European Study of E-government City Models

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Abstract
Barcelona city council, in collaboration with “Eurocities” - the network of European cities, has published a study about e-Government in the local world. A review is made and the conclusions are presented. The study includes an in-depth analysis of seven major cities that deployed e-Government programmes successfully (Barcelona, Birmingham, Munich, Stockholm, The Hague, Turin and Vienna) and a live call with the senior executives in charge of the program in each city. The supply and demand of e-services are analyzed, along with the factors that promote and condition their implantation in the local world and, probably, in other Public Administrations.

Keywords
e-government, e-administration, e-services, ICT, economic and social sustainability

Estudio europeo sobre e-gobierno en las ciudades

Resumen
Se hace una reseña y se presentan las conclusiones del estudio sobre e-gobierno en el mundo local, que ha publicado el Ayuntamiento de Barcelona en colaboración con la red europea de ciudades «Eurocities». El estudio incuie un análisis en profundidad de siete ciudades que han tenido éxito en la implantación de programas de e-gobierno (Barcelona, Birmingham, Munich, Estocolmo, La Haya, Turín y Viena) y una entrevista con sus responsables de organización y sistemas de información o de su programa de administración electrónica. Se analizan la oferta y la demanda de e-servicios y los factores que impulsan y condicionan la implantación en el mundo local y, probablemente, también en otras administraciones públicas.

Palabras clave
e-gobierno, administración electrónica, e-servicios, TIC, sostenibilidad social y económica

Tema
Gobierno electrónico
Barcelona city council, in collaboration with “Eurocities” - the network of European cities, has published a study about e-Government in the local world. In the following pages a review is made and the conclusions are presented.

This report is part of the work done by the eGovernment working group from the Eurocities Forum on the Information and Knowledge Society (Telecities), led by the city of Barcelona, from January 2006 to March 2007. The goal of the group was to identify good practices and trends in eGovernment programs being run by the city members of the Forum.

Yearly, many surveys, articles, websites and conferences provide information and analysis about plans, pilot projects or innovations in which many European cities are taking part. The group took a different view, focusing on how the cities are delivering actual eGovernment programs to their residents, tourists and investors and how they manage and deploy these projects in their real lives.

So the focus was on how cities provide an advanced level of complete transactional eServices (not mere information and communication websites), through city or council wide programs (not just for a function or department) that are reasonably integrated with their back-office operations and, eventually, with external parties. (For those interested in eGovernment literature, focus is on cities placed in phases 4 and beyond in their eServices offering).

Twenty-five cities participated in five working sessions or submitted their presentations, ideas and comments; although in the final phase an in-depth analysis has been made of seven major cities in seven different countries. This analysis includes a description and explanation of the current status of their e-Government programs, according to a common index provided by the editors and a live call with the senior executives in charge of the program in each city, formally Chief Information Officers, heads of the e-Government unit or under other names. The cities participating in this phase are Barcelona, Birmingham, Munich, Stockholm, The Hague, Turin and Vienna. They all have an explicit e-Strategy or e-Government Strategy and they all publish results, so it is easy for the reader or the researcher to check or complete the analysis.

All these cities are the capitals of metropolitan areas and have a common base of city services, although it should be mentioned that the competences and resources may vary. In some cases, the “Big City” or Metropolitan Region holds only a few coordination bodies or runs limited sector programs (such as transportation or waste management) and in other cases there is a real political and managerial authority. Similarly, some cities run major public housing programs, social services, healthcare or education, whereas some do not.

Having described the inherent City Models for each of the cities analyzed, a number of conclusions have been reached regarding aspects found to be common or showing a particularly high relevance.

e-Drivers

Why do cities engage in e-Government programs?

Reasons may vary, but these cities usually see themselves as a driver or a main agent in the development of the information and knowledge economy at city level. In order to do this, some of them have been intensely reshaping urban planning, deploying new communications infrastructures, running major programs to attract investments or developing local entrepreneurs. Therefore, being an active player in the field of e-Government is perceived as a piece of the same strategy, or as a “must” to gain further visibility and credibility.

Years ago, many cities pioneered the transition to a new model of “public management”, focused on superior levels of efficiency and effectiveness, providing more transparency and participation or “putting the citizen first”. For such cities, e-Government is an enhancement of these policies or an opportunity to launch a new phase of service (or “business”) transformation and process reengineering. In these cases, the emphasis may be placed either on improving service levels (especially in relationships with the citizens) or on gaining efficiency and cost savings, but there is usually a continuous line between both topics.

Things have changed significantly since these programmes were launched (six to ten years ago). The extension and popularity of ICT, and the Internet, have boomed among citizens, businesses and in the ordinary
running of every council. So now, for most cities e-Government is no longer merely an option or a political pipedream. According to Johan Särnquits from Stockholm, now “it is a must, something that people take for granted” – residents or businesses expect to deal with the Council through the web, as they do when they buy travel tickets, check their bank accounts, order books or download music.

It is important to notice that e-Government is not considered a technical or technological issue, even when it is managed inside the IT department, but rather a topic related to “business” - the deployment of new services, improving existing ones or re-engineering operations. Moreover, as was mentioned by the Mayor of Barcelona, “it is no longer possible to imagine any public policy without the support of information and communications technologies”.

Following a certain tradition on the literature of management, the study identifies ten “key success factors” or conditions (individually necessary and sufficient on the whole) to attain the goals of the e-Government programs in the local world and in every kind of public organizations.

These factors would be:

1. The focus of the services towards the citizen (to make their life easier), choosing services of high impact and demand
2. Achieving a sustained political support
3. Assuring that the program is sustainable, in terms of effectiveness and efficiency
4. Having an explicit strategy
5. Having a dedicated unit for the coordination and leadership of the program
6. Constructing a common architecture of information
7. Assuring the participation of the different interested parties through change management
8. Searching the massive social adoption through sound marketing and communication
9. Displaying the projects and the operations in a very professional way, from both a technical and managerial point of view
10. Establishing agreements and cooperation with other administrations and with the private sector.

1. Making People’s Lives Easier

Nowadays, leading e-Government cities offer citizens and businesses an array of services that are helpful in their real lives, 24 hours a day and 7 days a week. When describing their services, “easy”, “time-saving” and “convenient” are common words.

They focus their innovation on solving the most common problems and needs of the majority. They are demand-oriented. Success is now being measured in terms of adoption (effective usage of the service by the population) and user satisfaction.

In some cases, e-Government programs are an evolution or a complement to citizen relationship programs being placed on site (in public city offices) or phone (some call centres) over the last decade, or even earlier. These programs offer a single point of contact with the Council, regardless of their internal organization, and are run by a separate structure or, in some cases, outsourced.

Being multi-channel (or “click-call-face”), sharing the same systems and databases for different channels is now a common goal in the cities we surveyed and a requirement for the new technological platforms they are now building.

More recently, interest targets usability (providing features and a lay-out that people can easily recognize and deal with), accessibility (applications being open to users with reduced physical or mental capacities) and technical neutrality (being usable regardless of any particular software).

High-Impact Services

After a number of years designing and implementing advanced e-Government programs, all cities recognize that a key for success is providing services that match a large demand and attract a critical mass of users. And they all thrive on what in the private sector are called “killer applications”, or “high-impact services” in the public space. These are important to facilitate rapid adoption and move public interest and habits to the
usage of the city e-Services. The key is to find the types of applications people (or businesses) use frequently and intensely, and where they can gain time, money and convenience if performed online.

<table>
<thead>
<tr>
<th>Change of residence or business address</th>
<th>Payment of taxes and fines</th>
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<td>Permits for home improvement work</td>
<td>Making an appointment with a city office</td>
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<td>Registrations of business and trade</td>
<td>Questions, claims and complaints</td>
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<tr>
<td>Application for public housing</td>
<td>Access to parking licences</td>
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<tr>
<td>Permission for works or events in streets</td>
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<td>Organising a wedding</td>
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<td>Voting ticket application</td>
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<td>Submitting and checking bills</td>
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<td>Documents of the city registry</td>
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The previous table shows a list of some of these popular services. In many cases, cities have targeted businesses and professionals as the main users of e-Services, as they are more accustomed to the Internet for dealing with customers, suppliers or banks and they usually have a digital authentication. Tax applications are some of the most extended everywhere. But applications related to urban planning, mobility and all kind of permits are growing. For individuals, the most popular services are those involving housing, libraries and the obtaining of census-related documents.

The most advanced cities offer a full range of these city services, covering 50% to 80% of the whole potential volume of transactions.

2. Secure political support

Although the emphasis may vary, in all cases e-Government is part of the strategy, of the ensemble of policies or the action plan of the municipal Government. The CIO of Stockholm city council says: “e-Government is a political component of the city. It is, of course, instrumental, but it also has a significant political dimension now. (...) I would say that the stakeholders are the politicians. No argument there.”

Certainly, major e-Government programs cannot be developed without political support, which must be sustained and, as far as possible, remain out of the political turf.

In many cases, e-Government programs were launched and sustained by a Mayor or Vice Mayor with a personal interest and keenness on technology.

However, the CIOs and proponents of major investments and support for e-Government programs should no longer complain of the lack of interest from politicians and the difficulties in securing their buy-in. They should provide the incumbents with good practices, better ideas and tools on how ICT can support their political priorities. In many cases, the benefits of e-Services are not always evident. The point is how ICT may match the cities' strategies on transformation, growth, inclusion or better Government; how ICT can really deliver; how politicians and senior executives can capture the potential benefits of these investments.

3. Sustainability

Nowadays, the economic and social sustainability of the investments in ICT and e-Government programs is a growing concern in many public organizations, as it was in
the commercial sector some years ago. Investments in ICT are competing with others in fields such as public works, transportation, schools, housing or social programs. And they need to show that they pay back (even if other programs do not need to demonstrate their pay-off, as was mentioned “off the record” by one of the participants). The paradox is that at the same time, these programs need to be big, ambitious enough and long-term-oriented to really capture benefits.

Some cities are starting to observe the gains from their efforts in terms of internal efficiencies and cost savings. Some are reaching a more than acceptable level of “channel substitution”, which means that the Internet (with much lower costs of delivery per unit) is taking over from the traditional, much more expensive channels. Adoption and sustainability are closely linked.

Leading cities now select their investments in ICT very carefully, prepare business cases very professionally and try to set metrics and reviews to monitor achievements. But not many are measuring the real impact of these investments in terms of productivity, growth and job creation for the whole city.

4. e-Strategy

Advanced e-Services (those of a transactional and interactive nature) require the integration of multiple components, a shared view and, as already mentioned, sustained long-term efforts.

Leading cities in our study are using an explicit document of Strategy to set priorities, provide leadership and governance over the e-Government programs and align the entire organization. This is also being used to justify and secure additional investments.

That document is a road map for implementation and to set a public (internal and/or external) commitment in terms of contents and deliverables, as well as a timeframe. Some cities are publishing part of their ICT strategies on their websites.

It is interesting to note that, in most cases, cities no longer speak of an “e-Government strategy” but of e-Strategy, ICT Strategy, Business Transformation or other names. Actually those documents cover all the matters on how technologies support, enable or even drive the improvement and transformation of the whole process of the council and the city policies. E-Government is embedded in the e-Strategy, as e-Business or e-Commerce has become an ordinary part of the IT strategy and the business strategy of any company.

5. Someone in charge

All the cities in this study have a dedicated e-Government unit (sometimes with different names), placed at the top level of the organization, such as the office of the Mayor or the office of the city first executive (CEO).

Usually, this unit provides guidance, coordination and support. It manages projects and deals with the central resources allocated to e-Government programs, but it does not necessarily have proper executive power.

In most cases, it is a small unit whose members have “consultancy” skills, combining IT, process management and relational skills.

6. The importance of a common Architecture

All the CIOs (or similar) participating in the study coincided in a kind of obsession for building a single “model” or, more precisely, a common architecture.

e-Government requires integration, from the front-end to the back-end, trans-departmental, or even crossing the traditional boundaries of the council. Integration means a common language, strong standards and a set of tools to facilitate communications.

e-Government pushes cities to develop (or buy) new systems, or at least new service components (like authentication, digital archiving or document management). There are obvious advantages of scale and serious risks of mismanagement.

In general, e-Government challenges the quality and the organization of the information (especially raw data, such as user or geographic information systems data), business
processes and applications and the way to make them evolve. Everything becomes transparent and expensive.

Most cities are investing heavily in new technical architectures and platforms (named “Service-Oriented Architectures”) and building new information and technology frameworks. Some are considering re-centralizing their IT delivery, internally or via outsourcing.

7. Getting people on board

All the cities in our study recognized that internal adoption among politicians, executives and civil servants is key to success. e-Government challenges the rules, habits and cultures of traditional bureaucratic public organizations.

The senior managers of central and sector departments (the leaders of the different “businesses”) are identified as the main potential barrier, if they position themselves against the e-Government program, or are indifferent. Senior executives are the actual “owners” of the main service processes and they should find the advantages of being engaged.

The commitment of politicians (mainly the Mayor), regulatory changes and a proper “change management” approach are needed. Professional “change management” programs (considering human resources and organizational development) are being deployed in some cities.

Nevertheless, all the participants consider internal adoption to be a very complex and tough issue, and strongly advise other cities to be cautious, patient and tolerant to frustration.

8. Sound Marketing and Communication

If adoption is fully recognized as the main (or at least one of the main) test for successful e-Government programs, all the cities in the study recognize the need to use sound marketing and communication to facilitate the diffusion of e-Government among the public. Strong (and costly) marketing programs should be considered in e-Government programs as an investment, as is the case in technology investments or, more recently, in change management.

The participants recognize that traditional public or social marketing is not very appropriate for this type of programme, in which the cycle of adoption and maturity is complex and should be tailored to different audiences. The goal here is not to improve public image or build brand identity, but rather to shift individual attitudes and, at the end of the day, acquire new users and more transactions.

In marketing e-Government programs, cities should not be focused only on campaigning but also on the full circle of product development and public acquisition. They should know the characteristics of demand in depth, understand the users’ needs and expectations, secure their involvement in the whole design and implementation process and listen to their feedback. Some cities are introducing “new” (in the public space) tools to understand the position of the customers in the acquisition process and help them to be aware of the service, rousing their interest, letting them try and retain loyal users.

9. Very professional deployment

As was expected, on reading the last remarks, all the cities recognize the increasing complexity involved in major e-Government programmes, as supply and demand grow and external and internal users and stakeholders become more demanding. As one participant explained: “everything became bigger and more complex, thus demanding excellence in planning and execution.”

Big e-Government programs require sophisticated management, new skills and capacities and a culture of delivery. Among the most-quoted new skills were those related to implementation strategy (not mere strategy design), programme and project management, designing enterprise technical architectures and those pertaining to professional change management, marketing, public relations and advertising.

Many cities buy these capacities from external sources, but they all recognized the need to develop internal skills to improve contracts and control suppliers.
In terms of general or personal skills, the participants mentioned the need for a new type of civil servant or officer, new leaders focused on the citizens and their expectations, able to broaden their scope and "see" the whole council beyond their own department, eager to take responsibility for sharing and being a part.

10. Cooperation and partnership

Complexity, scope and volume of current e-Government or information-enabled operations in many cities are requiring new forms of cooperation and partnership. These are not the only reasons.

Many cities are engaged in projects or platforms that go beyond the strict boundaries of the council, involving metropolitan areas, the province, the region or even national initiatives.

Some city portals in central Europe are partnerships between the council and other public and private players. Some cities in different parts of Europe are engaged in new (mixed) forms of contracting out services, infrastructures or even "business transformation" programs.

As the participant from Turin mentioned, the issue is that the "traditional perimeter of e-Government is now extended". Leading cities recognize this fact and invest in cooperation and in the new relational abilities that are now required.

After years of intelligent and sustained effort, the cities that participated in our study are successfully offering a wide range of electronic services to their populations and achieving significant adoption figures. They are starting to reap the benefits of these investments.

They, by themselves and with the help of external partners (other administrations or commercial companies), are developing new abilities and skills.

There is still a big challenge facing the transformation of the back-office or the ordinary processes of the regular administration, and not just in technical terms (the design and implementation of new platforms) but much more in organizational terms - putting new service processes in place and changing the culture of people’s and the organization’s behaviour.

The political and managerial journey of e-Government is still moving forward.

Recommended reference

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