluation one needs to include also the effort put forth in such projects - in terms of financial, human resources, and policy. All three dimensions are equally important and complementary.*

Key words: *citizen/employee-driven solutions; e-Government; interoperability, scalability, NPM*

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* Andreea Gatman, MBA Public Governance Management, Modul University, Vienna, e-mail: andreea.gatman@gis.com.ro.

Introduction

There is not one model of e-Government, but rather many "isolated" solutions and different technologies addressing the same core problem: better management, better planning, better and faster solutions/services offered to citizens. Information is a vital, strategic resource, yet without transforming it into knowledge it becomes useless, a waste of time, money, and effort. Information must be interoperable and scalable.

This paper addresses the following question: W*hat key instruments and/or factors could assess e-Government initiatives in Romania from an active participatory stakeholder perspective in order to demonstrate the value added that information technology brings?* Active stakeholders, for the purpose of this research, refer to any actor that has a role in identifying, communicating, developing, enhancing, using e-Government solutions. Public managers need to be active stakeholders, not just receivers of information, not doing so could be one of the reasons why e-Government projects miss their targeted objective and become redundant, lack interoperability, and waste important resources.

Successfully integrating such initiatives within public strategies and public policies would create the environment that would support communities in developing their own ICT capacity and resources according to their specific needs in active and functional public administration[1].

Any impact evaluation has at least two components: the **benefits** that are foreseen to arise from the successful implementation and the **risks** associated with achieving these benefits. Many risks are associated with such projects and any assessment tool should consider and diminish identified risks as much as possible.

Six case studies were documented in order to test and show methodology and how recommendations at the level of public management can actually be followed in practical terms.

The methodology considered in this paper is to propose one tool for the **evaluation** of eGov projects, on-going or implemented. The idea for the tool is to be actually used by public managers. Such an evaluation will also show the elements of success and how these were achieved but also possible weaknesses in both technological and policy terms (vision), allowing one to draw

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[1] For further details see "E-Strategies/ICT Strategies" at http://www.itu.int/ITUD/cyb/ estrat/index.html.

recommendations for the policy-maker in order to improve the value added of the e-Government investment.

This paper is structured into three main parts: elements of the analysis: evaluation methodology; recommendations at the level of public management.

The role of Government in Today's Information Society

Today's local government organizations are turning to on-line service in order to improve access and reduce costs. Web-based services can make interactions with public agencies smoother, easier, and more efficient. Web-based applications provide the opportunity to allow government services to be organized in a way that fit the needs of citizens and eliminates "dead moments" in bureaucratic processes.

Moving services on-line can eliminate many of the problems associated with distance and time. Specifically, as governments interact with citizens, businesses, and other public agencies, on-line services may stimulate five overarching benefits[1]. Public administration organizations that employ the on-line services may register benefits in responsiveness, visibility, efficiency, performance, and integration.

Responsiveness – Citizens can approach government offices any time, anywhere, and this turns into good governance terms that governments are using the channels chosen by "users" accountable for the services they have to deliver. The limited hours when governments normally operate can create a great barrier between citizens and administration and also become the biggest source of frustration and dissatisfaction.

Visibility – Online services are not only focusing on citizens but also on administration, how it can actually improve its work efficiently. Virtual space offers public managers the possibility to reach their "clients" on the right channels of communication according to his day to day practice. This means in time important money savings because of advertising, written communication, brochures that are sent to citizens. Not only are printing costs a real burden on the public budgets but also the message and information do not reach the citizen most of the time.

Efficiency & productivity – On-line services offer substantial possibility to cut public spending and to improve productivity in terms of time spent for processing a

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[1] M. Maureen Brown and Shannon Howle Schelin American local governments: confronting the e-government challenge, in *Local Electronic Government: A Comparative Study,* Helmut Druke (ed.), Routledge, 2005.

request or deliver a service. This, of course, should not be taken as given with all e-Government offerings. Many organizations that are implementing an e-Government project will argue that online platforms will help them reduce costs in printing hard copies and wasting paper. Also, online payments can be both efficient and productive because they save time for both administration and citizens regarding tax declarations; also they can be productive because in most cases taxes are distributed between certain agencies. Doing this in an un-automated manner means money being transferred between many accounts and not being used.

Performance gains – In most cases, solutions are designed above the administrative capacity to produce a certain service online. Bureaucracy sometimes is associated with time loops – different civil servants from different offices doing just the same thing. Correctly implemented, online solutions can eliminate these time loops as they allows different users with different roles to actually process at the same time a certain document. In this case, definition of roles for each type of user and also analysis of the administrative process are crucial elements of actually having performance gains.

Integration – Technology allows virtual integration of what governments are supposed to deliver to citizens. Citizens are not interested in what agency delivered which part of that particular service or how papers are sent back and forth between certain offices; they want clean, quick, efficient handling of those services or requests. From a technology point of view for this to be possible a certain framework standard has to be observed. This is actually the most critical aspect of all five elements.

Theoretical Framework

New public management can support a more active role of Government in ICT developments

The European Union (EU) defines e-government as "the use of Information and Communication Technologies (ICTs) in public administrations combined with organizational change and new skills in order to improve public services and democratic processes and strengthen support to public policies[1]"

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[1] European Commision (2003) "The Role of e-Government for Europe's Future", available at http://ec.europa.eu/information_society/eeurope/2005/doc/all_about/egov_communication_ en.pdf retrieved on 30th July 2010.

This perspective introduces three layers that technology should serve: citizens, civil servants, governance.

Citizens – New Public Management offers the possibility to "regain" clients' trust, in the case of administration – the citizens. Citizens' dissatisfaction or disengagement shows that e-Government initiatives are not fulfilling their objective of delivering easier, cheaper, better services. Citizen-centric approach expressed as a concept the idea that technology brings people closer to their administration. Administration will be 24-7; services will be available online "just one click away" through the Internet. After spending important budgets from the EU and from national budget, post facto evaluation of such projects have shown low levels of use, or that they promised more then they delivered.

Bringing e-Government to a new level of website technology, Web 2.0 has also brought the idea that solutions should be citizen-driven and not citizen-centric. Basically, what technology has not dealt with is delivering the right services to the users, which means users were passive stakeholders and not involved in the technological process. Allowing stakeholders to be directly involved as active users in the process of delivering services addressed to them would tackle this problem. While advocating for one or the other solution, we have in mind that technology can both include and exclude.

Designing services as a citizen-driven process reduces the risks of low usage or resistance to change. The EU measurement for availability of online services[1], shows that the usage by citizens and also the availability of services for this category is much lower than for business users. This would show that basic elements of democracy were not reflected in the new e-Government technology offers.

Moving from a citizen-centric to citizen-driven approach means focusing on what users really want rather than government's interpretation of their needs (Maio, 2009). The citizen-centric approach meant to focus on releasing the citizen from the negative impact of bureaucratic processes, but the impact was rather dissatisfaction of the "client", with limited improvement of citizens' perception regarding their administrations. With this consideration, a citizen-driven approach transforms what before was a principle, i.e. a bottom up approach, into a

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[1] EUROPEAN COMMISSION, DIRECTORATE GENERAL FOR INFORMATION SOCIETY AND MEDIA, (2007), "The User Challenge Benchmarking, The Supply Of Online Public Services". Available at http://www.google.ro/url?sa=t&source=web&cd=1&ved=0CBcQF jAA&url=http%3A%2F%2Fec.europa.eu%2Finformation_society%2Feeurope%2Fi2010%2F docs%2Fbenchmarking%2Fegov_benchmark_2007.pdf&ei=IPpSTJ_9DuacOPvggJ8O&usg =AFQjCNGnLkMxO0GfIItQbULvb_cN2Rc24Q retried on 30th of July 2010.

required architectural technological approach (Maio 2009). Engagement of citizens is viewed as a way to improve citizen trust in governments and in new tools for administering the public domain.

One of the main "advantages" presented as value added of e-Government solutions is that citizens had one access point to any service, and they are released from the office to office tradition. The main technological advantage presented by IT providers is that back office would no longer be of interest for the citizen, and the costly back office applications with common database would be of concern only for administration. This has proven to be a good technological approach but not a good management approach as it has failed in delivering promised achievements – high number of users, interoperable platforms – and failed in achieving good governance.

Assuming that citizens are not interested in the administrative process is not only affecting transparency and accountability, but actually it artificially simulates what the users would need. Citizens should play an active role in determining how e-services are delivered and through which channels. As an example, allowing certain services to be delivered (to be accessible) through intermediaries they are already dealing with (such as banks, accounting firms, and professional associations) would be a citizen-driven initiative (Maio, 2009).

Employees – This is an important layer, unappreciated by many e-Government offers. They are considered from technology offers perspective as back office. Most of the time, software applications offered as e-Government solutions are approaching separately the back office layer from the front office layer (applications for citizens – website, etc.). The problem is that such an approach is ignoring the perspective of organizational change and this is a challenge any e-Government project should consider when dealing with this layer.

Interoperability is the technological principle translating the target of cost efficiency that any e-Government initiative has, and this would actually work if applied within and between each mentioned layer. In a new public management approach, Bloomfield expressed this as agents' interactions**:** "... not attribute power to structures or relations or processes that cannot be characterized as agents" (Lukes, 2005 cited by Bloomfield, 2009).[1]

Employees often are not considered key stakeholders and the citizen-centric perspective on e-Government solutions was the main reason for that. Yet

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[1] Bloomfield Brian P. and Niall Hayes in "Power and Organizational Transformation through Technology: Hybrids of Electronic Government" in *Organization Studies* 2009; 30; 461 DOI: 10.1177/0170840609104394, pp. 1-28).

technology depends on the surrounding heterogeneous networks and human actors or institutions (Bloomfield & Hayes, 2009). If employees are part of the technology creation process, resistance to change is diminished, they become part of the process, solutions adapt to them and not vice versa.

Governance – The search for new styles of governance through the engagement of citizens is viewed as a way to change perceptions of distrust in governments. e-Governance can help rebuild trust and put on track e-Government initiatives. Citizens become part of the content creation; they are part of the process, not only consumers. Therefore feelings of their dissatisfaction will disappear. Being part of the process, governments will seem more transparent, accountable.

The first step has been introduced by e-Europe initiatives. "The positive effects of political will and enforcement through effective implementation benchmarking are perhaps the first lessons for other regions and states"[1] (Misnikov, 2003). For an example, the presence of the Romanian Interior Ministry for the first time on Twitter, Facebook, and Messenger for elections purpose shows that in order to reach your users you approach them on the right channel, you adapt to them, and citizens have the feeling of involvement.

E-governance is a set of technology-mediated processes that is changing both how public services are delivered and also the broader interactions between citizens and government. Governance refers to the capacity of governing systems to co-ordinate policies and to solve public problems in a complex context (Pierre, 2000 cited by Torres, 2005). According to Cliff (2003, Cliff cited by Torres 2005) e-government from the governance perspective seeks to improve government decisions, increasing citizen trust in government, enhancing government accountability and transparency, accommodating the public will in the information age and involving stakeholders, including NGOs, business, and interested citizen in new ways of meeting public challenges[2].

The second step has been moving from a global perspective to a practical perspective, which meant dealing actually with e-Government at national, regional level before launching promising objective on Global Information Society. Better Governance is actually not any more a principle in the context of Information Society but rather a *function*.

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[1] Misnikov Yuri (2003). "How ICTs can serve good governance". *Local Government Brief,* Open Society Institute, winter 2003, pp. 1-10.

[2] Torres Lourdes, Pina Vicente and Royo Sonia (2005) "E-government and the transformation of public administrations in EU countries: Beyond NPM or just a second wave of reforms?", University of Zaragoza.

Present context

The economic crisis has heavily affected the IT industry and so e-Government projects have been in danger of running out of budget, one of the major risks of such type of investments. According to the last measurement of e-Government in Europe "the sector has invested heavily in technology over the last decade. It is time to reap returns from these investments. Leaders and decision makers seek proof that these investments were wise. They need confidence in the ability of technology to make evidence-based gains. It is time for the digital assets that have been created to be *used* and to *add value*"[1]. New risks related to e-Government projects in a recession period have been translated by Andrea Di Maio into concrete challenges government official must address, including 1) *Budget optimization; 2) Disillusionment with traditional e-government; 3) Need to focus on priority areas;* and *4) Unclear value for ambitious integration projects*[2]. Risk analysis, as part of the cost-benefit analysis for e-Government projects is an important planning tool and this will be shown in the analysis part of this paper. Above the general risks presented in the context of recession, particular types should be approached as part of the analysis, such as risk of over-spending, user risk, public management risk, complexity risk, technological risk, supplier risk, and political risk[3].

The Romanian context: e-Governance is challenging e-Government

According to the 7th Measurement of Online Service in EU, Romania is the last out of 27 members in terms of sophistication of services and online availability of services to citizens. This clearly indicates that there is an urgent need for public management reform in what regards governments' role as service providers towards clients[4].

According to government prediction Romania would need to spend about 1.882 billion euros from public funds and 383 million euros from structural funds in

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[1] Idem 15.

[2] Di Maio, Andrea, "Delivering on E-Government in a Recession". Gartner, ID Number: G00165030, February 11, 2009.

[3] Kertesz, Sorin (2003), "Cost benefit analysis of e-Government investments, J.F. K School of Government, Harvard University.

[4] "Many governments strive for citizen-centric e-Government services. However, the actual e-Services that government agencies have provided in the last few years have fallen short of being citizen centric (Soufi & Maguire, 2007) due to a lack of representative user involvement in the design process (Følstad, Jørgensen & Krogstie, 2004)."

order to reach the average level of development registered according to the 2007 measurement in Europe for the 27 member states, taking into consideration indicators like connectivity to Internet, type of connectivity and speed. At the 2009 level, the rate of broadband penetration in Romania was 8% comparing to EU average of 42%[1].

As the public administration assumes the diversity, scale and constraints of the supporting mission of community prosperity, the challenge of organizing and distributing information becomes obvious. Public Administration needs to achieve this objective in an efficient manner of managing, reliability of internal and external information and compliance with laws, regulations and internal policies. It is necessary to have certain consistent capacities for having access, analyzing and exchanging information inside and outside the organization, in order to work out strategies and predictions as well as performing monitoring, evaluation and reporting. The complexity of the managerial process, which should effectively harmonize the economic, social, administrative, environmental and political elements, requires that the managers place a decision in the given context. Specifically related to e-Government, this would imply a capacity to use powerful *databases* that offer the opportunity not only to provide information regarding one sector of activity but manage information in an aggregate manner so that it allows them to predict implication on entire community/administrative process.

Methodology Applied

The value added of this research is that it goes beyond the purpose of benchmarking e-Government. The purpose is to contextualize e-Government initiatives in actual real political, social and economic situation and have an **active tool** of assessing such initiatives. By active tool of assessment it is understood not to investigate what was done wrong but what actually can be done for outcomes to be **improved.** In this paper the intent is not to add another tool for assessment but rather to focus on what is important with e-Government, making use of existing investments, promote good governance, and achieve outputs that can be improved on medium and long term according to society needs.

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[1] (Source: Ministry of Communication and Information Technology, see also http://www. zf.ro/business-hi-tech/ministerul-comunicatiilor-primeste-de-la-buget-78-5-mil-euro-cat-camera-deputatilor-3847821/.

Selection of methodology

Gartner's Assessment Framework[1] has been used as an analytical tool for the purpose of this paper. As the main focus is on public administration playing a more active role in how e-Government offerings are developed by the ICT sector, the purpose is to show to the "user" the usefulness of such tools in regard to effectiveness of strategies that are designed. As a state with a communist legacy, meaning a state with a highly bureaucratic tradition, eGov offerings have to tackle the problem of public managers' strategic planning capacity, civil servants' perception of their role within the structure. Such a methodology, like the one used in this research, underlines one major gap with e-Gov in Europe: the new democracies need active tools of assessment, tools that can actually help them achieve desired results and not tools that will only measure their performance compared with more developed states, with larger budgets with greater experience. I believe benchmarking will not help close the gap of technology between the 27 countries.

Research instrument

Gartner's Assessment Framework[2] questionnaire consists of two sets of questions. Each set contains three to five sub-criteria and each sub-criterion is evaluated by answering two to five questions. Each question has a scale from 1 to 5. The questionnaire is based on two main futures - completeness of vision and ability to execute; each of the two having different elements that are measured. Answers are measured with 1-5 Likert scale responses.

The questionnaire was answered by the project managers from the six e-Government initiatives - four central government initiatives and two local government initiatives. In the case of local offerings, the project managers were from the private company of the implementing agent and in the case of national case studies the questionnaires were answered by responsible persons from the public authority.

The first argument for adopting this methodology and not other methodologies is that it allows for public managers' self-identification of elements/areas of strategic planning that will guarantee a successful transformation/improvement/

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[1] Di Maio, Andrea, David McClure, Richard G. Harris, "A New E-Government Assessment Framework", Gartner, ID Number: G00147284, March 28, 2007.

[2] Di Maio, Andrea and David McClure, "Using the E-Government Assessment Questionnaire", Gartner, ID Number: G00153058, February 15, 2008.

implementation of technological investment projects. Also it triggers what I consider "fine tuning" in case of e-Gov project; it is not about technology or about administrative reform but it is about technology and administrative reform at the same time and the right balance between capacity to implement and to envision. The second argument is that while a benchmarking tool simply measures the public value of IT such an instrument of analysis – an active tool of assessment – can identify areas that can create public value.

In order to interpret results within this framework another Gartner tool is adapted for e-Gov context that is Magic Quadrants. This tool aims to provide a qualitative analysis of the market and its direction, maturity and participants[1].

The Analysis

Selection of Cases

Selected cases represent main directions for e-Gov offerings in Romania. The reasons for selecting these six case studies are:

✓ at their launching they were breaking – through technologies, first time implementations in Romania;

✓ second and most important, for the purpose of this paper, they are "ongoing" projects in the sense that all of them have technological modules, futures that were not fully implemented or fully sophisticated and so they can be at any time continued or improved.

As the purpose of this paper is to adapt an active tool of assessment for e-Gov in Romania, and not to propose best practice, case studies were selected from both the national level and the regional level. The case studies selected are covering a wide range of population and sectors, from the National e-Gov Portal, to the one-stop shop for payments, to offerings for a middle town population like Baia Mare, to civil servants structure from the second most important town in Romania - Iaşi. The range of case studies selected cover the main verticals of e-Gov offerings: G2G (government to government) as in the case of National e-Government Portal, G2E (government to employees) City of Iaşi; G2C (government to citizens) City of Baia Mare; G2B - national e-Procurement platform and the national platform for transportation licensees.

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[1] Lehman, Jenni (2008), "Magic Quadrants and Market Scopes: How Gartner Evaluates Vendors Within a Market", Gartner ID Number G00131166, January 22, 2008.

When considering these cases I have selected both types of e-Government offerings: the offer that addressed entire administrative structure (national and local) as in the case of National e-Gov Platform, one-stop shop for payments Baia Mare City e-Gov and Iasi e-Gov offering but also agency-specific strategies and objectives like in the case of e-Procurement and Transportation licensee platform.

Case studies

1st Case Study - national e-Government System- SEN

This platform aimed at standardizing the electronic environment of the Government, and assumed as the main results/benefits: creating a common and standardized platform for authentication and communication; reducing costs for infrastructure, development and maintenance; facilitating access of business community to public services.

Based on a common authentication and communication architecture each institution with its own application could connect to the common access point[1]. "A national portal that gives access to the different services is one way to fight a fragmented public service offering"[2] and this was the ambitious objective of this project.

Based on an impact research conducted by ASSI in January 2009 regarding the usability and click ability of SEN, the majority of respondents confirmed quantitatively the utility of the portal: 32% of the respondents used the portal facilities for more than 3 years, 98% considered that it meets their needs and 48.52% are pleased with its functionalities. The qualitative assessment based on their suggestions of improvements would identify some of the pitfalls of this project. Basic communication and personalized facilities that would allow the user to be actually involved in the process (citizen driven) not only as a passive user were requested. Some examples: ability to save in history the declarations, receive alerts when laws and regulations are changed; possibility to respond online to future rectifications asked by officials. Another basic request was to receive a registration number on the declaration when this is submitted. Internally, this number exists (in the back office it is called national administrative protocol) but it does not appear automatically to the user. Another aspect which

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[1] See www. Eguvernare.ro.
[2] Idem 29.

is actually common to many similar e-Government projects in new democracies is that the online services allows transmitting certain documents while other documents related to the same services have to be submitted in paper format only. This is an example of fragmentation and highlights one common pitfall of administrative reform which would be giving up traditional bureaucratic practices.

The main weaknesses of the project are the lack of a single authentication system and the over focus on technology, not service provision. Similar to other e-Government projects from Romania, this one was perceived as a purely technological investment, rather than delivering actually services. e-Government initiatives are not considered scalable and this makes the risk of inefficiency very high. SEN was considered as a framework for sub-system that at that point did not exist, and so tried to impose certain technological futures for later on development- this would be a forced interoperability.

2nd case study – SEAP - The Romanian Online Public Procurement Platform[1]

If in the first case an impressive majority was satisfied with the system, at least 98%, with this project, barriers were easier to be quantified and not only qualitatively expressed, as it also addressed a direct and precise service. Out of the total number of respondents, 32% were able to detect barriers. The main one, identified by 53% of the respondents, was the limited amount of choice when accessing the specific catalogue for purchasing certain products and services (lack of sufficient content, which actually goes back to knowing user needs). This barrier is actually limiting the number of procedures to be conducted fully online, and not only parts of the process like notices and announcements. As in the first case study, the user is able and has the intention to use online services which are actually online, unfragmented, not only certain functionalities available for that service.

Bureaucratic barriers that are not actually eliminated something in common with the first case study. Online procedures are followed by paper-based procedure, and all documents electronically sent and processed have to be paper based, sent in order to complete the application. Although considered only on the 4th position as a barrier, this is actually an important pitfall of e-Government services, especially because e-Government promises to reduce costs and

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[1] Launched in March 2002, this website can be accessed at www.e-licitatie.ro. This Platform is regulated by the national Law 468/2002 which sets the general framework and rules for using on-line procedures regarding public tender attribution contracts.

increase efficiency. Addressing this pitfall means also addressing the legal aspect involved – to have the political support in order to adapt legislation to the new environment and requirements of the Information Society

3rd case study – The electronic system for distribution of International Transport of Good Authorization[1]

 The scope of this application is to regulate international and local transport regarding the transport route. For local services it represents an interoperable challenge, as the main scope is to connect local authorities and follow the transport from one county (administrative unit corresponding to NUTS III level) to another. The Agency for the Information Society is the main operator of the software application. The biggest challenge of this application is legislation requirements and changes, since these have to be transposed into the system in real time.

4th case study – Virtual Pay Desk-one stop shop for online payments[2]

The platform aims at facilitating the interaction between tax payers and public authorities. The objective was to facilitate payments of taxpayers in a transparent, secure and controllable manner. Similar to SEN, the Virtual Pay Desk was designed as one-stop shop for all local and central authorities to connect. According to the Minister Decision no. 339 of 5 December 2008, Art. 2, the online one-stop shop payment is part of the e-Government system, which facilitates electronic payments for the business sector and for citizens towards central and local authorities.

The project objectives were: to improve interaction between payers and public authorities in a safety secured manner regarding personal information; to provide equal access to rapid online payment facilities; to promote use of internet for delivering public services; to reduce public debts, to combat bureaucracy.

The pitfalls faced by this system are: fragmented services, lack of employee involvement, and lack of efficiency. The one-stop shop payment is conceptually considered as part of SEN, but was separately developed, with separate access,

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[1] The platform can be accessed at www.aurizatiiauto.ro. It is regulated by national law Decree 1173/2003 and represents the framework for online permits for electronic authorizations for the international transport of goods and also for local public transport services, as regulated by secondary legislation.

[2] Launched as concept in 2006, this website can be accessed at www.ghiseul.ro.

and with separate databases. It is considered as a separate service when it is actually a level of sophistication of the same service. The payer is using the service as any e-banking service; it is not actually connected to the service. If there is a mistake in the process as the payment is processed from one actor to another, the payer is not notified, and so can be reported as not paying taxes.

As in the case of the other projects presented, it is still the case of a lack of employee-centric consideration. Actors involved are not automatically connected and the user is affected by that. First of all, outsourcing and involving a private company as a payment operator is a source of tax not collected in due time. The lack of efficiency is related to the prolonged tax collection, the service actually missing its point.

5th case Study – Integrated Information System for Baia Mare City Hall[1]

The integrated Information System for Public Administration (SIGMA) was a technical solution that took the model from business software and adapted it to the public administration sphere. The three main technological pillars were: business intelligence software for effective management; data interoperability; and GIS technology used for tax collections. The solution proposed intended to provide GIS functions with a map-based interface, analysis, prediction and reporting functions, scenarios modeling and evaluating tools, and multiple format outputs.

The results to be achieved from a public management point of view include: management team collaboration and strategy development; valuable usage of information by integration; standardization and communication; data availability (including internet publishing); evaluating, monitoring and predicting.[2]

In terms of technological models, the Baia Mare e-Government solution would be more of a front office back office approach. This case study presented certain advantages like: clean technological objectives, having a local supplier that followed step by step the implementation and functioning of the platform. It delivered what it promised even though the e-Government offering was not so innovative or sophisticated if measured by EU indicators. As said above the technological background was adapting an ERP (enterprise resource planning) type solution to the administrative context, and from here I believe back office

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[1] http://www.baiamarecity.ro/simpotaxd.php. The project took place between April-October 2008.
[2] Source: Indeco Software; www.indeco.ro.

front office approach. This is not an undesirable scenario but it is less sophisticated – and by sophistication we refer to ability to personalize services. It can prove to be more costly from the point of view of reaching a 4th level of online services for example, and because it has a citizen-centric approach it does not involve an active stakeholder from either the citizen or from the employee side.

6th case – City Hall Iasi - SAP for public services

The City of Iasi, Iasi being one of the most important cities in Romania, had implemented SAP for public services. The project solution was to build one common database that would cover all financial activities of the institution in an interoperable manner. As in the case of Baia Mare with regards to implementation and customization of solutions and modules, a local company was selected. Also, in this case, the client considered, as one of the most important advantages, having a local company to closely follow up the project.

The project was implemented after an internal need evaluation that underlined as a major obstacle for job performance lack of data integration or difficulty in accessing needed information. Employees have expressed this as a lack of communication between departments. To eliminate this obstacle they considered that an interoperable software solution would help provide better services for citizens. The project started in October 2006 and the implementation took 22 months. At the end of the project, the responsible manager from Ness Technology, the implementing company, said that resistance to change from the employees was the major obstacle to overcome. Employees from different departments had their own processes and particularities and so, first, consultants had to work in order to make uniform automated process that would answer all needs and habits. Overcoming this obstacle was even more difficult due to employees' distrust in the new application. The second most difficult obstacle was represented by the continuing changes in legislation, changes that needed to be reflected in real time in the application.

The representative of the IT Department from the City Hall added that inconsistencies between legislation and practices within the City Hall departments challenged the project and also the fact that such a SAP business solution all in one was for the first time implemented for a local public authority.

In order to overcome all these obstacles first a joint working team from both the public institution and from the IT Company was set up. This project delivered in terms of e-Government services only G2G (government to government) services

- reports, budgets, declarations shared with Ministry of Finance or subordinated institutions and G2E (government to employees) as human resources applications and project management module[1].

Framework assessment

Gartner's new framework assessment was chosen for the project analyses because it points out elements of improvement that can be adopted. Such investments as the ones described above are highly costly and one of the first major downfalls of e-Government worldwide is the reinvestment in similar projects and declaring previous attempts as failures.

This framework identifies for the public managers what improvements can be applied for the execution of the project, and it expresses in public management terms the technological functionalities. This framework points towards the importance of joint effort from the IT providers and from public institutions. Employees are important stakeholders who must be actively involved in all phases since we saw in all case studies how this element influenced the outcomes.

Another important aspect that is underlined by applying this analysis tool is that of the *public value added* of the e-Government investments. In other words how do these solutions create value, something all public managers have to show to the end users and taxpayers. Last but not least it can represent one important element in the tool box of any public manager who deals with strategic planning for e-Government investments. This framework highlights two important sets of criteria: **completeness of vision** and **ability to execute**. Due to the nature of the two criteria chosen and the model used, vision and strategic planning abilities, coupled with execution ability are assessed in order to predict e-Government project success. This is actually the idea of an **active tool of assessment,** one that allows for correction in order to ensure that financial resources can be efficiently used.

Findings Based on the Assessment Applied

In order to show how an active tool of evaluation of e-Government works, I have applied Gartner's new framework questionnaire to our "six agencies". Such tools are not pointing towards pitfalls but rather help identify what areas can be improved. As mentioned above, there are two main elements of assessment:

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[1] See: Market Watch, October 2009, no. 119, at http://www.marketwatch.ro/articol/5376/ Premiera_in_Administratia_Publica/, access on 18 January.

completeness of vision and capacity to execute. An active tool of assessment in case of such projects like e-Government is actually action oriented; it practically finds complementarities and dysfunctions between these two elements. This is the value added of this questionnaire and in general of such tools.

The questionnaire is composed of 12 items addressed each with 2-3 questions. Six items measure completeness of vision and the other six measure capacity to implement. For the completeness of vision items addressed are: constituent understanding, constituent centric strategy, service delivery strategy, service development strategy, transformation and innovation, e-Government marketing strategy. For the capacity to implement, items addressed are: budget viability, agility and adaptability, political support, constituent service capacity, organization and governance, operational efficiency. Each item has a certain weight according to its relevance to the particular e-Gov project.

In order to interpret results within this framework another Gartner tool is adapted for e-Gov context: Magic Quadrant[1]. As a general consideration, what the magic quadrants show is the alignment between vision and capacity to implement; what is between the lines (between 1 y and 1 x) is ideal alignment and placement within one quadrant gives a rough indication on the nature of the project in terms of performance and what could be improved.

 The different criteria (as exposed in the table) can be given different weightings according to particularities of context or interest. While generating this statistical image, authors' suggested weightings for each sub-criterion have been applied, but as this is an active tool of assessment and planning, one can change the weighting according to specific context and interests.

There are 4 categories:

1. **Revolutionary** strategies are those that are on the right path for achieving their goals.

2. **Evolutionary** strategies are those for which the organization's ability to execute exceeds its vision.

3. **Reactive strategies** are those for which the vision is not fully articulated, and organizations tend to react to changing priorities by focusing on quick wins, but without a longer-term ambition to achieve significant transformation.

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[1] Lehman, Jenni (2008), "Magic Quadrants and Market Scopes: How Gartner Evaluates Vendors Within a Market", Gartner ID Number G00131166, January 22, 2008.

4. **Visionary strategies** are those for which the level of ambition and articulation of the strategy is not matched by an adequate organizational effort or capacity to deliver. This is probably the most risky (and traditionally the most common) area to be in[1].

The position on the diagram in figure below gives an overview of the nature of the e-Government strategy and positions the Agency with regard to the general objective – the alignment of the vision with the execution.

Figure - Results of research questionnaire
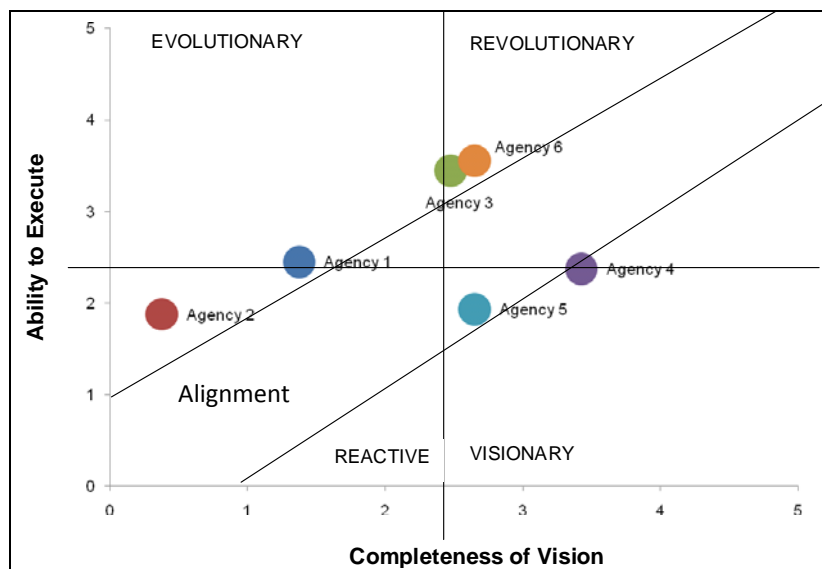
Agency 1 - One-Stop Shop (national)

Agency 2 - National Transport Authorization System

Agency 3 - National e-Procurement System

Agency 4 - Baia Mare City Hall local e-Government (SIGMA)

Agency 5 - Iasi City Hall local e-Government

Agency 6 - National Electronic System (e-Gatway - national)

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[1] Andrea Di Maio, David McClure, *Using the E-Government Assessment Questionnaire*, Gartner, publication from 15 February 2008.

For calculating we have considered each individual answer to each question addressing one of the 12 items and averaged the totals obtained.

The scores below represent each agency's compiled self-assessment on the survey instrument

Survey Statements	Constituent Understanding 1.1	Constituent-Centric Strategy 1.2	Service Delivery Strategy 1.3	Service development Strategy 1.4	Transforma-tion and Innovation 1.5	E-Government Marketing Strategy 1.6	Vision Total
Statement Weighting	**15%**	**20%**	**20%**	**20%**	**10%**	**15%**	
Agency 1 - Ghis Unic	0.15	0.30	0.30	0.10	0.15	0.38	**1.38**
Agency 2 - SAET	0.08	0.00	0.00	0.10	0.05	0.15	**0.38**
Agency 3 - SEAP	0.40	0.60	0.20	0.70	0.20	0.38	**2.48**
Agency 4 - Baia Mare	0.65	0.70	0.90	0.40	0.40	0.38	**3.43**
Agency 5 - Iasi	0.40	0.80	0.50	0.50	0.15	0.30	**2.65**
Agency 6 - SEN	0.20	0.60	0.50	0.50	0.25	0.60	**2.65**

Survey Statements	Budget Viability 2.1	Agility and Adaptability 2.2	Political Support 2.3	Constituent Service Capability 2.4	Organization and Governance 2.5	Operational Efficiency 2.6	Execute Total
Statement Weighting	**20%**	**15%**	**25%**	**15%**	**15%**	**10%**	
Agency 1 - Ghis Unic	0.40	0.45	0.44	0.25	0.41	0.50	**2.45**
Agency 2 - SAET	0.27	0.19	0.44	0.55	0.19	0.25	**1.88**
Agency 3 - SEAP	0.50	0.45	0.88	0.65	0.57	0.40	**3.45**
Agency 4 - Baia Mare	0.20	0.45	0.50	0.30	0.53	0.40	**2.38**
Agency 5 - Iasi	0.73	0.19	0.44	0.20	0.23	0.15	**1.93**
Agency 6 – SEN	0.73	0.53	0.88	0.65	0.42	0.35	**3.55**

Concluding remarks

Enacting modernization in public administration directly relates to the question addressed in the beginning of this research, w*hat key instruments and/or factors could assess e-Government initiatives in Romania from an active participatory stakeholder perspective in order to demonstrate the value added that information technology brings.* Implementing or proposing a strategy in what concerns e-Government projects at any level – national, regional, or local – means having in mind the above question. This brings a narrower issue to the table, assessing if organizations/institutions have the right tools, resources, processes in place and political support required for a future state vision (Di Maio et al., 2008). The ultimate objective was to demonstrate the key role of having an active stakeholder in order to generate public value of IT investments like e-Gov. We have argued that for this purpose one would need to apply an interactive tool - meaning one that could evaluate in real time and be orientated from a technological and management point of view, not only play the role of "best practices" and benchmarking. Based on the six case studies I have

proposed how added value can be practically considered and integrated in strategic planning by public managers (see table in Appendix).

As an assessment tool, intention is to evaluate the costs related to the conceptualization, implementation and management of the e-Government offering, versus the expected value added brought, reflected in the benefits for various constituencies and discounted with the *risks* of achieving those benefits. We have presented all elements except some types of risks that could be foreseen and what measures could be taken in order to prevent or deal with these risks.

Risk of over-spending (concentration risk)

A poor coordination between GANT and budget - between time, actives and spending - can drive to this risk. Local authorizes tend to overestimate the importance and also the funds allocated to one project affecting the entire portfolio of investments.

This effect is seen on medium and long term, not on short term.

Measures

This risk can be reduced by taking into consideration price index level.

As to avoid concentration of resource towards one project, different phases of technology implementation should be considered over a period of time longer then 2-3 years and instead of thinking in terms of one project we consider it a program with different projects.

As to the risk of resource allocation in term of human resources, the public officials can select civil servants to work in teams with project implementers, as part of their daily task and not hire other personnel. Also by using appropriate methodology and tools for controlling deals with lowering the level of concentration and overspending.

User risk

Users may be reluctant to the new channel of communication and this can lead to very low adoption rates. Reasons for such risk: lack of Internet access, very slow connections, lack of Internet navigation/Computer operation skills, issues of security or privacy, payment methods (e.g. Romania hasn't yet developed a convenient and widespread online payment method).

Measures

In most cases – especially for new emergent economies hot spot have helped (this proved in most CEEs countries that registered impressive developments

with e-Government); also infoqiosks do help but put in the right places like libraries, pharmacies, not parks or on the street just as a reason for ather hardware to be purchased.

As part of other risks and measures it is important to correlate the project with infrastructure projects, secure that the target user has the possibility of Internet access.

Security for payments, this is a standard to be followed and used.

Public Management Risk

In countries like Romania where bureaucracy is a tradition, processes are overlapped and new steps are invented all the time. Also civil servants can be replaced and this means additional human resources costs. Resistance of civil servants to the new introduced technology proved to be major source of failure, which translates into low productivity, low rate of return of investment, misused technology; low productivity since most of the time civil servants still work the way they were used and then formally introduce data in the system. There is a risk of additional human resources costs - if employees are not able to adapt to the new environment - costs of lay-offs, costs of hiring new personnel.

Measures

Personnel should/can be involved even from the development phase, so trust in the new methods is built as they are part of the technology; also they should be involved in the post facto analysis so they can see what improvements can be made, how their work/results have been already improved; training programs must be in place and the training must particularly respond to the needs of a certain use. Adopt a solution that looks at the processes as a whole, certain steps – that bureaucratically exist – are redundant and certain steps which are not on the paper are actually performed by the civil servant, another reason for which the employee must be part of the design.

e-Government offering should be designed having in mind and transmitting to the employee the message that technology makes transparent the institution, makes it visible, facilitates collaboration with citizens and community, and does not replace the civil servants, but makes them reachable.

Complexity risk

It is a risk of any project; following project objective implies assuming activities which involve for example different actors, different teams of implementation.

Measures

The risk of complexity cannot be eliminated as it is implicit, but can be reduced, using certain tools of planning and as much as possible isolating each main activity and approach it as a "sub-project". This way, instead of having one complex problem, we will have a series of less complex problems/issues to be solved.

Technological risk

There is risk of the chosen technological solution to be already out of life by the end of the project due to either fast development in the industry or to the unpredicted prolongation of the project.

Measures

Attention must be paid to terms of reference and technological demanded characteristics, and scalability must be one of the main requirements. It is recommended to have with the contractor a clause requiring at least 3 years of maintenance with specific demands regarding functionality of the system and updates.

Supplier risk

Most of the major projects are won by internationally known multinational companies. In most of the cases they conclude subcontracts with local companies to execute. In the present economic context even large/successful local IT companies are vanishing overnight. This is one side of the risk, the other one is that international brands are as opened to overnight change as local companies, and since one brand is purchasing another brand portofolio restructuring is one of the first activities and so projects can be severely put in danger. Such risk translates into major additional costs.

Measures

Most of the time such risk can be eliminated or actually kept under control by following public tender legislation - like declaring all your subcontractors.

Political risk

Such risk can mean lack of cooperation between subordinated institutions, partners in the project, or reduction of public spending, budgets allocated to IT and investments.

Measures

European financing has helped not only in terms of financial support but also public responsibility for the project. Any project in order to be approved needs a formal written decision from the local authority representatives; this decision is binding for the entire period of implementation, irrespective of political change.[1]

Conclusion

The study cases analyzed in the context of proposing a type of active assessment tool for e-Government projects in Romania do represent a good sample for a large spectrum of such offerings. The goal of this analysis was to provide some of the critical elements of how e-Government assessment tools can actually increase the public value added of technology and not only serve as a lesson for future applicants; how to allow gaining knowledge and understanding the role of e-Government, its potential benefits, and its associated challenges as part of the implementation process not only as a post facto analysis.

Virtual space becomes an essential element of modern public administration, but little was studied until now with regard to the actual advantage of "virtualization" for new democracies like Romania.

Only by actively being involved in how e-Government is offered and implemented by IT companies, public managers can demonstrate the public value added of technology in terms of restructuring and modernizing public administration. Determination for this activeness comes from the fact that the end user – the tax payer- has expectations from the public institutions, from the public managers and not from the IT companies. If an e-Government project fails it will be upon the public manager, if it succeeds it is on the IT company. Such tools presented in the research show public managers not only how to asses an e-Government project from a technological perspective but how to formulate, plan and execute a strategy starting from knowing how to express and understand the need of the end user.

From the public management point of view, active evaluations of e-Government assist public managers in making sound policy choices and understand the practical challenges and opportunities e-Government brings.

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[1] For risk regarding e-Government projects see Kertesz, Sorin (2003), "Cost benefit analysis of e-Government investments", J.F. K School of Government, Harvard University.

Acknowledgements

References

1. Bloomfield B. P., Niall Hayes (2009), "Power and Organizational Transformation through Technology: Hybrids of Electronic Government", *Organization Studies*, vol. 30; 461 DOI: 10.1177/0170840609104394, pp. 1-28.

2. Brown M., Howle Schelin S (2005), "*American local governments: confronting the e-government challenge*", *Local Electronic Government: A Comparative Study*, Helmut Druke (ed.), Routledge.

3. Di Maio, A. (2009), *Delivering on E-Government in a Recession*. Gartner, vol. Number: G00165030, February 11.

4. Di Maio, A, McClure D, Harris R. G., A (2007), *New E-Government Assessment Framework*. Gartner, vol. G00147284, March 28.

5. International Telecomunication Unit (2006), *E-Strategies* available at http://www.itu.int/ITU-D/cyb/publications/2006/dohaactionplanprogramme3.pdf retrieved on 30th July 2010.

6. Kertesz S., (2003), *Cost benefit analysis of e-Government investments*, J.F. K School of Government, Harvard University.

7. Lehman J., (2008), *Magic Quadrants and Market Scopes: How Gartner Evaluates Vendors Within a Market,* Gartner vol. G00131166, January 22.

8. Organisation for Economic Co-operation and Development (2005), *E-Government for Better Government,* available at http://www.oecd.org/document/45/0,3343,en_2649_34129_ 35815981_1_1_1,00.html#HTO retrieved on 30th of July 2010.

9. Torres L. , Pina V., Royo S., (2005), *E-government and the transformation of public administrations in EU countries: Beyond NPM or just a second wave of reforms?,* University of Zaragoza.

10. Van Reemen. J., (2010), *The Economic Impact of ICT,* Center for Economic Performance, London School of Economics.

11. Wimmer. M, Krenner. J. (2001), *An Integrated Online One-Stop Government Platform: The eGOV Project.* Paper presented at the *9th Interdisciplinary Information Management Talks, Proceedings*, Schriftenreihe Informatik, Universitätsverlag Trauner, Linz.

Appendix

Public value added of e-Government projects based on key successful factors of e-Government

Objective	Actions

1. to be accessible, meaning
  a. as many users as possible
  b. delivering services through alternative channels
  c. easy to use friendly interface (web 2.0)
	Citizen and employees driven.
	To be accessible to the citizen, have already in place the communication &security infrastructure needed for 24H access from anywhere; information kiosk only if proved to be used in common places for certain categories of users like pharmacies- for elders'; malls or libraries for youngsters etc., design based on the inputs received from the different stakeholders, open architecture allowing permanent upgrading and responsiveness to users' expressed (directly or indirectly) needs.

2.efficient, through
  a. public savings
  b. civil servants/employees productivity increase
  c. better organisational fit
  d. high quality public services delivered
	Such technological approach based on vertical integration does not require common IT communication infrastructure, which would be cost and time consuming; services can be developed in time and by different institutions based on their own strategic planning; yet this would not affect the other institutions processing and delivering of information.
	Integrated collaborative approach (not separate back office front office) translates into time and costs reductions based on the experience observed.

3. objective orientated, through
  a. bureaucracy reduction
  b. increase user satisfaction
  c. inclusive public services
	Scalability - the system should be capable of handling an increasing number of users without any disruption to service.
	Flexibility – the system must provide a broadly configurable array of hardware and software devices that do not require major re-installations as enterprise requirements change.
	Compatibility - the system must meet expandable configuration requirements as well as standard industry specifications to protect future application investment.
	Manageability – the system should not demand excessive management time and effort for maintaining on-line operations.
	Availability - the system must be capable of sustaining tens to hundreds of thousands of processing transactions with minimal wait time or downtime.

Objective	Actions

4. democratic, ensuring:
  a. openness
  b. transparency and accountability
  c. participatory
	Technology allows and supports open method of coordination.
	Citizen-driven process instead of citizen-centric, the citizen is more than a user; he is part of how the entire process is defined and how the service is actually delivered in the end - web 2.0 had revolutionized this aspect of virtual participation.

5. innovative, neutral technological approach	Innovation is determined by the actual involvement of employees in the process of technology vision and implementation; they are given the opportunity to understand the change becomes part of it and actually in time not worry about the execution of their job but have time to upgrade and innovate in their field of activity. Focus is on the information rather then on the data
6. safe and secure	IT infrastructure should be structured based on a centralised operational management using Active Directory type. Security policies are of great importance and so each institution should have and respect the protocol, security audits are recommended.