EGOVERNMENT: NEW PERSPECTIVES ON THE FUTURE OF GOVERNMENT DIGITISATION

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ABSTRACT: In the last five years, the new waves in Information and Communication Technologies together with the increase of mobile technologies have developed new possibilities for the collaboration between the governments and the citizens. Year by year, the governments are using huge quantities of ICT especially based on Internet and on mobile devices, to improve the quality of services between government agencies and companies, citizens, or government agencies from other countries.

In a period of financial crisis we have less and less time at disposition. The new possibilities offered by Information and Communication Technologies give government chances to rethink strategies and ways of working providing services for citizens and businesses. In this world in a continuous changing, the state must recognize the importance of fulfilling the new needs and expectations of the citizens in opposition with the reality of reduced budgets.

While the literature is not as robust as we would like to see, many articles are talking only about positive impact of eGovernment and less on difficulties or misconceptions, especially in financial crisis period.

Keywords: EGovernment, open source software, ereadiness, mobile government.

JEL Codes: O38, O33

Introduction

Ideas about e-government sometimes amount to not a great deal more than government as usual plus information and communication technologies (Georgescu, 2010). The waves of e-government are developing through public organizations and public agencies especially in USA and Europe (Georgescu, 2008). Year by year, the governments are using huge quantities of ICT especially based on Internet and on mobile devices, to improve the services between government agencies and citizens, companies, or government agencies from other countries.

Properly, as with ebusiness, ecommerce and eoffice, eGovernment represents the introduction of an important wave of technological innovation as well as many experts and practitioners appreciate, government reinvention. It's a very important step for the evolution in the 21st century, a period which began with many economic crises, with greater quality, lower cost for government services and probably a better relationship between government and citizens (Fang, 2002).

If we talk about citizen perception according eGovernment, we must recognize we have different and sometimes divergent views. Fore many citizens EGovernment is only online governmental information or a modality of enrollment in online transactions with citizens. In all the countries, one of the most common conceptions is eGovernment simply consists in the creation of a basic web site where information about fiscal, political and governmental problems is only

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presented like in a window. From the start, these misconceptions of defining eGovernment reduce the margin of opportunities it offers and reduce also public confidence.

According to Valentina (Dardha) Ndou, one of the most important reason why a lot of eGovernment initiatives fail is connected to the limited definition and inappropriate understanding of the eGovernment aim and functions (Ndou, 2004), so lack of functional literacy.

One of the most known definition is offered by World Bank, 2001: "eGovernment is the government owned or operated systems of ICT that transform relations with citizens, the companies and/or other government agencies so as to promote citizens empowerment, better service delivery, consolidate responsibility, increase transparency, or improve government performance"(World Bank, 2001).

EGovernment: variations on a concept

Although, the circumstances and requirements are not so different from a country to another, it's not quite an easy road in the evolution of eGovernment. The most important difficulties for a good perception of eGovernment role are:

- Perceived Uncertainty and Civic Mindedness;
- Lack of Trust in e-government;
- Little Education in this field;
- Experience and Skill;
- Size and Bureaucracy of Government
- Quality of actual websites;
- Difficulties to access e-government;
- Authorities support;
- It's not easy the measurement and assessment of benefits.

Talking about EGovernment Opportunities, we can summarize the followings:

- Especially in a period of financial crisis, a cost reduction;
- Improving the value of service delivery to companies and citizens;
- Credibility, transparency, trust and accountability;
- Creating collaboration networks and new virtual communities;
- Possibility of making decisions based on quality standards;
- Encourage use of Information and Communication Technologies in other areas of the society;
- Human capital improvement and promoting the concept of Life long learning.

It`s not so easy to quantify the opinions pro or against eGovernment or to elaborate a eGovernment framework. In the categories of controversies about eGovernment we can include:

- Inaccessibility – in numerous cases, e-government sites that offers web access and support, frequently does not allow the possibility to get many users especially those who live in isolated zones, are homebound, or have low education levels;

- Cost - While "a high sum of money has been spent" on the progress and achievement of e-government, some say it has return only a mediocre result. The results and gains of online based governments are often not easy to gauge or unsatisfactory (The Economist 2008). According to Gartner, worldwide IT spending is evaluated to a total of \$3.6 trillion in 2011 with more than 5.1% increase regarding 2010 (\$3.4 trillion) and this in a period of financial crisis;

- Hyper-surveillance – Development of connections between government and its citizens in both directions. If egovernment begins to grow and become more and more complex, citizens will be constrained to interact especially online with the government on a greater extent. This could be a source for a lead to a lack of privacy for citizens as their government obtains more complete information on them. Finally, this means lack of trust in eGovernment services;

- Lack of full transparency and responsibility – Some authors from e-government literature motivate that online governmental transparency and responsibility could be doubtful

because it is maintained by the governments themselves and not by private entities. The content can be added or deleted when the government wants and some times only for political reasons;

- Disadvantages – In the current period, the main disadvantage concerning egovernment is the large difference in citizen access to the Internet, confidence of information on the Internet, and hidden agendas of government groups that could affect in bad manner citizen opinions. There are important considerations and potential implications of implementing and designing egovernment, including disintermediation of the government and its citizens, impacts on economic, organizational, social, and political factors, vulnerability to cyber attacks, and disturbances to the status quo in these areas (Atkinson, R., Castro, D., 2008);

- Improvisations – in many countries there are organisations which enable improvisations;

- One of the biggest is that public bodies are locked into long-term IT deals which limit their ability to choose new software.

According Gartner Research: "On an average, \$8 out of every \$10 spent in IT is "dead money" – not contributing directly to companies change and development" (Gartner, 2007). We must recognize, despite the important steps from the last years, the perspectives for eGovernment in developing countries, however, remains greatly unexploited, even though, ICT is believed to offer a huge opportunity for the sustainable development of eGovernment.

All of these distinct technological, human, collaborative and organizational factors, issues and problems pertain in all the countries, require more detailed studies and complex approaches. Information Communication Technology, in general, could be an "enabler", but on the other side it should also be considered often as a challenge and may be a peril in itself.

There are many models for eGovernment analysis. Through the use of a model the local governments may generate standardization and interoperability between governmental offices, but also becoming an integrated tool to generate a full perspective from three different angles; the citizens or users of municipal services, the designer and implementers, and the relation between regulations and norms with the particular situation of each municipality.
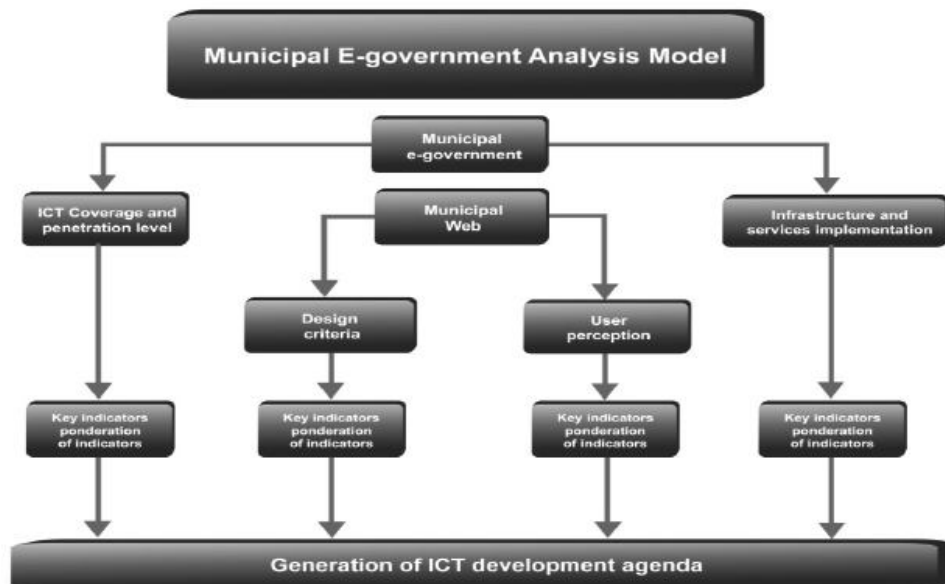

Figure no.1. - Study Model for local e-governments (Lozoya-Arandia, Reboreda, 2012)

Another very important multidimensional model for measuring and eGovernment was proposed by Luis Felipe Luna-Reyes, J. Ramon Gil-Garcia and Georgina Romero.
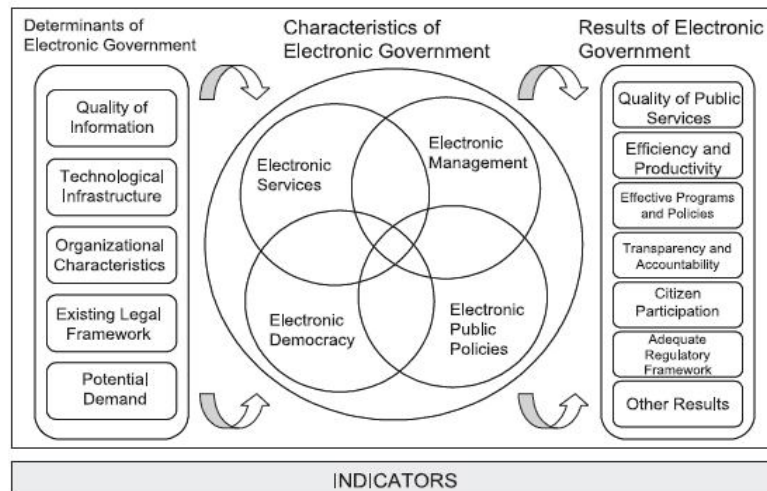

Figure no.2. - Theoretical - conceptual model for comprehensive measuring of electronic government
(Luna-Reyes, Gil-Garcia, Romero, 2012)

It's not so simple to elaborate an eGovernment framework: the requirements and circumstances are so different from a country to another and there are a lot of improvisations used from a period to another.

In the last years, the introduction of Web 2.0 tools and the use of new type of platforms such as mobile devices and especially social media, expand the possibilities to interact, participate and collaborate among government agencies and between government and nongovernmental actors, creating the potential for a new local eGovernment model.

In this world in a continuous changing, the state must recognize the importance of fulfilling the new needs and expectations of the citizens in opposition with the reality of reduced budgets. The new service delivery must provide greater satisfaction with higher efficiency.

Probably, one of the most difficult tasks is to validate an instrument to measure citizen's perceptions of service quality from eGovernment portals or websites. According to Aladwani and Palvia, there are three generic steps common in all models construction and verification that include (Aladwani, Palvia, 2002):

- conceptualization;
- design;
- normalization.

Figure no. 3. EGovernment Values (Georgescu, 2008)

Using an extensive literature review we can conceptualize the model. For the second step, it's important to concentrate on construct validity and reliability analysis. In this stage the refining of the sample of items takes place (in order to come up with an initial scale), deciding on such operational issues as question types and very important also question sequence. The third step concerns the attempt to normalize the scale that has been already developed. For this construction, Mentzas and Papadomichelaki propose a model with 33 eGovernment quality attributes under six main quality dimensions (Papadomichelaki, Mentzas, 2012):

- Ease of use;
- Trust;
- Functionality of the Interaction Environment,
- Reliability,
- Content;
- Appearance of Information;
- Citizen support.

Performance measurement in local government–concept and practice

One of the most common debates is regarding the concept and features of electronic government. The most known interpretation is through Almazan et al perspective (Almazan, Gil-Garcia, 2006):

- Managerial perspective;
- Citizen Centred perspective;
- Evolutionary perspective.

Regarding the managerial perspective, E-Government must concentrate on managerial processes. This perspective establishes that the main objective of e-government is to improve managerial effectiveness and efficiency. According to Wescott, "e-government is the use of ICT to promote more efficient and cost effective government, facilitate more convenient government services, allow greater public access to information, and make government more accountable to citizens" (Georgescu, 2008).

The citizen centred approach to egovernment accentuates the leading role of citizens as vectors of e-government. This outlook concentrate on people's needs and put on the first place the necessity of evolution in government processes to make services more attractive and accessible to citizens.

Last, but not least, the third perspective keeps on the assumption that electronic government is progressive. Some authors contend that each one of the stages is already electronic government. Others delimit from witch of the phases a government can be considered electronic (Georgescu, 2008).

According to Snijkers, Rotthier and Janssen, for a global comparison of EGovernment evolution, the most important categories of indicators are (Snijkers, Rotthier and Janssen, 2007):

- **input indicators** (amount of financial resources for eGovernment; IT/eGovernment spending as a % of GDP; total of resources devoted to research and development; total of public resources devoted to Internet infrastructure);
- **output indicators** (number of online services for citizens; % of government agencies that have a website; % of government websites that offer eservices);
- **usage indicators** (number of individuals that have made use of eservices offered by government agencies; % of citizens that have visited government agencies websites to search for information or services; % of companies that have made use of eservices offered);
- **impact indicators** (decrease of waiting time; citizen/companies satisfaction levels concerning egovernment;

• **environmental indicators** (Information and Communication Technology penetration rates – Personal Computer, Internet, Mobile phone – households and companies; telephone tariffs, Internet access tariffs).

In the literature there are a couple of international rankings for e-government development and implementation. The most cited and used are: Eurostat rankings, Economist, Brown University, and the UN e-Government Readiness Index. According to the UN's 2012 e-Government Readiness Index, the most important countries for the developing of egovernment services are:

Table no.1

E-Readiness Top 10 in Europe

Rank	Country	E-gov. development index 2012	E-gov. development index 2010	World e-gov. development ranking 2012	World e-gov. development ranking 2010
1	Netherlands	0.9125	0.8097	2	5
2	United Kingdom	0.8960	0.8147	3	4
3	Denmark	0.8889	0.7872	4	7
4	France	0.8635	0.7510	6	10
5	Sweden	0.8599	0.7474	7	12
6	Norway	0.8593	0.8020	8	6
7	Finland	0.8505	0.6967	9	19
8	Liechtenstein	0.8264	0.6694	14	23
9	Switzerland	0.8134	0.7136	15	18
10	Germany	0.8079	0.7309	17	15
	Regional Average	0.7188	0.6227		
	World Average	0.4882	0.4406		

See UN's 2012 e-Government Readiness Index

E-Readiness does not mean only ICT readiness, probably the most important is human resource readiness and the education in this field but not negligible also Enterprise readiness. An important question of our days is: what role did eGovernment play in government answers to the financial crisis? Or really there is place for EGovernment/MGovernment initiatives in this period?

Table no. 2

Expected key outcomes of e-Government's contribution to the crisis response

Impact of austerity measures on EGovernment implementation	Countries
EGovernment is a part of achieving the government's austerity goals	Austria, Brazil, Chile, Estonia, Egypt
EGovernment is not a part of achieving the government's austerity goals	Belgium, Czech Republic, Finland, India, Norway, Sweden, Switzerland, Turkey
EGovernment priorities have been changed due to the adopted austerity goals	Chile, Estonia, Greece, Ireland, Italy, Mexico, Slovak Republic, Slovenia, Spain, United States
EGovernment priorities have not been changed due to the adopted austerity goals	Austria, Belgium, Brazil, Czech Republic, Egypt, Finland, India, New Zealand, Norway, Sweden, Switzerland, Turkey

Source Barbara-Chiara Ubaldi, European Journal of ePractice no 11, march 2011

Especially for emerging countries it's important finding out if lessons can be learned from other country's EGovernment experiences. It could save not only money but also time and trust for the citizens. On the road to efficient eAdministration it's important to measure each year the progress and compare not only with the same developed countries. To really improve the process each government must compare with the best practices in the area.

Many authors are talking about E-Government Third Generation as a really open government: this generation model of ICT enabled government transformation into open, participatory, accountable and citizen driven government (Petrov, 2011).

According to Oleg Petrov from World Bank, it's time to talk about the triangle: open economy, open government and open innovation (Petrov, 2011).

Figure no. 4.- Open transformation components (Petrov, 2011)

Usability and technical issues in MGovernment perspectives

What is the motivation of citizens and companies for the increasing demand for mobile services? The most important factors that are driving these phenomena are (Riley, 2007):

- the union of wired internet and telecommunication networks, permitting information once only available on a PC or a laptop to be received quickly via mobile phones;
- the acumen of mobile devices/technology and the very low cost of entry into mobile connectivity;
- the impact of 3G services which promise to make more information/services available at faster speeds.

However, the debate advantages/disadvantages of M-Government, must start from some key questions, studied in the phase of designing mobile government (Georgescu, 2010).
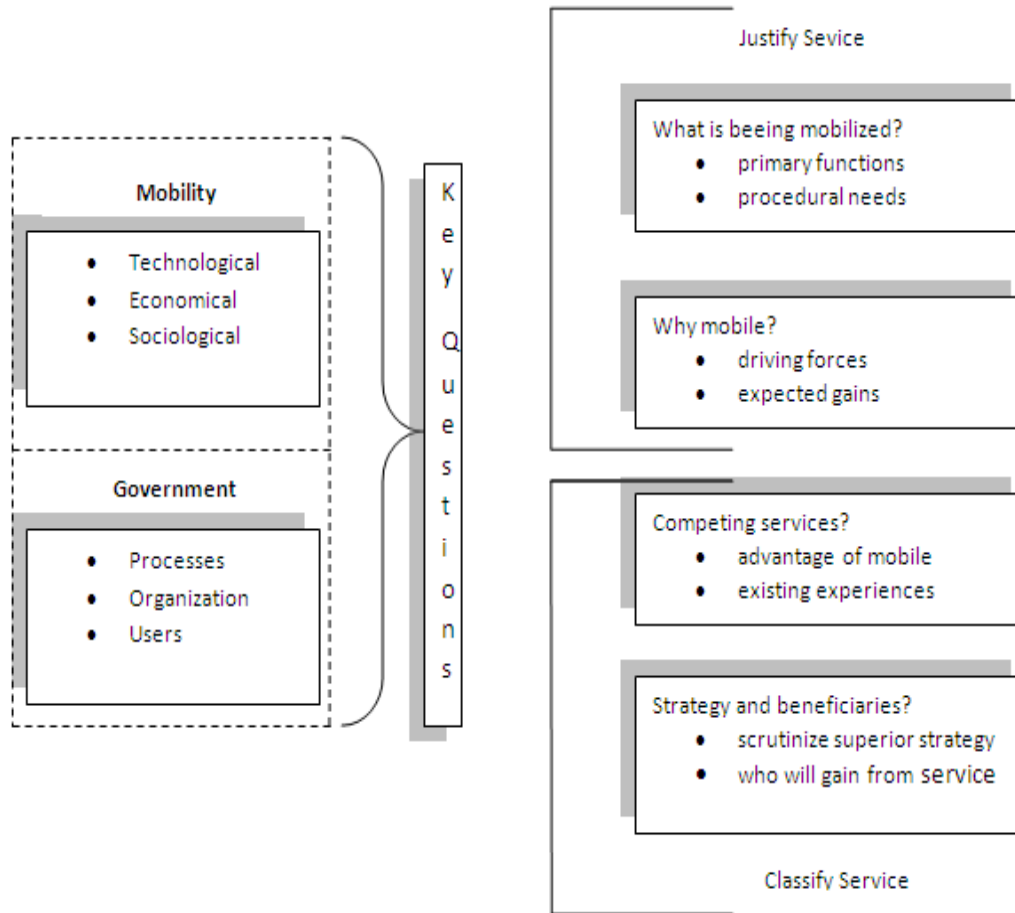
Figure no. 5. - Key questions when designing mobile government (Georgescu, 2010)

If we look to the actual figures, there are almost 5 000000000 mobile subscriptions and by 2014, more than 400 millions from world's Internet users could access the network just through a simple mobile connection with a normal device.

What are the most important services that government could deliver via mobile phone? We can include in MGovernment services relating to:

- education of all types;
- health services;
- police, judicial and other legal systems;
- fines and fees.

In the last years, payments and other financial services are also possible through mobile phones, which increase the opportunities to incorporate mservices into the normal lives of citizens.

Another important area where mobile phone technology can also considerably expand is edemocracy and eparticipation, engaging citizens in democratic decision making through various polls, mvoting, and other forms of communication between citizens and the government agencies.

We have a lot of positive examples: UK and Switzerland have pioneered mvoting in local elections; Estonia has already prepared legislation to allow mvoting; Korea leads the way in m-voting through its use in the selection of Presidential candidates.
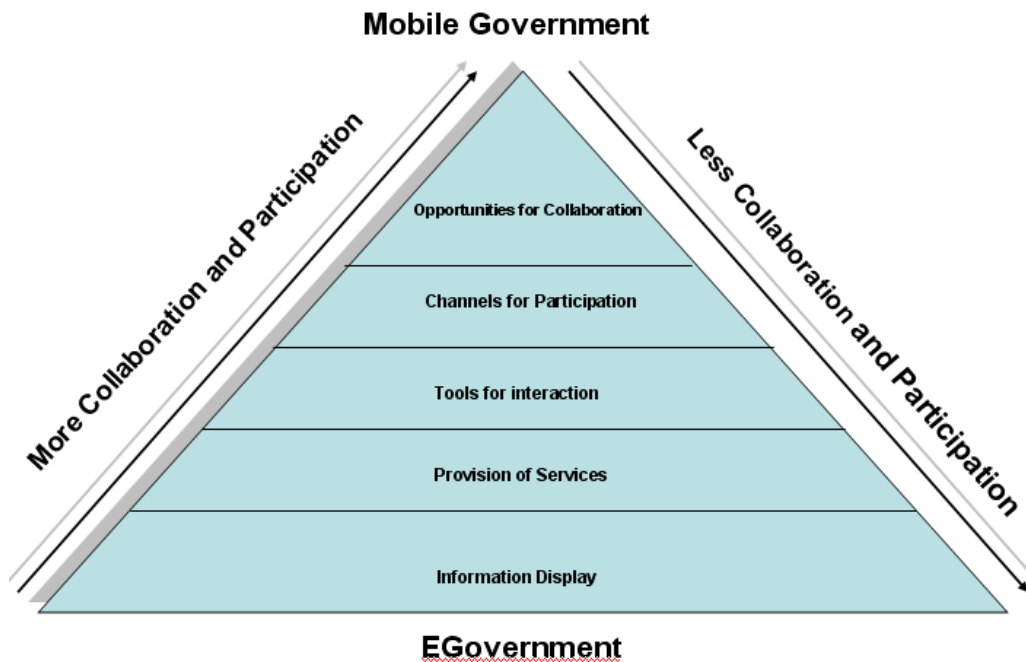
Figure no.6.- Differences between eGovernment and MGovernment

Probably, lack of standards and optimized data exchange protocols in mobile and wireless environments inhibit the real potential of mgovernment. In this regard, developing a coherent mgovernment framework in the public sector is a very important factor. Many European countries placed egovernment services development high on their strategy. But even though the initiative is in top, the recent survey shows lack of awareness about mgovernment among the citizens. In this fashion, the development of mgovernment standard unites innovation of architecture, technology, feasibility and citizen's education and awareness.

According to Antovski et al. (Antovski, Lj. & Gusev M.,2003) a common mobile public services framework must first and foremost incorporate the following five principles (Georgescu, 2010):

- Interoperability;
- Security;
- Openness;
- Flexibility;
- Scalability

Interoperability is based on bilateral agreements in which the rules for communication are defined for each new system that is connected. The core of interoperability is the stipulation of common data models and common protocols for exchanging data (Georgescu, 2010).

The openness of the system is considered on several levels: open standards, open interfaces, open specifications and open source codes. Scalability should be built into a system from the start. It is important to be able to maintain both the functionality and efficiency of the solution if the need changes, for example in respect of user numbers, transaction volume or data quantity. Modularity and scalability must also relate to the nature and scope of the work (Georgescu, 2010).

Web 2.0 technologies - the vector of public administration renewal

In our opinion, the progress of the public administration on the digital road could be strongly stimulated, even under the conditions of the current crisis, by the availability of the 2.0 technology in the web.

The term 2.0 nowadays refers to the change brought on the Internet by a sum of social, economical, technological tendencies which have transformed and keep on transforming it into a

distinctive environment, of great impact, characterized by the participation of the users, its openness and the network effects.

According to Bonsón et al. (Bonsón, Torres, Royo, Flores, 2012) among Web 2.0 technologies, four paradigmatic examples can be mentioned:

- **Content syndication**, which allows the user to automatically receive updates about the state of the resource syndicated. The updates can be text, audio file (podcasting), or a video (videocasting, vidcasting, or vodcasting);
- **Widgets**, which are instruments to deliver information from a web source to other pages or devices. Common examples are the small windows with a different aspect to the web page that hosts them and that offer weather or currency updates (Bonsón, Torres, Royo, Flores, 2012);
- **Sharing and bookmarking facilities**, which permit to a user to share web content with their friends by means of social networks and to give a score to that content based on its usefulness and/or relevance (Bonsón, Torres, Royo, Flores, 2012);
- **Mashups**, which are applications that take data and combine it either with other data or other web services to create something almost new. An often example, a mashup may take data about the location of government services and then plot their locations and other associated data on a map. Google Maps based applications are popular practice among mashups (Bonsón, Torres, Royo, Flores, 2012).

Table no. 3

Web 2.0 technologies, social media and utilization by municipalities

Web 2.0 technology	Features	Utility
Content syndication	Pieces of software in conventional websites or in social network platforms that allow the users to automatically receive updates about the state of the resource syndicated.	Viral distribution of the content of the official website, especially news and documents (such as council minutes) and video or audio files (such as a council meeting). Users can subscribe to automatically receive every piece of news from the council.
Widgets	Allow for the inclusion of material (text, graph, photos, videos or another data type) in a web page by means of a small application—created by a third party—that can be installed and executed within a web page by an end user. Widgets are tools to deliver information from a web source to other pages or devices, so they can be used as a means for syndication.	Viral distribution of the content of the official website, especially news and documents, even if they are videos or audio files. Instead of subscribing to a feed, users can embed the code of the widgets in their own web page to automatically receive every piece of news from the council.
Sharing and bookmarking	Piece of software in conventional websites or in social media platforms that allows the users to send the content to their friends and contacts automatically by connecting the content to their social media platform.	This allows the users of the official website to distribute its content in their own social media platforms. This could increase the visibility of the city council and of the material produced by it.
Mashups	Combination of technologies and services from different conventional and 2.0 sources in the same website or social media platform.	Technology that allows the city council to integrate, in the same official website, videos, maps, documents and presentations located in different external platforms.

Social media platform	Features	Utility
Blogs	Diary where new entries appear over old ones and that allow the users to control the impact of their writings. Most blogs are interactive, allowing visitors to leave comments on the different entries	By using blogs, local governments can collect valuable opinions from their different stakeholders, including citizens, visitors, employees and beneficiaries of their social and environmental activities. Blogs could also be a valuable tool for detecting social problems in advance and for obtaining ideas for new services and initiatives
Wikis	Network that allows users to share and classify knowledge on a general or specific topic and to correct the content in real time.	Wikis are devoted to knowledge and can be used for a variety of goals, for example, to disseminate the heritage of the city with the collaboration of the population. A local government may find wikis useful to start a dialog about its corporate social responsibility activities or other relevant projects. Under certain conditions, wikis have also been considered helpful for improving relationships with employees (Trkman & Trkman, 2009).
Social networks	Platforms that allow the users to contact with a certain number of friends, administrate their own online communities and share files, photos, text and news and give a score to the different contents and files provided.	These platforms can be considered the next generation of the official website, incorporating in the same site the community, their opinions, the content and the most sophisticated tools for the distribution and analysis of all this information.

Source: Bonsón, Torres, Royo, Flores, 2012

The content of the term remains evolutive, the main characteristic of Web 2.0 being novelty, the ability to continuously adapt and reshape depending on the users' needs and the technological discoveries in the field. In Web 2.0 version, the Internet is:

- Easy to use, friendly, non-discriminating;
- Open, democratic, transparent, supporting anyone's "voice", regardless of age, incomes, language, geographical position, access terminal or operating system at hand;
- Participative, collaborative – information (its own and not only) can be shared in large quantities and frequency by the users, towards an unlimited potential target which can easily reply in various forms (text, image, audio, video) to the posted contents. Thus information is internally validated by the beneficiaries themselves (see, in this case, the success of Wikipedia);
- Agglomerating, a link for the people with similar interests who can easily find one another and quickly gather;
- Dynamic, bi-directional – the information flows are sent to the subscribers immediately after they have been created, saving the effort of searching for the elements of interest;
- Substitution of equipment and software, distributed in its own form also as services;
- Self-sortable, self-classifiable– the users can easily group things together, by labelling, depending on their own preferences, information in video channels, photo albums, so on, creating the basis of a virtual community split on interests, tastes, affiliations, so on.

As a consequence of these features, Web 2.0 technologies are widely used by the citizens. We illustrate this statement in an evolution table for the number of Facebook users, one of the most popular networks of socializing in the world.

Table no.4

Top 10 Facebook Countries Statistics

No	Country	Number of Users	Change	(± %)	Penetration
1	**United States**	167554700	+8 524 960	+5.36%	54.01%
2	**Brazil**	60665740	+5 718 360	+10.41%	30.17%
3	**India**	60502800	+8 541 380	+16.44%	5.16%
4	**Mexico**	39388040	+2 831 500	+7.75%	35.02%
5	**United Kingdom**	33190940	-4 474 740	-11.88%	53.23%
6	**Philippines**	29862300	+942 140	+3.26%	29.89%
7	**France**	25295760	+966 440	+3.97%	39.06%
8	**Germany**	24974660	+1 034 180	+4.32%	30.35%
9	**Italy**	22829800	+1 026 080	+4.71%	39.30%
10	**Argentina**	20411360	+825 840	+4.22%	49.37%

Socialbakers.com affirms that there are 5.101.200 Facebook users only in Romania, which makes it 30 in the ranking of all Facebook statistics by Country. Facebook penetration in Romania is 23.23% compared to the country's citizens and 65.51% regarding the number of Internet users. The total number of Facebook users grew by more than 457.380 in the last six months.
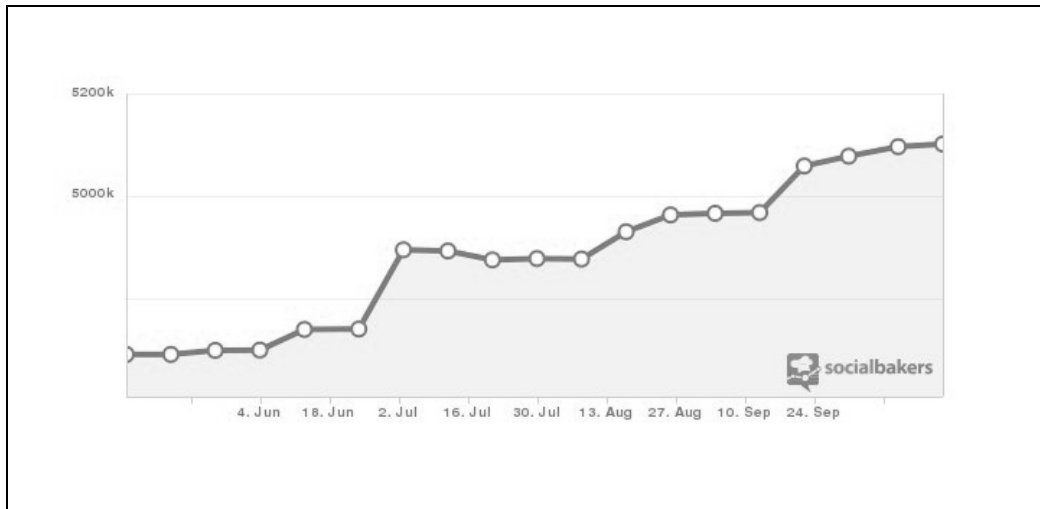
Figure no. 7.- Romanian Facebook users – (June – October 2012).
Source: socialbakers.com.

On the background of a constant and accelerated growth in the number of users, the Web technologies create a new dialogue between the government and the citizens which is worth exploiting at full capacity by the city halls. The environment in itself can renew and reshape the message, making it attractive, in its form, for categories of addressees which were previously left aside.

New perspectives on the future of government digitization: the road from open source software to the emerging direction of cloud computing

Open source software has existed as a model for developing computer applications since the 1950 s, but has only found it's way into the public area within the past two decades. According to most of the authors, the public sector in all the countries has a history of resource wastage and underperforming information systems. In the same time, it's a reality that implementation of open source software in government organisations is different from one to another, and from one country to other.

There are important steps in the last years. For example in 2010, in United Kingdom economy, 50% from software applications were open source software, so it's possible also for eGovernment applications. The problem is the same idea was announced in 2002. So, what went wrong? The specialists agree that in the future "big data" is going to be open source.

Nevertheless, many businesses are increasingly becoming attracted to OSS for eGovernment, even those developing proprietary software. Lerner and Tirole (Lerner, Tirole, 2001) suggest three explanations for this: to better know the competition, to make money on complementary services and support to OSS programs and to attempt to influence the development of a project to favour their company.

If we try to summarize the most important advantages of Open source Software for eGovernment, the most important are:

- Little cost - one of the biggest attractions of OSS for governments is the perceived availability at little or no cost ;
- Reliability - Murphy (Murphy, 2001) and Carnall (Carnall, 2000) state that reliability is often cited as one of the most important benefits of OSS. Reliability in the software context means the absence of faults that lead to incorrect operations, loss of information or system failures. The reliability of OSS is enhanced with the availability of the source code to other programmers who can identify problems and propose solutions;

- Customisability - Linked to reliability is the issue of customisability. Krishnamurthy (Krishnamurthy, 2003) argues that as the source code is available to all, individuals or organisations can modify the program to meet specific needs;
- Licensing - The freedom given by the different licences means users can customise or re-distribute software as required, whilst also giving businesses the authority to sell modifications and enhancements as proprietary software;
- Greater choice and control for citizens/private companies – Open Source Software is creating an important alternative to proprietary software and providing end-users with a various range of software options which are continually under development;
- Support from major companies - In the past many businesses have been reluctant to invest in OSS because of the lack of support and training available. Now this is changing as major IT companies begin to support OSS (Butcher, 2003).

What about the potential disadvantages of Open Source Software? There are many issues that surround the use of OSS but the disadvantages that were identified over the last few years (Waring, Maddocks, 2005):

- Version proliferation - This is a major issue for proprietary software users but it is even more problematic for the users of OSS;
- Complex and numerous licences - This has already been discussed as a benefit to business users. However, some licences require OSS users to re-contribute to the OSS community by releasing new/amended code or by supporting developers. Many business users do not have the technical ability to understand the code and rely on outsourcing customisations or software maintenance, yet are still legally responsible for ensuring the licence requirements are met;
- Implementation issues - It is claimed that one of the major worries for OSS users, particularly at corporate level, is there is no single person responsible for the development of the product who can be contacted to resolve problems.

When looking at implementing OSS in most developed countries of the world, the UK Government for example, appears to lag behind many others. Applewhite (Applewhite, 2003) lists countries including China, India and Norway where OSS is more established and identifies 24 countries that have passed or considering laws encouraging OSS use. Germany in particular is seen as a leader, and this is reflected in adoption not only by the public sector but also large businesses. (Mathieson, 2003) suggests that up until 2001 the UK Government had shown little enthusiasm for OSS and of the 20 largest local authority websites only eight (40%) used Apache, compared to 67% of all websites worldwide. However, the EU is increasingly adopting more OSS as there is better awareness of its potential benefits.

So, if we try to answer to the question: Do we have a viable universal alternative model for open source software for eGovernment? The answer is not yet but it's clear that in this long period of crisis, governments have a crucial obligation to spend taxes more wisely.

But, what about cloud computing applications in this area? It's too early to talk about Cloud computing impact as an emerging direction? By the year 2014, over $ 1000000000 of the federal US IT budget would be used to cloud computing. According forecasts, the evolution to the Cloud computing could save Washington D.C. City Government 48% on e-mail expenditures and the City of Los Angeles 23.6 %.

Korea's has announced engagement of $ 500000000 to the growth of Korean cloud computing facilities: 17 of the critical applications are moving to the Government Cloud. In United Kingdom, for example, the G-Cloud program is one of the vectors of the new Public Sector ICT Strategy. The G-Cloud Program is expected to assure savings of £300 million per annum (by 2015) by consolidating data centres in use across the Public Sector against estimated current spend in the order of £5bn.

Probably, the most difficult problem in this area is that too many citizens thinks that Clod computing means less security and also the best software is the most expensive software. So, what we need is also a culture change. At a time of austerity, like our times, the governments can't afford to ignore the more cost effective solutions.

Conclusions

In many cases, governments are talking about technology without strategy. We must recognize that current eGovernment standards focus more on solving the technological problems related to compatibility and interoperability. Also the law system is not really updated. If we want to develop strong eGovernment systems, we must improve in the same time such systems both in developed countries and developing countries. The development of high quality eGovernment applications is an important issue addressed through the development of a model based on understanding citizen perceptions and expectations.

In a "big Europe" eGovernment systems must be developed to support everywhere sharing of resources, and free movement of ecitizens from a system to another. According to this direction especially the problem of the technical standards is an issue that is far away from the necessaries stage of development.

What role did eGovernment play in governments responses to the crisis? How do governments to achieve direct or indirect impacts in the economic recovery? Becoming more transparent could be a priority for rebuilding citizen's trust. It's also an occasion probably, to accelerate the speed of implementation.

Governments are also looking more closely at the potential for sharing resources, services, capacities such as infrastructure, technological platforms, and also competencies and skills. In sum, though many OECD member countries report unchanged priorities, the common message is that existing e-Government strategies and action directions are aimed at targeting the lagging efficiency and effectiveness realisations and the possibilities for delivering coherent and individualised services to citizens and companies (European Journal of ePractice, 2011).

Although eGovernment is high on the agenda and many resources are set aside for it, eGovernment still faces significant challenges as it continues to develop. Low uptake becomes problematic as greater efficiency and returns on investments are only possible with a widespread use of eGovernment services.

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