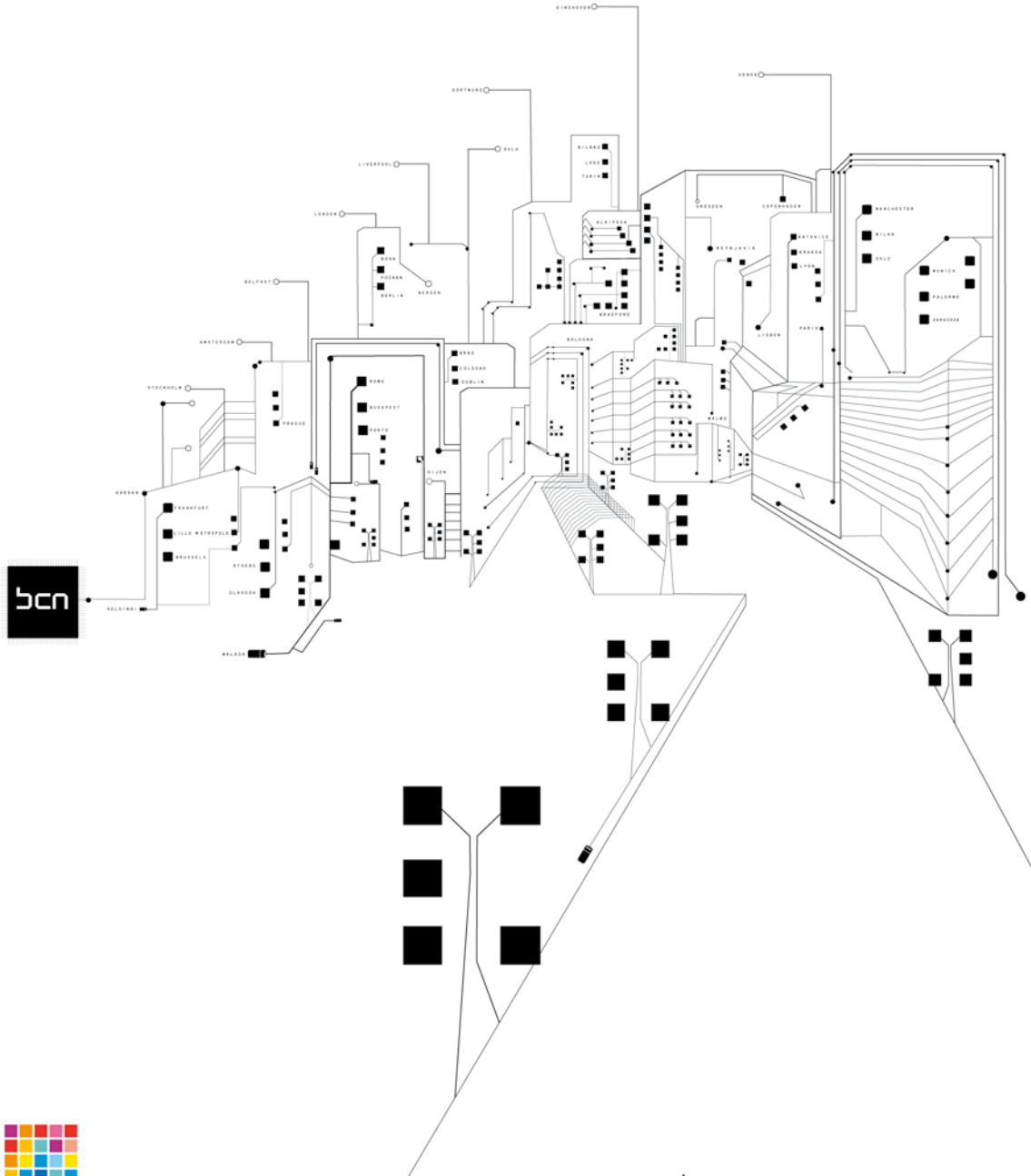
E-GOVERNMENT CITY MODELS:

CASES FROM EUROPEAN CITIES



EUROCITIES

Ajuntament de Barcelona

Title: “e-Government City Models: Cases from European Cities”

Published by Barcelona City Council. Chief Information Office with the collaboration of EUROCITIES.

Editor-in-chief: José Ramón Rodríguez Bermúdez
Associated editors: Joan Batlle Montserrat & David Esteban Ayerbe

Design by TBWA\Barcelona

ISBN: 978-84-9850-028-8

Legal Deposit: D.L. 27939-2007

www.bcn.cat/publicacions

Special thanks to Marten Buschman, Franco Carcilo, Petra Delsing, Glyn Evans, Lucia Garutti, Ingrid Götzl, Hans Peter Heidebach, Iolanda Lacasa, Suzanne Liljegren, Johann Mittheisz, Rune Olsson, Giuseppe Paruolo, Maurice Paulissen, Johan Särnquist, Hannelore Schnell and Wolfgang Willberger.

E-GOVERNMENT CITY MODELS:

CASES FROM EUROPEAN CITIES

EUROCITIES

Ajuntament de Barcelona

Presentation by the Mayor of Barcelona

I am pleased to present this study on e-Government models of cities, drafted by the EUROCITIES e-Government work group and coordinated by the city of Barcelona.

Nowadays, the deployment of any public policy is unthinkable without the intensive use of ICT. And not only this, but access to information and knowledge technologies has become a new citizens' right, as also provided for by the European Charter of e-Rights launched by EUROCITIES.

In this way, progressive strategies for the development and use of ICT must combine efficacy, efficiency and equity. In a word, they must place technology at the service of the people.

There are two facets of this book I particularly like. Its contents place the emphasis on 'delivery', the real and concrete development of massive experiences in the implementation of services that improve citizens' quality of life and their dealings with the local administration, beyond pure novelty or invention.

And on the process, almost two years' work of sharing experiences, projects and ideas among the e-Government leaders and ICT managers of 25 member cities of the network, and more particularly the in-depth study of 7 cities with which Barcelona has maintained a very close relationship for many years now: Birmingham, Munich, The Hague, Stockholm, Turin and Vienna.

We are convinced that knowledge and progress in cities must be driven by an in-depth awareness of the needs of the communities we serve, combined with permeability and learning from others.

We are proud and happy to receive and give. It is part of the nature of our city and its deeply-rooted vocation to be a truly global city.

Jordi Hereu i Boher
The Mayor of Barcelona

CONTENT

FOREWORD

It is with great pleasure that I introduce this survey on European City Models of e-Government, promoted by the e-Government Working Group of EUROCITIES Knowledge Society Forum – TeleCities and by the City of Barcelona.

ICT innovations represent a way to overcome the boundaries of modern urban aggregations, providing more effective and innovative services and developing interactive relations between citizens and public administrations.

Over the past few years, new technologies have driven local administrations to experiment and subsequently implement applications that allowed them to offer new services to citizens. However, we need to recognise that Cities are now beyond that first phase and they are clearly approaching a different stage that demands a qualitative leap.

The key challenges related to the use of ICT today are the overcoming of the digital divide, the definition of citizens' rights in the Information Society and the choice of the most suitable connection network architecture.

The applications achieved so far, such as civic networks or online public services, need to be evaluated and classified so as to identify the best elements in the various experiences. This will also allow Cities to develop a joint approach to define the lines for further developments and to concentrate their investments towards common strategies. The survey here presented can be a very useful tool in this direction. It analyses a set of relevant and successful cases involving different approaches and strategies to e-Government policies, namely those of Barcelona, Vienna, Munich, Birmingham, Stockholm, The Hague and Turin.

The effort to single out the e-Government City Model underlying each of the different approaches taken by cities can help us to identify the main features of a winning e-Government model.

Giuseppe Paruolo
Chair
EUROCITIES Knowledge Society Forum – former TeleCities
Deputy Mayor for Health and Communication, City of Bologna, Italy

INTRODUCTION

EUROCITIES is the network of major European cities. Founded in 1986, the network brings together the local governments of over 130 large cities in some 34 European countries.

EUROCITIES provides a platform for its member cities to share knowledge and initiatives, to exchange experiences, to analyse common problems and develop innovative solutions, through a wide range of Forums, Working Groups, Projects, activities and events.

The e-Government Working Group was conceived in October 2005 during the EUROCITIES Knowledge Society Forum meeting in Prague. It was established as a response to new sensibilities of the cities and to face coming Knowledge Society challenges.

At the same time, it was understood as a logical evolution from the former working group on e-Rights in order to focus now on the e-Government delivery. Since its initial steps the city of Barcelona led this WG, which has been chaired by Mr. José Ramón Rodríguez, the CIO of the Barcelona City Council.

As a result of e-Government Working Group initiatives and benefits, many relevant cities, experts, individuals and private companies took part in the pursuit of its foundational goals:

- To identify and describe successful European Cities Models of e-Government.
- To characterize the relevant key success factors in e-Services adoption, such as interoperability and the use of standards, sustainability to make long-term e-Services and take-up of e-Services among citizens.

Two main outcomes were expected at the end of the exercise:

- A through study on “e-Government City Models”, where the underlying models of delivery of e-Government services in several European cities will be analysed.
- A final report on “Key Success Factors on e-Services adoption”.

Both papers were to be released during the Spring Event of the EUROCITIES Knowledge Society Forum, to be held in Barcelona by March 2007.

The vision and strategic approach taken from a number of cities has now turned into real and tangible results. No one is similar to others, either in approach or in models, or at least not exactly. Most of them have been succeeding in a number of areas, some have encountered and overcome barriers and obstacles which were not always the same.

The Working Group of EUROCITIES decided to contribute with a survey about the different models which European Cities adopted in the delivery of public services: from take-up to implementation, from organisational change to services promotion.

This document provides some of the outstanding models of local e-Government as adopted by cities like Barcelona, Birmingham, Munich, Stockholm, The Hague, Turin and Vienna. These approaches will also be discussed in a round table during the Spring Event of the EUROCITIES Knowledge Society Forum – TeleCities.

THE RATIONALE

All cities, regardless of their size, political orientation, governance organisation or their technical capacities and in-place infrastructure are considering a pragmatic deployment of e-Government services.

The e-Government Working Group took as a starting point the assumption that deployment of e-Government is not just a one-shot exercise, it is not about succeeding (or failing) at once. It is a longstanding journey, composed of many decisions taken at different phases of the overall process by different people in charge, sometimes under a visionary approach, sometimes looking for efficiency improvement, always dealing with change management and building on previous consolidated assets developed along the time.

All participating Cities in the work carried out by the working group are succeeding in one way or another in deploying their own action plan, which is different in all cases. There is no 'magic formula', it is about case by case, but the experience of many of the most successful Cities shows that they seems to be an inherent concept of 'City Model' floating around.

This model can be seen better in most of the cases when the Cities have already progressed in their 'journey' to the effective deployment of e-Government services. Perspective is needed to be able to appreciate the 'shape' which the overall ensemble of decisions and implementation have given rise to with regard to the final framework as it is developed in each City. This can be perceived when non-marginal complex projects are tackled and surprisingly result in either a resounding success or in total failure, rendering it necessary to rethink many of the existing building blocks.

BARCELONA

Barcelona is one of the major European metropolises. With more than a million and a half inhabitants in the city but more than four and a half million in the metropolitan area, Barcelona is the political, economic and cultural capital of Catalonia, an autonomous community located in the northeast of Spain, on the Mediterranean shores. Today the city and its surrounding area, which has traditionally had a significant industrial activity in relation to its overall economics, act as a centre of economic activities related to new technologies and advanced services within the framework of the information society.

Barcelona City Council is strongly involved in the e-Government process using the Internet as an instrument to achieve three main strategic objectives: improve commitments to the inhabitants and expand them, develop a participatory strategy for the city and reconsider and improve internal management.

The City Council's official website, www.bcn.cat, is a portal that contains a layer of common services, managed from the homepage (the news, the city diary, the city guide, and the rest of the general services for attending the citizens), and gives access to a galaxy of around 150 websites on different topics and from different municipal departments.

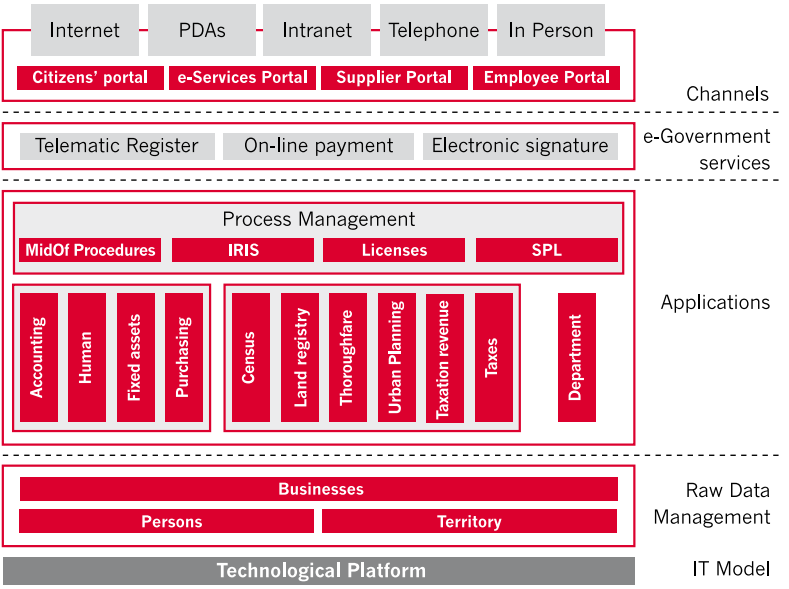
Some of the most important pages are those of Tourism, Culture, Traffic, and Business. Most of the contents of the website are presented in Catalan, Spanish and English. The use of the pages in English was 24% in 2004. Over the past few years the website has received an important number of awards.

e-Government in **BARCELONA**

The deployment of e-Government services are based upon the use of Internet to increase the efficiency of the Local Administration, the improvement of the public services, and the re-formulation of the processes of governance in the city.

Over time, Barcelona City Council has made a significant effort to deploy impressive ICT infrastructure.

With a yearly sustained IT budget of around €35 million, and among many other components, the municipal infrastructure is composed of over 7,500 workstations, 65 file & print servers (5 Terabyte capacity), 64 midrange servers (8 Terabyte capacity), 6 million documents and 500 tailored applications supported by more than 150 km. of a corporate fibre optic network connecting 225 buildings.



THE 'BARCELONA MODEL'

In June 2004, the professors Manuel Castells and Esteve Ollé published, within the framework of the Project Internet in Catalunya (PIC) of the Open University of Catalonia and the Regional government, a study about the implementation of Electronic Government in the city of Barcelona. From the conclusions of the study, the emergence of the city's own model of administration can be deduced, focused on the institutional and conscious use of Internet "to increase the efficiency of the Local Administration (...), the improvement of the public services and the reformulation of the city's governance processes".

The 'Barcelona Model' can be introduced in four interrelated components or dimensions:

- A new model of public management characterised by business and territorial decentralisation, the outsourcing of services and the separation of the political authority and the executive authority, which extensively adopts management models and intensively uses information technologies.
- The use of ICT, and in particular the Internet, to increase transparency and communication with the citizens by means of new information services and online procedures.
- The enlargement of the daily life of the citizens by means of the social use of ICT, in a dynamic relation mode between physical space and virtual space.
- The influence and leadership of Barcelona in the networks of European and Latin American cities that promote and exchange advanced experiences in the use of ICT.

THE FOUNDATIONS OF THE 'MODEL'

The foundations of the 'model' feature a deep-rooted common information management structure for the different channels (the so called "integrated multi-channel system of information for citizens", or MISS), an expansive strategy of offering as much information and services as possible through all the different channels, particularly the Internet, and a strong individual and collective substratum of innovation, supported from the Mayor's office and led mainly from the department of Barcelona Information.

The main characteristics of the municipal information systems and technology for some time, well embedded within the municipal organisation, were the concept of a centralised management structure of the main databases of information for the citizens, the integration of corporate and departmental back offices, the structure of the model of

applications in separate levels, the excellence of the geographical information system, their integration with alpha-numerical information, and the quality of the 'base information' (which relates to the people and the territory).

The co-existence between different structures (the information and service providers of the departments, the central coordination structure of the website, the people in charge of the Municipal Institute for Information Technology, the managers of the common information databases, etc.) and an effort of 'relational management', relatively hierarchy-free, have probably been key in terms of the functioning of the Internet in the City Council since about 1999 (after the initial period of what could be called 'autonomy').

In 2001, there was a strategic reflection about the future of the Internet in the City Council which gave rise to, among other initiatives, the content management project, which determined the model of government and production of the municipal website from that moment.

Since then, the website of Barcelona has functioned as what might be termed a horizontal or 'federal' portal, currently comprised of a galaxy of around 150 websites of different municipal programs and services, which allows the re-utilization of contents and validates the process of production by means of a workflow manager. The central structure, apart from establishing the common regulations for the whole system, directly manages the corporate services of online information and procedures.

Finally, Castells and Ollé identify the hacker ethos of innovation underpinning the individual and collective substratum of this transformation, especially within the Barcelona Information group. The characteristics of this 'ethos' would be creativity, active internal and external relational attitude, self-organisation of work time, public service vocation, to establish a certain competitiveness with other Administrations and a feeling of belonging to a 'community' of practitioners. This ethos would co-exist, according to the authors, in a dialectic, contradictory and complex relationship with other more 'protestant' municipal ethics (the democratic model of municipal public management, based on efficiency, cost saving and introduction of management and business systems, or the public servant hierarchical rules-based model).

That was easy (and fast)

The Barcelona website has been adapted to mobile phones and actually places the city's information services on the street. It offers a wide variety of options, such as consulting the cultural agenda or finding the best way to get anywhere by public transport. And all by just using a cell phone.

BCN on the mobile is the new channel of information which the City Council of Barcelona has made available to the citizens and visitors of the city. The new channel was born with the aim of responding to the information needs of the city that the citizens have when they are on the move, in the street.

BCN on the mobile is a portal that can be browsed from mobile phones providing information about events and shows being held in the city, a complete directory of facilities such as restaurants, libraries, civic centres, a service of maps and plans of the city, as well as a feature that indicates routes and how to get there by means of public transport. The information is completed with useful telephone numbers and a specific section is activated during festivities and other major city events.

In spite of its remarkable service quality and completeness, the overall platform development exercise took 2 months and the involvement of two technical experts. How was that possible? Because it leveraged most of the components already existing as part of the Barcelona e-Government City Model (comprised, among many other services, of an enabling middleware layer, an operational GIS platform, and an existing 'how to get there' service developed by TMB, the municipal transport company), thus requiring only the further development and fine-tuning of the very specific channel interface.

INSTITUTIONAL COMMITMENT AND MANAGEMENT MODEL

The phase that started at the end of 2003 with the new political period was in fact characterised by the effective expression and fulfilment of an institutional commitment in support of e-Government. That is reflected by the range of a combination of policies and plans, a major boost to investment in ICT and the implementation of new structures (organisational, technological and legal) for the management of the online services, which would facilitate the integration of the online Administration within the ordinary Administration of the City Council.

The main challenges for the period were the Strategic Plan for Information Systems and the Regulatory Ordinance (bylaw) for e-Government.

In this new stage, the highest political level also responsible for the entire municipal management machinery took over the strategic redefinition of the municipal website. Consequently, an e-Government Committee was formed with the engagement of councillors and directors from the different municipal areas, and the Editorial Commission for the website was revitalised.

The position of Deputy Managing Director, under the Municipal Managing Director, was created, to oversee the new Department for Citizen Attention, the Department of Organisation of Systems, the Municipal Institute of Information Technology, and also a new 'Technical' Department for the Internet.

After the reshuffling, the new team prepared a Strategic Plan of Information Systems, followed by an e-Government Plan, which was included in the Municipal Action Plan and the Municipal Investments Plan.

An investment of €50 million for Information Technology was approved, representing an increase of 75% compared with the previous mandate. Twenty per cent (20%) of this investment is dedicated to e-Government and Citizen Attention, defined as one of the four strategic lines of the mandate, with the main aim of increasing the supply and demand of online transaction (electronic procedures) in all the municipal fields. In this sense, two Government measures were presented to the City Council Plenary.

New online services were produced and put in place whilst the whole technological infrastructure for the management of contents, development and production were renewed. The evolution of the technological architecture of the Municipal Institute of Information Technology towards an SOA model (Service Oriented Architecture), with new components of integration and web services, will facilitate the development of the e-Government applications.

Internet has become a 'VIP customer' of the Municipal Institute of Information Technology, to which end it has signed a demanding service level agreement. The whole program gives the new Internet area a technical, economic and managerial solidity it had hitherto lacked, allowing it to assume the enormous expansion of services and frequency that it has undergone in this period.

As with the rest of the projects of the Strategic Plan of Systems, the Internet projects are subject to mechanisms of qualification and evaluation of the return on investment, project planning, management and control, that place special emphasis on quality, time and cost, favouring the outsourcing of certain services.

The transition towards this type of dialogue has not always been easy, given that Internet-based development, not only in the municipal field, is subject to highly complex and iterative process of innovation, and there are few external references. This has led to some delays in the setting in the roll-out and delivery of some projects.

The international literature on project management and implementation of information systems has recognised the peculiarities in the development of the Internet and the need to adapt structures, plans and work processes.

The approval of a Regulatory Ordinance for e-Government determined a significant challenge milestone which was central to the construction of e-Government in the City Council of Barcelona and possibly in Europe. This regulation is a sort of municipal 'law' that establishes the rights of the citizens in this field and the principles of action of the Municipal Administration, regulating the legal procedures for publishing administrative information and for carrying out online procedures, transposing, for the first time ever, the state regulation of common administrative procedure into the field of the Internet.

The Regulatory Ordinance for e-Government configures an evolutionary step from a concept of informal voluntary accountability (transparency and responsibility), in which the Administration places information and services online, towards a concept of legal accountability made up of a series of subjective rights that the citizens can demand, and therefore a series of guarantees that the Administration needs to safeguard.

The last feature that characterises this phase is a cultural evolution from the subjective aim of being a 'service to the citizens' to a more business concept of 'giving value to the customers'.

In the current phase, as a consequence, the aim of gaining audience or social use of the municipal Internet, especially for e-services, is a very important driver, thus resulting in a sustained analysis of ways of use and usage trends. Surveys and qualitative studies are constantly carried out so as to understand better the needs of the customers and to involve them in the development of the new services.

e-Government in **BARCELONA**

Promotional strategies and tactics are tried out which are different from the institutional communication of the public administrations themselves, and often far from the mass media. New projects are analysed from the point of view of the market and the return on investment, and initiatives that only contribute novelties or experimentation are assessed thoroughly before being approved.

e-Services in Barcelona:

The 10 Commandments

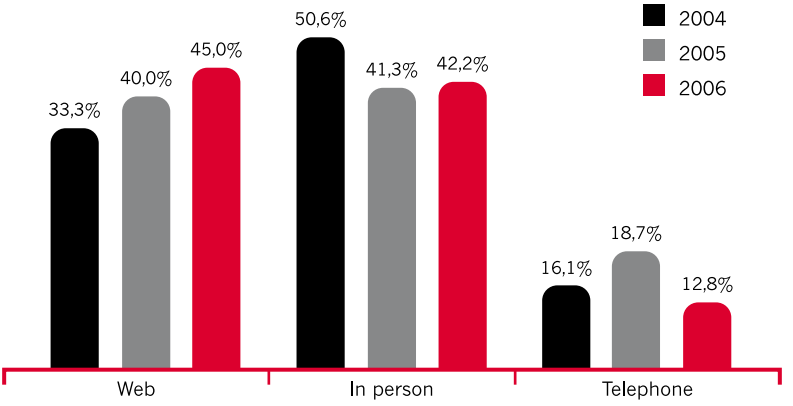
I. New Rights of Citizens.
II. Leadership and Governance through Strategic Planning.
III. User-centered e-Services pay.
IV. No one left behind.
V. A commitment to the Internet.
VI. Don't Automate: Re-engineer, Innovate, Transform.
VII. A virtual life of the city.
VIII. Go mobile.
IX. Work the Foundations.
X. Passion for Delivery.

A summary in two Commandments

I. e-Government be Government as usual.
II. Management Counts.

e-SERVICES ADOPTION

Data at the end of 2006 later confirmed that the number of procedures carried out by Internet will be similar to the number of procedures in municipal offices, and in the case of the professional public, the Internet channel has become the channel of choice for formalities, as illustrated in the following figure:



The adoption of information services by Internet appears to be very advanced (representing more than 40% of potential users, and therefore reaching the 'critical mass' level), and is replacing traditional channels. The use of transactional e-services is at a very advanced level for the groups of companies and professionals (almost 60% are customers) although the process for citizens in general is still somewhat slower.

All in all, the level of awareness of the services and predisposition for purchasing seems to augur that the process of social adoption of e-procedures will continue if suitable product and marketing actions are produced, and that take-up will be even greater if digital ID is mainstreamed to citizens and companies.

The civic behaviour telephone

IRIS is the new system for managing incidents, complaints and suggestions of the city council of Barcelona. It is a multi-channel program for managing requests for services, notifications, incidents and complaints from the citizens.

IRIS is part of a wide political effort, the Civic Behaviour Programme, one of the central political initiatives in the current mandate, aimed at increasing the awareness of and joint responsibility for quality of life of the city, respect for the rules of coexistence and the functioning of the public services.

It enables the citizens (and civil servants through the municipal intranet) to carry out all types of communication by means of a large variety of channels, to follow these up and get a response through the channel of their choice.

The preferred entry channel of contact is a new toll-free telephone number ("the civic behaviour telephone"). When the citizens contact the City Council, they get an immediate response in 30% of cases with a specific service commitment ("We'll repair the street lamp within 24 hours if there are no technical complications"), and a request code is provided for the citizens to be able to follow up and check that the case has been duly addressed. The aim was to achieve service agreements and immediate responses in 50% of the cases during 2007.

IRIS was designed and developed as a new enabling component of the existing City Model, and in this sense a particular effort was made to achieve maximum integration with existing services and subsidiary platforms, developing at the same time an impressive re-conceptualization of all the possible services (as seen by citizens). As a result, a new service taxonomy of more than 1,800 different services was defined, and fully integrated with the rest of the existing platforms. In the course of 2006, the application processed around 200,000 contacts.

JOSÉ RAMÓN RODRÍGUEZ

Deputy managing director of the city council of Barcelona

José Ramón Rodríguez is currently the Deputy Managing Director of the City Council of Barcelona and its Chief Information Officer.

He is leading the e-Government Group and chaired the group that produced the Charter of e-Rights in EUROCITIES-TeleCities.

Over his 25-year career, he has worked as a public executive with local governments and healthcare authorities and as an IT consultant with international firms. Among other positions he was the Deputy Director of the Health Service of the Basque Country (Spain) and leader of the Healthcare industry for EMEA with PricewaterhouseCoopers Consulting.

He is an Associated Professor in IT Engineering at the Open University of Catalonia and author of several books and research papers on IT Project Management, IT Strategy, e-Health and e-Government.

He holds a degree in Arts, an advanced program in Management at the IESE Business School and executive certificates at the Harvard Business School.

What is the current strategy of your city, as far as e-Government is concerned? How is the evolution on e-Government perceived from the city perspective?

I would say that our strategy, over the last four years, has been to move from a fairly strong offering of information services to a much more structured and strategic oriented implementation of more complex and sophisticated e-Services. Emphasis has been placed on the deployment of interactive and transactional services over the Internet. The aim was to accumulate a critical mass in terms of both offer and demand.

With respect to evolution, is this a process which should be understood only in terms of service implementation and deployment? Which other components could affect the evolution of the coming challenges?

The key point is the internalization of e-Government, both in the ordinary structure of the Municipal Administration and in the habits of relationship between the citizens and the government as well. It is all about adoption (that magic word).

The second issue is about organization. The key debate is about e-Government being government as usual. It affects very different issues, in particular legal dimensions. In this respect our major contribution over this mandate has been the approval of the e-Government ordinance. We have established a political commission on e-Government as a space to get the different departments involved in the deployment of e-Services.

The third issue is information systems and technology, and in that sense, providing e-Services that are helpful for people and for the government requires not only publishing nice photos or nice services on the portal, but also working on the basics, the foundations, quality and organization of the information, raw information, basic information,

evolving IT platforms, integrating the front-office with the back-office, leveraging legacy systems.

Last but not least, the fourth issue is about people. How to get people involved through information, training, and motivation is the most difficult issue.

What do you think would be the most appropriate description of the e-Government city model in Barcelona, understanding that the city has a very long and outstanding experience of combining political will and strategy and tactics in deploying e-Services?

I think the most important issue is this long history. It is not only about a political will, but also about stable political backing and support. We are talking about different responsible people coming in and out, albeit sharing a sustained and conscious effort on how to align IT as an driver to seriously reinforce attention to the citizens. It is a longstanding effort: political, executive, and technical.

The second important characteristic is that our strategy has been significantly demand-driven, and not so much supply-driven. We have introduced and implemented techniques and approaches to secure getting much more accurate information and feelings about what our citizens wanted and which services were required most, most appreciated.

We put our focus on providing people with services that they can use because they are needed in their real lives. The services with greatest demand are not those related to council life, but rather to city life, the life of the citizens.

We have positioned ourselves in a field which was traditionally the area of private information providers: enriched yellow pages, helpful city maps, the agenda of culture and leisure and things like that, and they were highly appreciated.

And what about e-Services?

When moving to e-Services the strategy has been quite similar: to provide, to focus our effort on mass services (like the population registry, payment of taxes or applications for public permits to do improvement work at home).

When we think about services that are helpful to people in their real lives, we also mean those that are of their interest in their 'virtual lives'. Consequently, we were involved in offering leisure and interactive services, virtual games, services with audio-video contents, photograph contents and things like that. The web as an extension of city life and city life as an extension of the website.

What tools are you using to provide process-wide leadership?

One issue was about securing government and leadership through strategic planning. I think this has been a change over this last period. We worked with different departments and with politicians and top management to design a strategic plan for IT and for e-Government. Not having separate things for e-Government, but embedding e-Government inside the overall city strategy. This gave us credibility, political support, financial backing and a viable roadmap.

Another key element has been passion or obsession for delivery and execution. It is not just about having a plan, but rather about having a team committed to this plan and the ability to get the different stakeholders engaged in the plan and eager to deliver.

Accelerating the way we develop and deliver services and improving the capacity to change or to create different pieces that relate one to each other has also been part of our approach. In that way we managed to take advantage of the strategy of re-engineering or innovating to create new kind of services, as in the case of OROM (the new system for the issue of structural work permits) or IRIS (the new system for posting incidences, claims and suggestions to the Council).

What is your understanding of the experience in Barcelona, with regard to the constituency-building phases and also with regard to those stakeholders who get involved at that time and their role and importance in each of the phases?

Again, it is all about leadership, both political and executive, and about having a tool for doing so. If as a Council you have your own strategy and strength, it is not so difficult to get people on board. If you have a strategy, if you have projects, if you have a leadership team, if you have a little bit of money, it is not very difficult to convince other people inside or outside the Council to commit to these projects. But you have to be able to show them the advantages, the benefits of participating...

A significantly stakeholders in e-Government are of course the politicians. We have not had to be particularly proactive in our case. As a matter of fact, we had sustained backing from the mayor and the vice-mayor from the outset, which also extended to all the City Council political instances.

Regarding tools, the importance of the content management tool must be mentioned. In such a big website like ours you must have a policy and a procedure on how to manage and govern the website, letting people have their own spaces and at the same time share certain ways of doing things. So, from a management standpoint, contents, the contents management process has been a key success factor.

The in-place relationships involving all internal stakeholders have been developed over the years, and have proved to be a key instrument in getting the commitment and engagement needed from different organisational instances in the Council. A significant milestone in this respect was the effort and the involvement of senior heads of many bodies in the preparation of the Council e-Government ordinance.

And what about the stakeholders outside the Council?

Another kind of stakeholders are determined by the relationships with the regional and national authorities. At regional level there is a very specific and positive situation in Catalonia, due to the existence of a consortium that put together the different layers of the public administration, basically the local and the regional administration instances, and in which the Barcelona City Council had played a significant leading role.

We are quite now happy about the role of the alignment of the consortium with our needs, and the way they have promoted technical platforms and political support. With the regional government, and even the national Spanish government, this has been quite important as well. So, at the end of the day, it is a win strategy.

Are there any other barriers that you can also remember that were important in the case of Barcelona?

As I have already said, the key word, the magic word for e-Government is adoption, both internal and external. The barriers to adoption are also the most important barriers. I mean, to my mind this is not a matter of technology. This is not even a matter of organization or legal issues. These are pre-requisites you need to put in place, but they will never be the reason for success or failure. These are necessary conditions, but not sufficient.

When you are in the deployment phase in the development of e-Government you are touching, you are entering the core of the business, the core of the organization. You are touching and maybe moving the tools, the resources, the balance of power and the flows of information in the organization. The fundamentals. Perhaps some years ago we were very rapid and active and innovative in the way we put things together when deploying services. Now the challenge is different. Speed is the important element that changes management, but in a quite complex way, sometimes producing alliances, sometimes properly isolating those who are against you or enabling you to deal with them in a creative way.

What about external adoption?

Here we also have the issue of frequency and intensity of usage, complemented by the fact that some people don't need to interact with the Council on a day-to-day basis. They come to us for a certain transaction or permit maybe once every two years or three. It is different for businesses or -in Southern Europe- for some kind of intermediaries (administrative accountants) that deal with the individual transactions of many citizens and business. These professionals need to interact with the Council on a very frequent basis, so they have a different type of needs. You need to understand and balance the type of effort you devote to acquire a certain type of demand, a certain type of population. You should not be obsessed with the Internet, at least not for people that usually do not require it.

Again, it is not a matter of technology. If I mentioned one only IT-related issue, it would be digital identification, as in most of Europe and in most European cities digital certificates are not so well-extended among the population. This could be a barrier to the dissemination and adoption of e-Services. It's a barrier that cities cannot overcome by themselves. You need to combine strategies with regional government, central government and other public instances.

So marketing and communications are key...

Governments are quite used to providing large institutional campaigns. In my opinion, the type of branding and communication of this type of services are much more, I would say... almost "guerrilla" marketing, one-to-one marketing, marketing for specific segments, the role of certain opinion leaders like professional associations. In fact, we are developing a strategy to acquire new users very similar to the strategy deployed by e-Banking some years ago.

What do you think are the most important assets that the city has generated so far? And what is still missing?

So far we've succeeded in developing solid foundations, in the way we manage and structure and publish and relate raw information about people, business, territory, in the strength of our geographical information systems, etc.

We have reasonably succeeded in terms of automation. Internally, 90% of council processes are now IT-driven or enabled, whilst more than 80% of processes with the citizen are also automated.

What are the missing links? To me, automation is one thing and innovation or re-engineering is a different thing altogether. We have succeeded in doing that in certain areas and in certain processes, but not in a massive way. The real transformation of the ordinary processes of government and the ordinary mindset of the organization, of public servants, is one part of the journey that we have yet to complete. The goal of e-Government shouldn't be to automate processes but rather to eliminate processes where possible, make things easier for the citizens. The best procedure is the one that no longer exists. In terms of functional areas to cover, we also need to complete the coverage of relationships with companies and entities, for instance in the area of e-Procurement.

We have also progressed in the area of e-Democracy and e-Participation, but we are still far behind many more advanced experiences in Europe. It should be a challenge for the next years, including the consideration and implementation of social enhancements such as the ones facilitated by technologies like Internet Web 2.0. In doing so we will provide tools for people, enabling them to create and share their own contents, create social communities, thus raising leverage and enhancing what I would call "the virtual life of the city".

If we really want to be the city web and not the Council web, we should be more active in that area, to say nothing of other good experiences like forums, chats, blogs or the like, where hitherto the council has been somewhat conservative.

Something on which you have not elaborated very much is the scale effect in Barcelona, where succeeding means millions of usage units. Could you tell us something about the killer services and the impact of multi-channel and multimodal dimensions?

Actually, managing this scale, both in terms of supply and demand, is really a major challenge for us. Over the last period we have been evolving our capacity of providing massive services to a massive audience. By way of example, in 2006 we had around 35 million visits to our galaxy of almost 150 websites. In terms of pages, or documents, that is more than 2 million documents. Moreover, we have tripled our demand compared to 2003.

With the information we have, the Barcelona website would be the most-visited one in a European city except for Berlin (a very interesting case based on a Public-Private Partnership strategy). We probably need to rethink about how to open up services and contents beyond the traditional scope of a City Council.

If you provide your users with services they require and love in their real (or virtual) lives this is a winning strategy. It's very interesting, when you have this whole mass of users, first there is a trend of concentration of these users in killer applications like the city map, the yellow pages or the leisure and cultural agenda. But at the same time, you make room for individual communities to grow or for new services with a very different approach.

I already mentioned the virtual games we provide. We could never imagine that people would enter the website of a local public administration to play, but last year four million visits were to our virtual games (if you go to the Berlin website the first application you find is snooker).

For e-Services it's quite similar, the services with greatest demand are those related again to the City map, for urban-planning purposes, such as the capacity to download the information of a specific plot of land on the City plan, or services that are particularly useful to urban professionals such as architects or engineers.

Being multi-channel is a hot topic now in Europe...

Over this mandate as yet we have not been able to make all our services multimodal or multi-channel. We provide almost everything through all the channels, but for the moment you cannot move from one channel to another easily, except for some recent experiences like the IRIS or OROM services, which were designed from scratch as multimodal services, and were hugely successful.

Another dimension is the multi-device perspective, as we have moved to Internet mobile, both through PDA or mobile phone (WAP portal), where we are providing our web-site's most popular services, which account for almost 80-85% of our demand.

Regarding the adoption of multi-channel and multimodal dimensions, I think it's a winning strategy, but you should be careful with the effort and investment you make, because in technical and financial terms it's a very expensive add-on.

How transferable you think that the experience of Barcelona is?

We have found two different cases. Many people come to us in order to get some kind of "know-how" or advice or "how did you do that". And we also identified some very small experiences where we realized that our approach to some of our products or services was being directly copied.

We are extremely open, even our ordinance on e-Government provides for and regulates the transferability of our applications to other cities.

In terms of barriers I think that the problem is that the management of all this transferability process is difficult and expensive. Even if you do your best to pull things through and so does another administration, things do not always happen easily. Why? Probably because the way we develop all administration and businesses, software applications do not provide for direct transfer to other environments.

Transferability is not easy and there are not many success stories in Europe. We are now working with our Regional Government and with the Consortium of the Open Administration of Catalonia in order to develop this type of process that allows for a more effective transfer of our experiences and the other way round, leveraging other applications and experiences from other cities.

What do you think are the key challenges for the coming years?

Telecommunication issues will become very hot: broadband to the home, particularly fibre to the home, Wi-Fi to cover the services provided by the council on the territory, but also for people to access the government or even to communicate among themselves or facilitate access to the Internet.

Another challenge is the convergence between telecommunications and information, such as the impact for the Council of the availability of voice over IP.

As I mentioned, we don't know what the effects of all the massive scale will be, not just for the Council, but everywhere. The challenges and requirements of the new massive high-scale users will be very important and we need to keep our mind and our ears open to all this.

Our users will be the same users of "You Tube" or "My Space" as examples, thus defining a baseline for the way we will have to provide services, serve our customers, interact with them, let them participate and in fact be part of our services.

Many cities have expressed their perception of many challenges or changes coming from other administrations at different levels: Regional, National, European...

I think that another significant issue will be cooperation. Not only cooperation, but the idea of one-stop shopping will be hot again.

It will be a kind of paradox for local administrations like Barcelona Council which, having developed their own very strong service offering, will also have to act as a horizontal portal to other administrations that were not well-known or close enough to the citizens.

Thinking from a strategic perspective, there is probably room for many opportunities of cooperation with Regional or central departments of National Governments, to say nothing of the European instances.

Is there anything else you would like to add?

Having described many benefits and strategic dimensions of deploying e-Government services it is probably important to emphasize the importance of the increase in Council efficiency.

When we speak about the extension and the adoption of these services, we should remember that providing services through the website is much cheaper and much more efficient than relying on offices and the telephone.

The efficiency driver is very important. This is not an ideological question, as in fact there are significantly important underlying financial and efficiency considerations.

When we speak about massive adoption, we mean that only massive adoption makes it possible to reduce operating cost and gather a viable return on the investments.

This is very important. It's about usage and obviously it is also about citizen satisfaction, but at the same time it is about sustainability and efficiency.

Last but not least, this should help to transform (through internal adoption) the way the government works internally and engages with the citizen, opening up space for the provision of new types of services that would not be possible without technologies.

This transformational issue is the most challenging and difficult dimension of e-Government at this moment in time.

BIRMINGHAM

Birmingham is a city with a population of approximately one million inhabitants living in an area of 268 km^2. It is the youngest demographic in a major European city with 23.4% of people aged under 16 and a significantly diverse city, with 30% non-white population.

Birmingham City Council manages an overall revenue expenditure of €4.3 billion per year, covering 174,000 pupils in 431 schools and 2,475 km of roads. The municipal organization is composed of 55,000 employees.

The IT infrastructure is composed of a WAN linking more than 1,000 locations with 18,000 desktops connected (excluding schools), supporting a traffic of nine million Internet emails plus 25 million Notes messages annually. The revenue expenditure in IT amounts to €70 million per year (excluding schools), securing the operations of over 300 application systems.

As far as e-Government is concerned, the UK national government established (1998) a target that, by the end of 2005, all interactions by the citizen with government would be available electronically. As one of a number of stretch targets agreed between central government and Birmingham City Council, the city agreed to achieve this target by March 2004.

The target was achieved on time–all services are available electronically on the council's website. However, in common with the majority of e-Government services in the UK, take-up of these services has been low; most citizens prefer traditional methods of contact.

During 2004, the council adopted a more radical approach to its use of technology, recognising that changed behaviour and the associated benefits would not flow automatically from simply making services available electronically. Services needed to be redesigned–taking into account people, process and technology. This approach came to be known as Business Transformation.

BUSINESS TRANSFORMATION

The council has clearly set as one of its main priorities the provision of an efficient and effective organisation, capable of delivering the improvements the city wants and needs. In order to achieve this it needed to create greater capacity within the organisation, more flexible resources capable of change and a way of embedding change throughout the authority. This ambition to fundamentally transform the organisation and create capacity is being achieved through our visionary and wide-ranging Business Transformation programme.

By late 2003 there was a growing recognition in the council that a radical programme of redesigning business practices was a feasible strategic approach. In addition, the timing was tactically appropriate; major IT contracts were due for renewal and soft market testing had revealed that companies were keen to position themselves as partners in business change, not simply technology suppliers. Workshops involving the corporate management team and senior members developed a clear vision of what was required from what came to be branded 'Business Transformation' – a win-win-win of more effective, more efficient services delivered by more empowered staff with greater job satisfaction.

In order to deliver the scale of change anticipated by the business transformation vision, it was clear that several building blocks needed to be put in place to maximise the chances of success.

First, additional resources would be required.

It was recognised that transformation was not simply a new approach to continuous improvement. It involved step changes in service effectiveness and efficiency and expecting business managers and staff to take responsibility for delivering this alongside their day job was totally unrealistic.

Second, business transformation would demand additional skills.

Transformational change requires abilities in process, organisational and cultural redesign which, again, it was unrealistic to expect operational business managers generally to possess. What was needed was an approach which allowed these skills to be available to the council, in support of transformational change, whilst retaining clear responsibility for realising that change with the relevant business managers.

Third, the council recognised that to be successful, transformational change requires a significant element of challenge.

What was needed was a long-term partner who would understand the operation and culture of the council but who would be prepared to question how and why services operate as they do, underpinned by an awareness of how things are done differently elsewhere.

e-Government in **BIRMINGHAM**

The search for a business transformation partner formally commenced in February 2004 with the publication of the OJEU notice. The model of the partnership to be established was left deliberately undefined at that point in the belief that this would be better developed through dialogue and negotiation.

The approach grew increasingly innovative as the procurement progressed, culminating in a negotiated best and final offers stage which allowed the council to gain an in-depth understanding of both bidders' partnership potential. This demonstrated its worth at the next stage, with just three months elapsing from preferred bidder decision to contract start.

Service Birmingham, the joint venture company established by the Council (32% ownership) and Capita (68% ownership) to support business transformation and to provide all ICT services, came into operation on 1 April 2006. The contract gives exclusivity for IT supply and support with a typical set of performance indicators and service credits. The contract for business transformation support differs entirely; the contract is non-exclusive and work will be given to Service Birmingham on the basis of individually approved business cases. Service Birmingham is believed to be the first major public-private partnership that is targeted at the radical redesign of how a local authority delivers its services, very much in line with the central government strategy: *Transformational Government: Enabled by Technology.*

Corporate Services Transformation (CST)

Birmingham City Council (BCC), which serves 1 million citizens and has 55,000 employees, is in the process of transforming a number of its services and the scope of this particular programme covers the Finance, Procurement and Business Management processes. The programme is using BCC's business transformation methodology to fundamentally modernise the business processes, systems and organisation design with a view to:

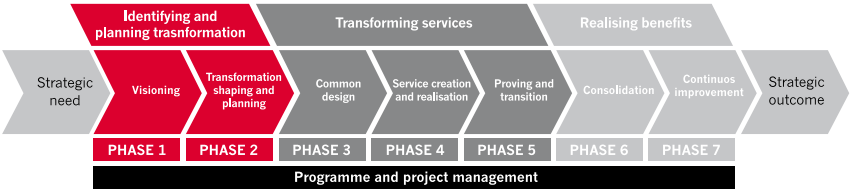
- Providing better services.
- Making more resources available for the provision of services to citizens.
- Improving the job satisfaction of the staff.

The programme will include the replacement of over 100 existing systems with a single application and will deliver over €1200 million worth of cashable and non- cashable benefits over its 10 year duration. The design deliverables are now being signed off and delivery of the new services will start in October 07.

GOVERNING TRANSFORMATIONAL CHANGE

Business Transformation is therefore the approach the council has adopted for achieving the objectives of step change, in both service quality and efficiency. Whilst business transformation projects will often utilise information systems and technology in order to support the achievement of these objectives, Business Transformation is primarily concerned with the redesign of how services are delivered – it has a business, not technology, focus – in order to meet the objectives defined in the Council Plan.

It was therefore critical that an appropriate governance structure was established. This would ensure that members would exercise control at crucial decision points, whilst avoiding delay to the realisation of benefits which would result from an unnecessarily time-consuming process.



EMBEDDING CHANGE

Whilst there are many examples of successful transformation projects across the public sector, there are few, if any, examples of organisations that have successfully embedded transformational change as a core component of the organisational culture. In recognition of this, the council's approach has included two components which are designed to firmly embed transformation in the council.

First, business transformation is underpinned at all levels of the programme by defining – and then delivering – measurable outcomes. This commences at the corporate level; the vision for business transformation establishes targets to be achieved within five years. Each programme then defines the outcomes it will achieve in line with these corporate targets. Similarly, each project defines the outcomes it will achieve in contributing to the programme to which it belongs.

Within five years, we will have:

- Customers saying they are satisfied or very satisfied with Birmingham City Council (BCC) services in the top 10% of all UK local authorities.
- Staff saying they are satisfied or very satisfied with working for BCC in the top 10% of all UK local authorities.
- The number of queries/requests that are resolved or actioned at first point of contact in the top 10% of all UK local authorities.
- The Council will achieve a 4-star CPA rating.
- To have achieved a 15% productivity gain compared to the 2004 baseline.
- 100% of service requests and service tracking available on a personalised basis through the customer's choice of channel.
- 75% of all service KPI's in top 10% of UK local authorities.

Second, it was recognised early in the development of the business transformation thinking within the council that, whilst there were sound approaches to project and programme management readily available (PRINCE2 and MSP), there was no equivalent for change management. To rectify this, the council and Service Birmingham have jointly produced a common approach to change management which will be utilised across all transformation projects.

It comprises seven phases (from initial 'visioning' through to transition into continuous improvement state), with each phase having a number of stages and each stage consisting of defined activities. This methodology will be made freely available later this year for others to adopt.

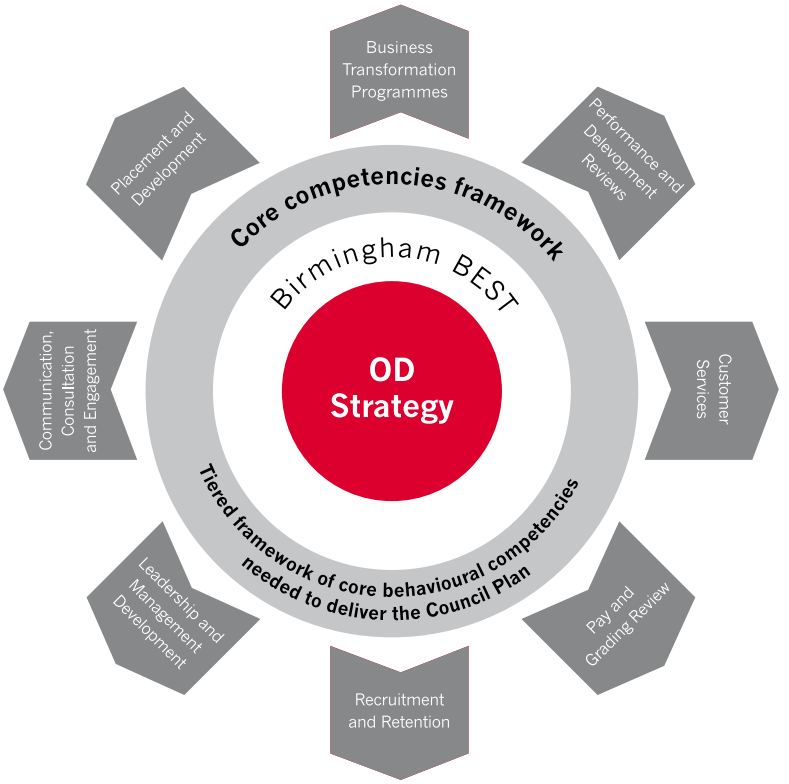
EXCELLENCE IN PEOPLE MANAGEMENT

Having clearly understood that changing processes and introducing a modern ICT infrastructure won't deliver change on its own and in parallel with the programme of Business Transformation, Birmingham City Council defined and initiated a programme of organisational development composed of a range of HR initiatives designed to achieve cultural and organisational change.

The BEST programme has enabled the organisation to introduce a set of clearly defined organisation values and expected behaviours:

- Belief that we can deliver;
- Aspiring to Excellence;
- Pursuing Success;
- and Trust in each other (BEST).

BEST is designed to empower teams to take responsibility for achieving outcomes, to collaborate more effectively across the council and with partners and to support Council Plan objectives by identifying and delivering improvements in services and ways of working. BEST reaches everyone from those leading the organisation to those on that service frontline. It is they that will ultimately transform indifferent or average service into excellence service.



WHERE ARE WE NOW?

Nine Business Transformation boards were established in May 2006. Five programme plans have now been agreed by Cabinet, establishing programme outcomes and budgets for Adults Services, Customer First, Property, Excellence in People Management, and Efficiency; the total allocated budget for these programmes is approximately €350 million.

The first full business case – Corporate Services – was agreed in July 2006. This efficiency project will address procurement, financial management and resource and performance management across the council. At the next iteration of the change methodology we will make it freely available in the public domain for other organisations to utilise should they wish.
As an example of the outcomes that Business Transformation will deliver, the Corporate Services transformation (within the Efficiency programme) will deliver €1176 million of benefits (of which €629 million cashable) over the next ten years for a total investment of €209 million.

The benefits result from a combination of:

- More effective external spend with suppliers;
- Increased efficiency in financial transaction processing;
- One-off savings in cash flow through improved debtor management;
- Improved decision-making through the availability of management information.

A 'BEST' diagnostic tool has been developed to enable assessment by every team in the authority against the values and enable identification of how they can improve, the rollout of this is just beginning. Core competencies are being developed for different job levels and a voluntary management assessment centre will allow individuals to identify development needs and ways to meet them.

Customer First

The Customer First programme will transform the quality of services to customers by ensuring that Birmingham City Council delivers streamlined services that meet: the customers' need; right first time; as far as possible personalised to the individual customer's preferences and making it much easier for citizens, visitors, businesses, and partners to access and gain benefit from them.

Birmingham City Council currently manages 5.1 million contacts annually via 400 different telephone numbers, 11 postal addresses and 45 different websites. The new future operating model for customer services envisages a significant rationalization of the above and the creation of a graded response service dependent of the nature of the contact being made.

The future operating model has now been agreed and the business case is being reviewed. The next stage will be to conduct the detailed design of the new services.

GLYN EVANS

CIO Birmingham city council

Having 27 years experience of local authority IT support, in November 2003 Glyn Evans was appointed as director of Business solutions & IT with Birmingham City Council with the remit to drive forward a business transformation programme across the institution.

He has led the development of the Council's approach to transformational change and in the creation of a joint venture company with Capita to support the change programme.

He has recently taken on the role of assistant to the Chief Executive on Transformation to ensure business transformation is adopted, embedded and implemented across de Council.

Glyn chairs the Society of IT Management's Information Age Group (SIAG) and is a member of the CIO Birmingham City Council, an advisory body established by the Cabinet Office's e-Government Unit.

What is the current strategy of your city as far the e-Government is concerned?

I think we are quite unusual in the UK, with our approach being an organisation-wide change programme. We call it Business Transformation in the city. In essence what we are trying is to redesign the way we provide services to the citizens.

It is not just an IT issue – we look at people, process and technology - and it is not really business process improvement. It is a service redesign model. It's a business change initiative using a change management methodology, in order to improve our service delivery.

So, we have an approach which sits alongside an organisation development initiative, about trying to rebuild the organisation. Our organisation development initiative is called BEST, which emphasizes our belief in ourselves, excellence in our services underpinned by celebrating success and founded on trust, which are the key values which we try to build into the organisation. So, those two aspects, the organisation development and the business transformation are ways by which we are trying to change how the council operates. There is nothing else.

The radical change programme is being delivered by business transformation. First and foremost, it is an outcome-based approach, so that we develop for every programme, and then for every project a series of outcomes that we are trying to achieve. Those outcomes fall into three categories: there are outcomes as far as the customer is concerned; there are outcomes around improving the efficiency of the Council and there are outcomes for the people delivering services, for our employees.

Each project is meant to have outcomes in all three areas, so again certainly for the UK that is quite an unusual approach, particularly the focus on employees; nationally, the agenda in the UK is very much focused around efficiency.

Having said that, we will be doing things more efficiently. It means that we will have fewer staff in the future, so we are not suggesting that we will have the exact number of jobs or people will be doing the same things in the future, because that won't be true.

How has this evolution on this government been perceived from the city perspective, how is your city reacting to the kind of changes and strategies that you are following?

Not everyone is enthusiastically in favour of this. There is a whole range of opinion. There are some people who want to do this, see the benefit of it. There are some people who take the opposite view. There are some people here that say that we are delivering good services, why do we have to change? The key message that we are putting out is that we actually can't stay as we are, simply because we don't have the money to stay as we are. So we can't carry on delivering services as we have always run them. We have to make that change. In that case, you may as well redesign services and create better jobs at the same time.

Could you briefly describe your development city mode?

There are various ways of answering that question, I think. First of all, it is very much about making sure that we don't see just the technology issue, that our city model is about business change. That means fundamental business change, a quite radical business change. Secondly, it's a model which demands business cases, before projects can proceed. So it does not make the assumption that e-Government is automatically a good thing. You have to have a strong business case before you have approval to proceed.

I think the third aspect of our model is that we have links to the heart of organisations governance structure, involving the senior politicians and the senior managers of the Council.

It is a long way from the UK traditional way of doing things. This will radically impact on the business, including an approach which sees us redesigning processes, organizational structures, alongside technology. For me it is fundamentally about bringing together that process issue and those organizational structure issues if you really want to get benefits out of the exercise.

What do you think have been the key constituency-building phases for the existing City e-Government in Birmingham?

Working with the senior managers and the politicians to develop the business transformation vision has been key for our success. Even if it is at a high level, people feel comfortable with what we try to achieve. They can see the benefits of what we try to achieve at that very high level.

We can demonstrate that we are taking steps in order to realize that vision, so I think that leadership has been crucial, establishing the objectives of what we try to do here.

The second crucial phase was recognizing that if you are going to do this scale of change, then you will not be able to do it with just your internal resources. So actually getting some support into it, support in terms of capacity and all sorts of skills was also crucially important. The third thing which I think is contributing to our success is the support of the governance structure, which I already mentioned.

Who do you think were the key stakeholders that enabled the business transformation process that you have described so far?

I think that in terms of individual projects, it is very important that as we take a transformational project forward all the stakeholders are engaged in that process.

We engage customers; we engage employees; we engage partner-organisations.

I noticed that you refer to citizens as customers. I don't think it's by accident, is it?

No, it's not an accident. We are very strong on referring to driving customers' satisfaction with our service and that's the key element of what we are trying to do here.

It's not as simple as in the private sector, because lots of our customers don't have a choice about what they are getting from us and we don't have a choice of our customers. So, it can be very simplistic parachuting private sector concepts into the public sector. You have to be careful and analyse a particular case and context when dealing with terms like customer satisfaction.

I think the public perspective is also affected by other issues like regulatory aspects. Let us take as an example an area like child protection. It you take a child away from his parents, all these issues of customer satisfaction become very difficult to cope with, because

probably the child doesn't want to leave the parents and the parents don't want to let the child go. So it isn't simple. I think that in all sorts of situations you can do it in a way which improves satisfaction, improves transparency and secure accountability.

Which, in your opinion, were the main barriers that you encountered along the process?

I think there is a culture of conservatism in the public sector; we are "risk averse" and see change as a risky process. It was a challenge. We had a change of political administration right in the middle of the process and that was really a significant challenge. I think we still have to deal with one of our biggest challenges which is how you engage with managers across the Council because all managers get too much information and it is in the nature of these things that people tend to misunderstand what sort of information they get. In fact, we are about to start another major communication exercise to engage with managers in the course of the next few weeks.

The process you follow, with this particular barrier, is it something which you think is specific for your particular case or are there any dimensions which could be applied somewhere else from a generic nature?

Generic. I think communication is always going to be an issue. It's different from city to city, from culture to culture. We have quite a federal system where we've got powerful politicians heading up services. And therefore, getting messages out across the organisation is particularly difficult for us, because there isn't a sort of central point where they can get it from.

A lot of issues here will be the same in any other major city. We have something like 2,000 middle managers. It would be nice if we could get them to come along to workshops and talk to them and spend a couple of days with them, but you can't do it when there are 2,000 of them.

We are producing some DVDs of what the future looks like and the process we are following. We have a poster campaign just starting in the Council. I think we didn't put enough resources into it in the first place.

What, from your point of view, are the best benefits of heading this e-Government City Model in Birmingham in place? What about the risks of not having it?

I think the real benefit is that I don't see an alternative. I honestly don't see how we would change the organisation in another way.

I think the risks of not having such a model would be that we would never achieve the changes that we need to materialize. We cannot carry on as we are. The funding that we receive through taxes and government grants is getting reduced, so we have to do something. We can't carry on in the way we've traditionally done. Setting aside that, the pressures that we have right across Europe are from an aging population, so there are more calls for our services from the 'elderly' in particular. We have to be able to deliver more service for less money, so the key driver is around that. Anyone would be able to deliver less service for less money. But actually to be able to deliver more service for less money means that you have to really radically rethink about how you will deliver service.

So the approach we are following is that we have to redesign our services and if we have to redesign our services, we won't be using technology as the only component of doing that. And you get back to the thinking of business transformation quite quickly.

There's still a risk. I think it's a diminishing risk, that it's just being seen as a technology initiative and not as a systemic initiative. I think certainly that in the early days it was seen as a technology initiative, but I think we will have overcome that in the course of 12 or 18 months, so to be seen by then as something where the technology is contributing, but it is not the real driver.

What do you think are the most important assets that have been created so far?

Honestly, the most important asset that we've developed so far is our business transformation methodology, which is our change management approach. Are you familiar with Prince2 in the UK? This is the project management methodology that we use together with a programme management methodology called MSP (Management Successful Programs) which we use in the Council. These are good and we've adopted them but neither really provide models of change management. That's what our transformation methodology does. The purpose of putting in place these methodologies was to adopt good practice, making sure that you deliver the benefits at the end of the day that you said you'll deliver.

So those are the sort of drivers for our business change approach, which we will be working within the next few months. The whole process will actually be put into the public domain. The fact, however, is that we are still in the process, that we have not delivered yet a full business transformation project, so there's still some way to go with that.

If I understood well, you think that it could be transferable to other public instances?

Yes... I think it will. Even outside the UK.

Could you describe what you think the killer services are, the most used services from your experience in your city?

The focus we have at the moment is around our key political priorities which are in four areas. The first one was children, a focus of central Government initiative in the UK making sure that every child gets everything they deserve out of life. The second area we approach is around social care for adults, addressed to people with disabilities, people with learning difficulties, and older people in need of support. The third priority is social housing, due to the fact that as a city we still directly provide housing. The fourth area is around the environment, clean streets, and the increasing green and safe environment in which people want to live.

In order to be able to deliver our outcomes we also had to find some money and therefore our initial focus was the back-office. That is in fact our most advanced program, transforming the way we do finance, the way we do procurement, because that would release a lot of funding. We are just about moving to the implement phase. That's next month, so that is when things will get really interesting.

What are your missing components?

We have recently addressed our 'customer first programme' which is about how we deal with the front-office, with that interface, because people will still come to our offices to get face-to-face service. All this work – it's crucial we get it all working together. We call that exercise 'Journey Management', so managing the whole transformational journey if you like.

The first thing is, and we still need to address this now, is getting the trade unions involved in our process. There has been quite a lot of disinterest. But they are now beginning to realise that they do need to get involved with this.

So, this is linked to a question that we were asking before, which is about stakeholders. So trade unions are...

Yes. Trade unions are stakeholders. Like every other organisation we have a lot of initiatives and they thought that this was just another initiative. Now they begin to realise that it is important for them as well.

What are in your case the dependencies between your city model and the need for multichannel and multimodality?

We are playing definitely with multichannel strategy anyway. Partly because of the community we serve, who is very diverse. But partly because we also have as a political imperative here to devolve power to our districts. I actually see realising savings as a difficulty. A lot of the costs in operating channels derive as a fixed cost and therefore you can't realise savings anymore.

I agree that economically it's not easy to justify the need and the reason for justification for having to have all the channels up and running.

We are going to be stricter in the internal use of electronic channel. We can probably also enforce use of such channels by our business community. I think we'll be able to do things like add value, by moving to each channel which we can not do at the moment.

What do you think the key challenges are for the coming years?

This year is probably the crucial year. This year is when we need to have a lot of faith; there are not many benefits coming through yet.

By the time we get to the end, in 12 months from now, we'll have lots of benefits in place. People will be able to see that it was worth it. But it will take those 12 months to do that.

Yes, we have benefits coming along through then, but a lot of this year coming in is going to be quite challenging, I think, because we've going to have to get politicians in particular to keep the faith.

A challenge is for the politicians not to expect miracles. Going back to the introduction, this is a journey. We are not going to get this sorted next week.

MUNICH

Munich is the capital of the Free State of Bavaria. With 1.3 million inhabitants and a growing population it is Germany's third largest city. The metropolitan area accounts for 2.6 million inhabitants and is Germany's second-largest employment centre after Berlin.

The economic region holds a diversified economic structure based on 80,000 companies with a 920,000 strong workforce within the city limits. The main manufacturing clusters are mechanical engineering and automotive companies, electronic and IT businesses, biotechnology research companies and the aerospace industry, with the headquarters of the European Galileo project.

As far as the services domain is concerned, the media sector is very strong, as is the finance and insurance cluster, and last but not least is the medical cluster. In 2004, the gross domestic product totalled about €68 billion. The present economic trends are particularly positive in Munich: a most vital new-start scene with a relatively high net rate of new businesses, many of them being University spin-offs in cutting edge branches.

Munich's 5.6 percent share of the labour force gives it the lowest unemployment rate of all the large German cities, and it is considerably lower than the German average. In a few words, Munich is a leading business location in Germany.

FRAMEWORK FOR THE MUNICH E-GOVERNMENT GUIDELINES

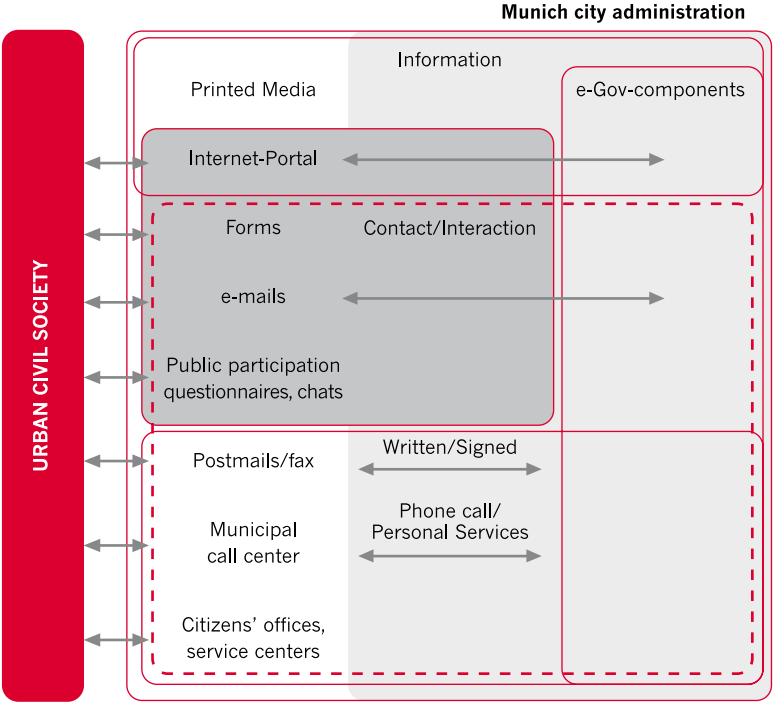
The city council and the administration are well aware of the fact that a high performance of municipal IT services and even more e-Government services is important to the future competitiveness and urban quality of the location Munich.

Thus, the city council approved a small number of guidelines to foster the New Media and IT in Munich. Also set up was the framework for municipal e-Government initiative, comprised of a number of strategic undertakings:

- A comprehensive delivery of information, guaranteeing public access to e-information for all.
- The aim of upgrading the media skills of all groups of citizens.
- Fostering the media business sector while developing e-Government.
- Managing comprehensive municipal tasks by using the New Media tools.

On the basis of these guidelines, e-Government tools are interwoven tightly between the communication structure of the city and the whole civil society of Munich, as is shown below.

The Munich Government Comunication Structure



Within the communication structure, e-Government tools are becoming increasingly more important. Some 29,000 municipal employees are equipped with 14,000 PCs and 18,000 PCs and laptops are currently installed in the municipal schools. A total of 26,000 computers in schools is planned for the coming years. The city is therefore an important actor in the urban information society.

Moreover, it should be noticed that the largest share of municipal e-Investments and manpower is presently being covered by the comprehensive migration of the city's operating system into the open source environment.

Besides the overall aim of supporting the modernisation of the city management, other objectives pursued include greater transparency of the administration for the public, particularly citizens and businesses, plus a constant processing of higher e-service quality and easier access to information.

Specific aims for the administration staff are to make working processes more efficient and cost-saving, and to implement new forms of working by using the possibilities of e-working, thus leading to more intensive internal communication. More specifically, in order to facilitate the daily work of municipal politicians, more efficient information tools for them are sought, as well as more transparent communication between politicians and staff.

THE WAY TO SUCCESSFUL E-GOVERNMENT

High-ranking political backing is a decisive precondition for a successful e-Government implementation process. In Munich, it is the Mayor himself who, together with his personal office, is spearheading the use of new e-Government tools.

Strategic development and implementation are centralised in the division "IT Strategy" within the Managerial Board of the city. The division aims to keep all municipal employees permanently informed and implements considerable networking activities in order to motivate them to use the new tools.

One precondition for a successful motivation is to show the obvious increase in efficiency achieved by e-Government processes as early as possible. Another precondition for an efficient implementation process is to foster the integrated strategic thinking of personnel in favour of bundling and tightening up service processes by e-Government tools.

e-Government in MUNICH

Surveys and direct contacts concerning the needs of the Munich business community should help the administration to apply e-Government more efficiently for company use. Several surveys since 2003 have validated Munich's experiences in implementing e-Government. Moreover, the needs of the business community e.g. for an optimised use of the Munich e-Portal services, are taken into account together with the Chamber of Commerce and important local companies.

Apart from the manifold information offers on the web, the city also implements public information campaigns to motivate citizens and companies to use all other e-Government services, from interactive tools up to fully automated service processes, more intensively.

Optional registration plates for cars or motorbikes

Within its framework of e-Government services, the Municipality of Munich has made the optional registration of plates for cars or motor-bikes available to citizens. By doing so, Munich was among the first municipalities in Germany to offer this service in vehicle registration.

Clients may fill in a form on the Internet, entering their preferred combination of letters and sequence of numbers for registration plates. They will get an immediate answer as to whether the preferred registration number is still available. If numbers are replaced by question marks the Internet user may then select between what is still available as combination of letters or numbers. Reservations of vehicle registrations are made instantly, as clients have direct access to the database.

Last year, the federal association Informationswirtschaft Telekommunikation und neue Medien e.V. (BITKOM) studied the service of optional registration plates provided by the 15 biggest cities in Germany. The cities Cologne, Frankfurt and Munich came out first as far as user-friendliness is concerned. Along these lines, the City of Munich was especially credited for its optional longer-term reservation service which gives citizens up to 30 days to collect their license plates.

MAIN E-GOVERNMENT TOOLS IN MUNICH

The City Internet portal www.muenchen.de is Munich's primary e-Government tool, delivering and transacting services such as forms, e-Mail contacts, questionnaires, online registrations and chat lines. Other services such as automatic SMS-information are offered e.g. about public transport timetables and traffic congestion.

At the moment, a growing number of interactive citizen services (g2c) are offered via online forms, including the possibility to order favourite number plates, documents from the registry office, municipal waste containers and bulky waste collection, as well as the registration of dog licences. Where needed, online payment is made available via direct debit.

In the field of government to business (g2b), the most used services are transactional applications via online registration forms for new car licenses (particularly BMW cars manufactured in Munich) and services from the local register of residents.

Government to government (g2g) services consist of numerous data-exchange systems with different authorities, e.g. with the federal office for taxes and other regional authorities dealing with the registration of residents.

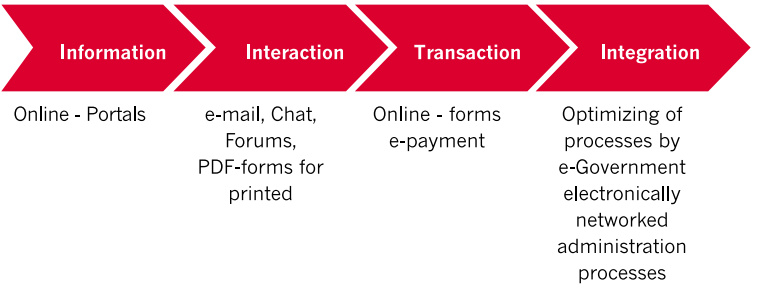
Within the municipality, and apart from business applications, other widespread e-Government components for council staff are Internet and Intranet-access, e-mail, e-calendar and a growing number of internal wikis.

The children's interactive portal POMKI (www.pomki.de) is developed and maintained by the city as a non-commercial offer in which children participate and build up networks. Naturally, public access terminals are frequented in all municipal libraries, while it was found that Internet kiosks already installed over the last decade were being underused by the Munich population and have thus been dismantled in recent years.

E-GOVERNMENT PRIORITIES AND FURTHER CHALLENGES

The following graph demonstrates the expansion stages of e-Government tools in Munich.

e-Government in Munich - Expansion Stages



The main focus of e-Government in Munich is still on information and interaction, the highest priority for citizens is the field of information and for businesses it is the field of communication.

There is a continued extension of transactional services, personal services such as investigation of personal data, ordering licenses and municipal job offers, are especially frequented.

A recent citizens' survey proved the Internet to be the favoured medium of citizens aged 18-40 years. There is a considerable demand to make all payments to the city electronically, therefore the city is eager to extend online bank services.

On the way to a fully comprehensive integrated e-Government administration in Munich, motivating staff to use the new technologies more actively and encouraging them by delivering suitable tools for a modernisation of administrative processes by e-Government is decisive. Nevertheless, insufficient interoperability and technical standardisation are still obstacles. To achieve greater cost savings in the future, a higher investment in software and experts is called for, at least in the first phase, when installing e-Government processes.

Optimizing municipal permits: fibre optic deployment case

How municipal permit procedures can be optimised by e-Government was demonstrated by the Municipality of Munich on extending the network of fibre optic cables. In the process of this extension, 1,100 km of fibre optic cable had to be laid and over 3,300 cable distribution boxes with separate power connection had to be set up. This measure required the granting of permits which had to be processed in addition to the normal workload (circa 10,000 excavation works a year).

By optimising office processes in combination with the effective use of IT technology, the main division for Road and Canal Construction of the Munich Construction Department succeeded in accelerating the required testing and permit proceedings by a factor of 4. By using a web front-end, all offices of the municipality and the different companies involved in this measure were able to use the same database. Access and functionalities were controlled by a model of roles and rights.

For each box location, a digital project file was set up indicating applications, approval notices, testing results and archive documentations. The workflow was fed into the system. This was the only way to ensure that apart from the normal workload, and without additional staff, some 7,000 additional building applications could be examined and thus 1,110 km of fibre optic cables were laid in Munich between April and December 2006, including the setting up of circa 3,300 cable distribution boxes. Munich was the only one of the three German capitals to achieve a 90% extension rate of its network of fibre optic cables by mid-December 2006.

The main division of Road and Canal Construction is now working on the vi@Bau project, an application covering a much larger area than the aforementioned procedure. The aim of vi@Bau is the general management of all planning procedures in public space, which means not just excavation works, but even the organisation of public events, setting up containers and so forth.

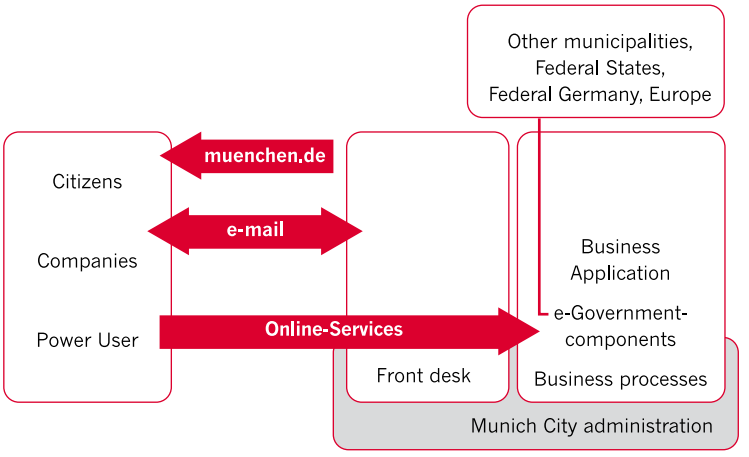
e-Government in MUNICH

For Munich, some of the most important initiatives towards better interoperability are XML, OSCI and SAGA:

- Governments and Municipalities have agreed to their first joint XML standards. One example is XMeld, which permits total data exchange between registration offices in the Federal States.
- The OSCI standard (Online Services Computer Interface) has been adopted as the nation-wide public agency standard for secure and signed transactions.
- The Federal Government, State Governments and Municipalities have drafted and are using a joint e-Government architecture model called SAGA.

With a view to enhancing interoperability, the City of Munich especially hopes to ease the integration of new open source components. The following graph demonstrates the final integration stage of the Munich e-Government structure.

On the Way to an integrated e-Government System – Processes and Clients



NEXT STEPS

Basically, the municipal form server will be extended. For the time being, the city has decided to operate further on a form server with highly advanced encryption and hash value based, i.e. the data is transmitted electronically.

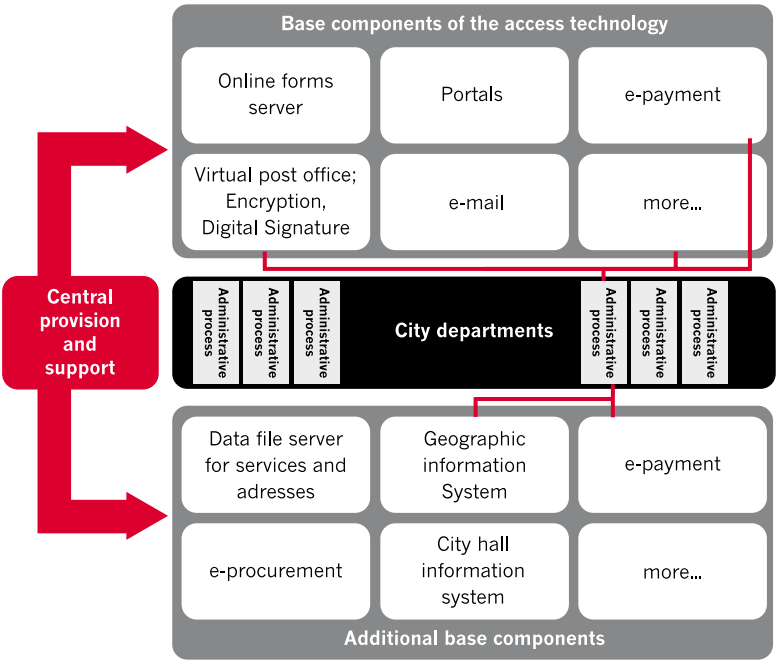
If required by law, a written signature is posted additionally. In the near future no general breakthrough of qualified electronic signatures is expected that would allow easier direct transactions without any media interference.

The city is currently building up its document management system and installing a city-wide e-payment platform. At the moment, pilot projects for the e-participation of district planning projects like schools and kindergartens are running to accumulate more experience for an extended e-participation by citizens.

Automated e-Procurement is now on the way, particularly for businesses and power users. A portal is being addressed for council staff to serve personalised information, with an integrated e-calendar and e-logging of working hours.

The following graph summarises the existing and piloted e-Government tools of the City of Munich.

The Extended Munich e-Government System



Also in the future, the overall aim of the e-Government strategy of the City of Munich is to offer a comprehensive mix of e-services to promote an all-inclusive civil society for the city, for all citizens, businesses, institutions and guests of the city.

DR. HANNELORE SCHNELL

Coordinator of the e-Government programme of the city of Munich

Dr. Hannelore Schnell has been in charge of coordinating the e-Government programme of the City of Munich since 2006. Born in Munich in 1953, she studied biology, followed by her degree dissertation and PhD in biology at the Institute of Physiological Chemistry of the Ludwig-Maximilians-University in Munich.

She worked in adult education and held the post of editor of the German environment magazine Natur for seven years.

Since 1991 she has been working for the Municipality of the City of Munich, starting as head of the "Public Relations and Media" section of the municipal Waste Management Corporation. In 1998 she was appointed head of the "Administrative Reform" division of the Office of the Lord Mayor. Since 2001, Dr. Hannelore Schnell has been supervising management projects within the framework of the citywide IT strategy.

What is the current strategy of your city as far as e-Government is concerned?

The City of Munich bases its e-Government activities on the principle of the following elements: information, communication, transaction and integration cycles.

The aim is to reach the next level with the lowest effort and the highest possible benefit for the public, the economy or the municipality.

The City of Munich provides an extensive range of information on its Internet pages.

All the departments and offices are represented there with their own contents, coordinated by structure, layout and navigation and in line with the city's corporate identity.

Apart from the common form of communication (personally, in writing, by phone) all offices are accessible by e-mail.

Within the framework of "interactive" communication, the city had initially intended to provide more PDF-forms for printout, as the offices are interested in making their current paper-forms electronically available in the future.

The idea is to provide space for further interaction with the citizens, providing a forum where discussions can be held and questions can be asked concerning the aspects of everyday city-life. However, the scope is meant to remain manageable as these services have to be adequately guided.

As far as "transactional" services are concerned, a further line of services is due to be offered on-line in the near future. This is basically meant to close the gap between paper-based communication and the electronic use of data.

Within this dimension there are also intentions to implement an electronic payment system as a basic component for all e-Government processes requiring payment.

Within the dimension 'integration', the aim is that finally the whole process associated to e-Government services could be technically supported in a way which allows automatic interoperability. Thus, support by additional human resources will no longer be required.

How is the evolution of e-Government perceived from your city's perspective?

The development of e-Government in Munich is influenced by two major concepts, the general urban development concept and the IT strategy.

The urban development concept, called 'PERSPEKTIVE MÜNCHEN' is mainly promoting e-Government from the standpoint of meeting the needs of society and urban planning, and other additional features. The IT Strategy is the major guideline for the use of information technology to enable the support of the most productive parts of the municipality's activities.

Could you briefly describe your e-Government City Model?

The current plans and ideas on the subject of e-Government were recently combined in a single concept.

Through it, previous and current activities related to this subject were aligned under this specific approach. The focus was then put on how to reach stage 4 (integration) with a sufficient degree for many services. An effective related administrative coordination will allow projects to be ready for a decision by the City Council within one year.

Could you explain the key development phases for the existing e-Government City model?

From the very outset, the department of the Mayor of Munich (the 'Managerial Board') has worked in close contact with the other departments involved, considering all technical aspects of the services on offer and their current stages of implementation.

One might call it guiding and coordinating control in one.

The Managerial Board also decided to bring together other key-players for example of business, IT-science and IT-industry. In this respect a specific unit was set up for the development of solutions and coordinating the further steps of implementing the project. Since the digital city council can only be accomplished on a step-by-step basis, the City of Munich makes a point of supporting mainly processes with the greatest benefits and effects for the communication partners (citizens, industry, other municipal bodies), as well as for the City of Munich itself.

Could you elaborate on the stakeholders' structure needed in your city to better enable the deployment of the e-Government City Model?

At first sight, it might have been easier if one key office had given strict orders to all other departments concerning the introduction of e-Government. Nevertheless, the Managerial Board, as the central controlling unit, decided to involve all departments in the development of the solutions and aims to be achieved. This is the only way to ensure that all the participants involved will fulfil their role as agreed to within the whole system.

Which were the main barriers encountered in the process? How are they connected with the different phases of the process?

The development of e-Government at all levels also depends on the available manpower resources the municipality can put in. All activities in the field of e-Government must be implemented in addition to other city-wide projects. One of the most difficult problems to overcome is the availability of qualified staff in the relevant positions of the municipality at the time required. As a consequence, and to secure the information service on the Internet pages, the city council released additional funds to recruit more staff.

Much more demanding are the activities on the 'transaction' and 'integration' levels. These processes must not be implemented one by one, but rather optimised at the same time. The greatest challenge here is to accomplish well-organised front and back offices to manage online delivery questions without service interruption.

What are the greatest benefits of having an e-Government City Model from your point of view?

It is important to start the necessary phases in developing e-Government systematically with a well-structured plan, showing correlations, interdependencies and synergies.

Then, if problems arise you can react more efficiently than having to base your decisions on a narrower structure. For example, if you can identify the parts of the project in trouble you can rearrange them

without endangering the whole exercise. It helps to identify and distinguish the parts of the project which should be dealt with first, or those which can be postponed, without getting mixed up or disrupting other operational activities.

What would be the risks of not having it?

The biggest risk is that without a concept at different locations in the municipality, uncoordinated activities may lead to a situation where important topics are not covered at all, or treated by several departments simultaneously.

Neither is it good if resources cannot be planned and allocated in time for the right purpose, so that there will be no results and the motivation and the support of the many participating actors will be lost.

What do you consider are the main e-Government assets that the city has generated until now?

First of all, there is the main advantage of the perception that Munich, being an advanced local government in Germany, is actively involved in the implementation of e-Government.

Munich is an outstanding metropolis with a reputation as an important business and scientific location in southern Germany, as well as a former Olympic city and top tourist destination. And that kind of city is generally expected to provide interactive information on the Internet on all important matters.

In this context it is important to emphasise the involvement of other partners. Apart from the municipality, the Munich public utilities company, a limited liability company supplying energy, water and local transport, the local chambers of commerce and the city savings bank, are involved. Thus, by entering the virtual portal, Munich's entire community and business space is opened up, and not just the website of the Municipality of Munich.

It is also very significant that the municipality may be contacted by e-mail. For all private individuals living in the city, or those economically active in the Greater Munich area, several service offers are available depending on personal circumstances, which may now be handled via the digital city council.

Several areas have already been identified showing a growing amount of Internet requests, which in turn has led to fewer visits by the public. The course of first applications was showing that the exchange of activity-related structured data between administrative bodies (please note Germany's federal structures) holds a certain potential. However,

this requires the set-up of specific prerequisites to be observed by all the parties involved (particularly consistent technology standards which need to be maintained by the providers operating on the market as well).

Could you describe the 'killer' services from your city experience?

Successful offers certainly include the following features:

- Registering a change of residence.
  Forms to register a change of residence are provided, but they cannot be e-mailed online for the moment because of the personal signature required.

- Preferred car registration plates.
  Preferred car registration plates may be reserved online.

- Passport matters.
  Applicants may inquire about the stage of processing of their passport applications.

- Job advertisements.
  Situations vacant in the municipality which are also to be advertised for the public are published on the Internet.

- The City Council Information System.
  It supports the work of the honorary city council; offering comprehensive searching services regarding papers on council sessions, motions and motion documents, managing the schedules and agendas of council sessions.

- The "Pomki" Children's portal.
  The interactive portal POMKI was especially developed for children as a non-commercial offer in which children can participate and build up social networks.

What components are still missing?

The supply in the interactive dimension should be further increased. This means that users of more specialised services should be able to find forms on the internet that they can fill in on their PC in their entirety.

The e-participation services (forums and chats) should be developed through pilot projects for a higher political participation of the population. In this regard the new media offer new opportunities. A major effort should be made to supply services that can be offered in a fully automated way. The municipality has to prepare itself, mostly internally, by defining, optimising and digitising processes.

Applications ensuring secure authentication and online-signing communication are not yet very common in the population. But we still assume that these aspects will be gaining ground in the future, mainly in b2g-contacts. Developments at Federal State level may provide an impetus, particularly with regard to the future personal identity card which will include an integrated authentication function and the electronic signature as an option.

What is the relationship and dependencies between your City Model and the need for a multi-channel strategy?

As already mentioned, apart from electronic communication, the other ways of communication must remain open to citizens and companies. It is essential to join these different access-ways into an integrated work process within the municipality.

We understand that having an explicit e-Government City Model generates benefits when deploying some specific projects.

Could you give us some examples?

Even though the formal overall e-Government concept is still in process, the current activities are based on conceptual ideas which are documented in the IT strategy or in specific decisions by the city council.

Anyway, the central management unit always made sure that e-Government activities, even of decentralised units, are lining up on these conceptual ideas.

To demonstrate that the public should realise that we are presenting, on the muenchen.de website, not only the municipality with information articles, topics and offers, but we are also presenting, together with the other partners of the Munich portal, the full range of functions and the economic sphere of the city.

To what degree do you think that your city experience is transferable?

There is no doubt that a number of conditions can be defined which are equally applicable for every municipality, e.g. administration processes concerning the development of e-Government should be analysed first with regard to the need and optimisation potentials.

On the other hand, all activities should consider the specific circumstances and demands of a determined city which are given in the way of administrative structures and the environment of the local user.

In your experience what is the most beneficial balance between e-Government technologies and politics?

It may be said that the political bodies of the municipality have recognised the importance and opportunities offered by e-Government. According to the saying "the data are on the way, not the citizens" the benefits are well acknowledged. This includes the opportunities to arouse the interest of the citizens in their city and in local government politics - headword e-Participation. It is also essential to involve the politicians in the e-Government considerations of the municipality.

What are your key challenges for the coming years?

The main challenges for the coming years are to change and adapt the structure of our municipality on the organisational and technological side, enabling the supply of e-Government-based services.

They have a high added value for the communication client as well as for the municipality being enabled by a high degree of automation.

In which way will these changes affect the current e-Government strategy?

The e-Government strategy has to be adapted from time to time. On the one hand this means new milestones set by the city to further develop the digital city hall, and on the other hand it brings in new developments from outside the municipality.

STOCKHOLM

Sweden has 290 municipalities covering the entire country, each with a popularly elected council which collects income tax and operates public services such as schools, care for children and the elderly, utilities, housing, and cultural and leisure activities.

While they enjoy the right to provide a great many public services at their own discretion, municipalities are bound by law and regulations to offer a number of basic services. Immigrants resident for three years in Sweden have the right to vote and run for office in local elections.

Stockholm, with more than 765,000 inhabitants, is the largest municipality in Sweden. The greater Stockholm area has more than 3.5 million inhabitants and was measured to be the most innovative European region by 2002.

Since 1996, Stockholm has been divided into 18 district councils with similar responsibilities and authority as the City's other committees and boards. The difference is that the district councils work within their respective geographic areas, have limited areas of competencies and have overall responsibility for their activities.

The City of Stockholm's leadership still has the overriding responsibility in issues concerning the entire municipality, e.g. municipal tax and the City's common budget. From 2007 onwards, the city will be divided instead into 14 district councils.

The distribution of seats between the political parties in a district council corresponds to the proportion of seats they hold in the City Council. The political parties propose the members who are to represent them and the City Council then approves their appointment. District council

members are politicians in their spare time, the mandate period being four years.

Most of the City's resources – three-quarters – are assigned to the district councils. How much each district council receives depends on its individual needs, such as the number of inhabitants, age and living conditions.

The administration and municipal companies of the City of Stockholm have approximately 50,000 employees.

The public administration in Sweden has a longstanding tradition in the use of IT and has in fact been a driving force in spreading computer usage in the society. This is also valid for the municipalities in general.

The City of Stockholm pioneered the creation of an IT infrastructure (fibre optic) to support not only the administration but also the development of the civic society and the business community.

Although the City of Stockholm has had strategies for the use of computers in the administration and the schools for many years, the first general and comprehensive e-Strategy was formulated in 2001. IT was set out in eight areas: Municipal services and the public, Democracy & political activities, Management and control, e-Structure, Skills development and supply, a more attractive Stockholm, Procurement and Info technology.

Goals are formulated in general terms where IT is considered to be a means to political ends. It is important to point out that the e-strategy was to be implemented by the formulation and deployment of local e-strategies of district councils, committees and boards, subsumed under the city's comprehensive e-Strategy.

The specifics related to IT were formulated in what was called the IT platform – the technical requirements to be fulfilled in order to deliver what the e-Strategy indicated.

Fulfilment of the e-Strategy was evaluated up until 2005. In practical terms, the measures indicated by the strategy were put in place. The next step is to reassess the e-Strategy, both in terms of what needs to be done but also in terms of whether the strategy is still valid in terms of the goals. This will be done in 2007.

E-GOVERNMENT STRATEGY

The e-Government strategy is based on the aforementioned City e-Strategy, with particular focus on a number of areas:

- Multi-channel delivery of services to citizens, companies and visitors in all business areas and architectures (SOA) to be supported.
- Integrated services to citizens.
- Consolidation of IT infrastructure.
- Miscellaneous internal e-Services for higher efficiency.
- Comprehensive management over IT development.
- Enhanced e-Democracy.
- Multi sector interoperability.
- IT in schools and in education.
- IT in culture and libraries.
- IT in planning, traffic etc services.

The City organization is highly distributed over a number of semi-autonomous councils, i.e. District Councils, Boards and companies. Each council has in principle the right to develop their own IT support although there are a number of general support systems that all council administrations shall use, as well as the City fibre optic network.

The basic lines in e-Government development are based upon the improvement of internal efficiency (better use of internal resources), external efficiency (delivery of value for money to the citizens) and the use of IT applications and infrastructures to improve living conditions in the city.

An important aspect of e-Government is how citizens, visitors and enterprises can access e-Services. For more than ten years now, the City-owned company Stokab has invested in fibre optic networks in the City.

Beside the creation of an all-encompassing high-capacity network for the City administration, Stokab has deployed fibre optic connections that can be reached almost everywhere in the city and in the region. This network consists of “dark fibre”, i.e. fibre connections which are can be rented on the market. The idea of Open Networks is prominent in the City. In Open Networks, all services are delivered competitively.

Today, Stokab and the housing companies owned by the municipality have reached an agreement to accelerate the deployment of Fibre to the Home. Around 80% of citizens already have access to a computer with an Internet connection.

Fibre connections are steadily increasing as programs for FTTH evolve. Bandwidth in the connection is also increasing. Today, 25% of all users have between 250 kb/s and 2mb/s 57% have 2 mb/s or more. In the 18-34 age group, 72% have 2 mb/s or more. These figures are important as e-Services develop in the City – it is becoming obvious that demand for bandwidth will be rising quickly in the coming years, and not least so because comprehensive e-Services will demand high bandwidth. Obvious areas are health and care, although other areas with a high degree of interactiveness or security will, when used together, demand high bandwidth.

NEW E-GOVERNMENT SERVICES AND APPLICATIONS

There are a number of services that integrate several databases in order to deliver permits of different kinds. Some examples of these are provided below (2006):

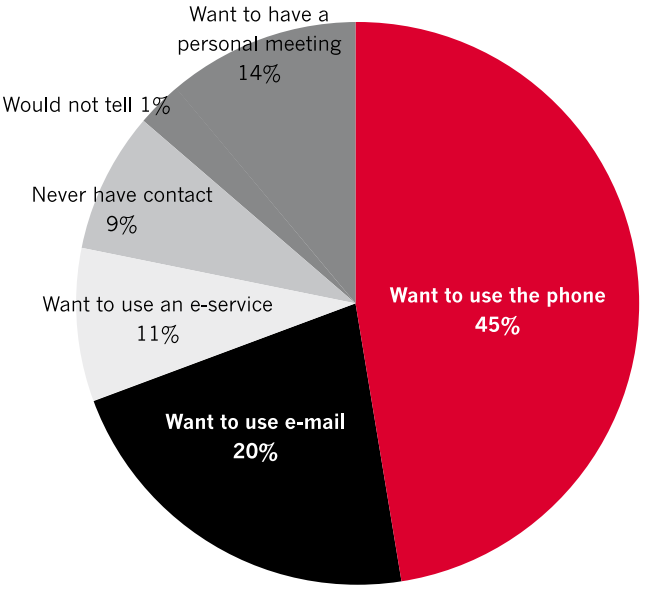
- Permit to build or rebuild real estate (1%).
- Permit to park your car in your residential area (13%).
- Permit to park your boat at a particular boat yard (1%).
- Application for secondary school (6%).
- Application for adult education (9%).
- Application for child care (5%).
- Application for housing (14%).
- Loans of books, CDs, cassettes etc. at the library (18%).
- Booking time slots at sport centres (6%).

The information that citizens seek at the city's website are as follows:

- Address and telephone of the municipality (56%).
- News about the municipality's services (31%).
- Local services (31%).
- Info about the use of tax money (1%).
- Info about traffic and public transport (38%).
- Info about housing and building (21%).
- Culture and leisure time activities (37%).
- Maps (GIS) (35%).
- Info about e-Services (8%).

The figures between brackets are the percentage of citizens that have used the service on the web.

When citizens are asked how they want to communicate with the municipality, the distribution is as follows:



As telephone contact is so important, the City has set up Contact Centres in order to increase the quality of service and reduce lead times and costs. The results are amazingly positive. Contact Centres draw heavily on a well-developed information infrastructure that is one of the prime targets in the development strategy of the City.

In the e-Service development, it becomes gradually more important that citizens can identify themselves securely. The more complex the service, the greater the possible infringement on personal integrity. The City of Stockholm accepts all types of identification media but at the moment it prefers the use of the e-ID. For the moment, 27% of the citizens have an e-ID that can be used as a means of identification and authorization for the city's services and systems.

Regarding the relationships between citizens and the city administration, although also with government agencies and private service delivery, the e-Centre in Vällingby was set up to explore the opportunities in a parallel development of the virtual world and the real world in a new city planning.

The Arena for Digital Services was then set up to stimulate the e-Services development among SMEs and to foster their market presence in various broadband "islands" in the city.

INFRASTRUCTURES AND ORGANISATIONAL CHANGE

Of the City's almost 50,000 employees, some 30,000 have daily access to computers and IT systems; most of them as an integral part of their job. The same goes for schools, which have access to a gigabit network. Practically all students have good access to computers at school and most of them also at home.

IT has been brought in gradually over a long period and there are no very dramatic changes or programs to be changed. Most things are handled within a number of obligatory systems. What will happen, as a result of the City Program for IT to All, is that new work forms and work organizations will be designed to make better use of the opportunity to have a broad information access where everyone is and will always be connected to the city network.

Challenges are in two areas: redesign of work and financing of licenses. For the moment, Open Source issues are already being explored and assessed in the City.

In the industry, labour productivity has seen unprecedented increases over the last five years. It could be said that labour productivity has undergone substantial positive changes in the service sector as well as in the public sector. The City of today is fully dependent on IT; a breakdown would practically halt the business – even mail systems have become critical.

INTEROPERABILITY AND COOPERATION WITH OTHER PUBLIC AUTHORITIES

The interoperability architecture is not yet in place on a broad scale; there is much talk, but action comes hard. Legacy systems still dominate. XML and standardized document formats are being used more frequently. Government agencies can exchange documents fairly well. A number of designed interoperability structures have been put in place but the more general framework is still to be accepted by a great number of players. As the Swedish public sector structure is built on semi autonomous agencies, coordination does not come easy.

There are, of course, areas of great cooperation and examples of high integration.

The income tax statement is one example. As a citizen you are presented with a compilation of all your economic activities during the taxation year for you to accept, add to or change. For most people it is

correct, and they can sign it, for example, with their mobile phone. Others might want to add something and will do so on the web, signing the statement with their electronic ID. The integration that is needed to produce the statement is vast and covers both private and public sector, even if income is earned in Europe.

The permit to park your car where you live in the inner city integrates a number of databases in several agencies, both state and municipal.

The GIS area is well-explored from an information infrastructure point of view and handles interoperability swiftly.

Sweden has a number of databases as an information infrastructure readily available for private companies to build services on, at a cost. These information resources lower the transaction cost for a number of parties in the business community and in the public sector. A more targeted effort is being rolled out at the moment to explore the opportunities to make a comprehensive effort in the area.

The County Councils are putting a lot of effort into the design of "one person – one record" system support for the Swedish medical care system. That effort will interact with municipal care activities to ultimately be integrated. Even if there is little cooperation between municipalities from an IT standpoint, the health care and care areas will serve as a plough alongside the education area. The County Councils have published and decided a national health care strategy that will be implemented in collaboration with the municipalities.

FUTURE TRENDS AND CHALLENGES

The elections of 2006 led to a shift in majority, at city, county and national level. The new majority in the City focuses on citizen's value for tax money, greater weight of free choice in a number of aspects where there are private alternatives to public services. In the first budget year, 500 MSEK are allocated to e-Services in order to boost development. The political commitment to the e-Society and the open city is high.

The main challenges are related to the design and deployment of a universal infrastructure to support development and delivery of integrated services to citizens and the administration. One of the most important challenges is about information resources as a common asset and the raw material for on demand e-Services.

As in all organizations, organization-wide IT management and IT leadership will remain an issue for a long time, even if a new management process design comes to the fore next spring.

Much effort has to be made to deliver better usability to end users, as today's costs are too high to support non-optimal solutions for end users.

JOHAN SÄRNQUIST

IT manager of the city of stockholm's executive office

Johan Särnquist is IT Manager of the City of Stockholm's Executive Office, with responsibility for co-ordinating IT development and usage.

He took his Master in Electrotechnical Science from the Chalmers University of Technology, Gothenburg.

He has more than 30 years' experience in the area of IT infrastructure and business development with IT as supporting tool. He has been project leader in Data and Telecommunications areas as well as business-oriented IT solutions in Ericsson, Alfa-Laval and Electrolux. As of 1993, he was in charge of regulation and standardisation within the telecommunication and radiocommunication areas in the National Post and Telecom Agency of Sweden. In 1996, he took over the IT Infrastructure Group and then operations, infrastructure and supply management in Electrolux. In 2002 he was appointed IT Manager CIO of the municipality of Lidingö.

What is, in the case of Stockholm, the current strategy in your city as far as e-Government is concerned?

Keep in mind that we had an election in autumn last year, which changed the majority in the city of Stockholm. The new majority, the political majority, is focused very strongly on e-Government issues to support the inhabitants of Stockholm. It is part of their political program. They want more e-Government services for the inhabitants in the city of Stockholm. As a consequence, e-Government is now very important, which means that today, even more than before, e-Government is a political component for the city. It is, of course, instrumental, but it also has a significant political dimension now.

Is this commitment by politicians to e-Government reflected in any kind of special commitment to the delivery of e-Government? Is this something which has been translated into a kind of, let's say, political contract with the citizens at this moment?

No, but what we intend to do is to give much better services by the Internet. There will be many more internet-based services for care of the elderly. And, of course, Geographical information systems are an important thing. Not only for the city, but for the region as well. The regional Government has, more or less, the same political composition as the city council at the moment. So it shares the same priorities.

How do you see the evolution in e-Government, not in general, but in practical terms related to you city?

The citizens expect us to deliver services and will ask us for them if we do not to deliver them, rather than the other way round. So, the citizens' perception is that they take for granted that we will support

them with on-line services. Thus, providing on-line services is a "must". From a political point of view we are under pressure to deliver those services in a specific time-frame, but from the practical standpoint we are trying to find out how we will be able to roll out new services in the best way.

Could you briefly describe this Stockholm city model from your understanding today?

Let's say, that in the school area, in education, you have all the things you can choose: the school you want to go to, by entering your description for the school on the on-line. You can get information on what is happening as far as your family is concerned in schools, etc. This leads to much healthier relationships between teachers and parents.

In care for the elderly we'll use it to make the way we support the elderly more efficient, because due to demographics in Sweden, and I think in most the countries, you get more and more elderly people. You have fewer resources to support customer care and you can increase efficiency by means of information systems.

Does that mean that you see that the city model, in the case of Stockholm, is to some extent related to some thematic areas such as education, the elderly, health care, probably social housing. Is this a way of structuring the way you can see what you are building up at this moment?

No, it's very different. The reason is because municipalities in Sweden are responsible for school and care of the elderly.

In the process of building up the Stockholm e-Government City Model, can you let us know what you think the main phases were, the main constituency-building phases that the city experienced, and also provide us with some information about the stakeholders involved in each of those phases?

There have not been explicitly declared phases of introduction of e-Services in Stockholm, but there have been a lot of different isolated "heavens" for established e-Services to work.

Since 2002, I think there has been an EDP procedure on how to implement, how to produce these e-Services in the city of Stockholm. You have a lot of documents describing the IT information technology platform. But not all the described features that have actually been implemented. What I'm doing to do now is get a decision to implement the information technology platform, and also to upgrade the former e-Strategy and to rethink it.

In this sense, the IT vision was one to the first phases which has not been totally implemented, but it was a constituency-building phase in which a certain vision was created and now the city is paying much more attention, if I understood correctly, to how to secure and integrate the deployment of the model. Is that correct?

It's correct. More formally, we would say that we are putting more focus on business cases than before. There is a need to have better services or less costly solutions.

So, one of the consequences, probably, of what you said is that in terms of the situation at this moment you are managing a change in the model, and I also understood you made a number of references to securing effectiveness. I think it's one of the key components at this moment. Is that correct?

Yes, because you can do it in two ways. You can give the inhabitants a good service and stop there, or you can give them services and try to make them efficient solutions for internal users as well, so that you have a cost-saving.

What about the stakeholders?

Who were the key actors in the different phases that were needed and got involved, let's say, one of the key components in explaining why this was done at that particular moment.

I would say that the stakeholders are the politicians. We can say, as we had that change of majority last autumn, that there has been a dramatic change of attitude towards e-Government solutions. No question about that. It's much more focussed now than before.

What are you experiences with regard to the need for coordinating components when deploying e-Government? What do you think were the main barriers that the deployment e-Government services had to face in Stockholm?

Management. In many areas in e-Government you have to have acceptance and support from top management. I would say that if you don't have it and you don't have a professional approach in leadership to the implementation, you will fail. This means that in order to address change management in a very professional and structural way, you will need to get commitments from the top level.

We have seen cases in the study where the approach was to consider citizens as consumers. How do you see that in Stockholm?

I would say we are far from the consumer. It takes years before we can say that the citizens will be consumers of services. We need stability and maturity in services.

What do you think you could provide from your experience in Stockholm about the benefits of having such an e-Government city model and also about the risks in cases in which this model is not clear enough?

The benefits are very clear and are based on achieving significant cost-savings. Not having to force the development and implementation of new services, you can re-do them by substituting some existing different solutions. In this way you can reach the objective in a much easier way, and of course you can predict what type of services you will deploy to the citizens in a much better way.

But you are talking about the risk of not having a model. This is not having a credible Gantt, affecting top-management commitment and creating barriers to work and difficulties for project leadership.

Which means that in a way e-Government projects have to be positioned at different instances, at management level, at city level, at political level. Is there a selling activity there?

Of course there is selling. Before you are ready to have a proper solution, there is no question about that.

What, in your particular case, have you seen as the killer components to elaborate this selling process?

Demographics play an important role here. The growing number of elderly people, the difference with people that can take care of themselves. So we have to align strategy, taking carefully into account how the demographics of our city will be evolving from now on into the future.

What about the social composition?

We are attaching importance to the availability to introduce new companies to the town centre in Stockholm. It is very important for us from a political perspective. The aim is actually to give them as much support as possible and simplify the activities for them to actually decide to do so. The town centre in Stockholm is not the same as in Barcelona, for example, and we are interested in promoting a more intense presence of business companies. In this respect we promoted these services targeting companies, to simplify all the administrative procedures and provide a better support for landing.

What do you think are the key assets that the city has had until now?

As I pointed out before, I have only been in charge here in Stockholm for seven months. So I have just scratched the surface of the existing issues. If we are talking about ideas and tools for business, I'd say that the elderly care area in Stockholm is noteworthy, it is quite advanced. So this is a significant asset in this moment, something that we have, that we think some other cities don't have at that stage. I'm quite impressed.

In terms of services, the existing services that the city is already offering to citizens and companies… What do you think are the winners, the most used or most highly rated ones?

We have a significant use of the services for applying for access for housing. Four years ago, they changed the whole service by transforming delivery into an Internet solution. And the number of people making applications increased because it was so simple to use that everyone agreed to pay to get access. Actually it is not free, users pay 30€ a year, and they can actually book apartments available on-line. It is quite amazing to see what they have done with that solution. I think they have increased the number of employees by about 50%, but they have doubled the number of applicants. Of course, they also get higher revenue through the increase. And they are also actually delivering an excellent service to the citizens. It is a 24x7 solution. That is interesting. I'm impressed.

What do you think is still missing?

The platform. An integrated service platform. Something that brings together all the different components.

Is there a multi-channel strategy also existing as part of the city model?

Multi-channel is, in my interpretation, different ways of accessing one service. Currently, every individual service must be developed independently on their own platform. Multi-channel is being addressed in terms of enabling several access channels to those services, by creating the interfaces. Which means that in a way, the city is relying on opening many different channels to access the same services in order to facilitate the widest possible use of those services, regardless of the channel the citizen wants to use, in order to get access to them.

Which two services or which two success stories do you think will be the relevant ones in the case of Stockholm?

Today, probably, the best one is housing. We could say also that one major issue we definitely have is mobility. I think that mobility and multi-access will be successful. Not only mobile, but also TV, digital TV for instance.

How transferable you think the experience in Stockholm is with regard to other cities?

We are not totally sure, I'm sorry. We have had approaches from other cities interested in what we are doing and asking for information, even support or ideas and things like that, but not much.

Again I think, as I said before, IT has been treated until now in a completely different way and the future is that before the end of this year everything will be put together under the responsibility of a single department. So we are facing a radical change. It will be a totally different situation. We are at the beginning of this process, at this moment. Let's say we have that challenge.

What do you think are the key challenges for the coming years?

I do not think it will be budget. I think it is possible to do enough with the budget for the major actions to be addressed.

But I do believe that the remaining obstacle will still be management, being able to pinpoint the most important areas that really provide a return on investment.

What are the outcomes, the results, the target that you and your team, so the city, are being asked to provide after one to three years?

The target is simple, to supply the citizens with comprehensive e-Government services. The same target will be to improve services to increase efficiency and have better cost savings, and return on investment.

THE HAGUE

The city of The Hague is one of the four major cities of The Netherlands. It is at the heart of the Hague Region (Haaglanden) and has 472,000 inhabitants, 40% of whom have a nationality other than Dutch (more than 100 different nationalities). It is enclaved between the North Sea on the west and a number of suburban municipalities on the east. To the north and south are protected nature resorts and agriculture.

With 2,214 inhabitants per square kilometre, the region is one of the most densely populated parts of Europe. The central municipality of The Hague even has a density of 5,361 inhabitants per square kilometre.

The Hague never fails to impress visitors with its relaxed, elegant atmosphere. Its combination of a multi-ethnic city culture, with two coastal resorts (Scheveningen and Kijkduin) enhances its unique quality. The city also has many green areas, elegant palaces and parliament buildings. The Hague is at the heart of political power in the Netherlands. Over the years it has also acquired importance as an international political centre. Aside from the residence of the Queen, the government and foreign embassies, there are several international institutions, to mention only the Permanent Court of Arbitration and the International Court of Justice.

The city of The Hague and its region entered the information era from a relatively favourable position. The presence of government and business services represents a growth market for the new technologies.

e-Government in THE HAGUE

The local economy is closely linked to the presence of central government and the Dutch Parliament in The Hague, not being the capital of the Netherlands. Thousands of residents and non-residents work for the ministries and other governmental organisations. The Hague holds a great attraction for service-oriented businesses such as consultancies, accounting firms, computer and telecommunication companies, insurance companies and advertising agencies.

Many international companies have their headquarters in The Hague. Being the fourth UN city, The Hague also figures prominently in international affairs. With the International Court of Justice (in the Peace Palace) and the International War Crimes Tribunal (among others dealing with the war in former Yugoslavia), The Hague has evolved into the world's centre of international law.

In addition, as the centre of the national administration, The Hague hosts many embassies and consulates, as well as other international organisations, including the Organisation for the Prohibition of Chemical Weapons and the European police organisation Europol of whom approximately 2,300 work in the different departments of the city of The Hague.

In this regard the 'Governance' topic is one of the competitive clusters, together with the knowledge industry, business services, telematics and tourism. These clusters constitute the demand for location factor such as labour market issues and quality of life.

The municipal strategy towards the so-called "new economy" also aims to keep the already present ICT-firms in the city.

THE INFORMATION SOCIETY VISION

The city of The Hague had strong ambitions with regard to the information society. This, however, is not without a clear goal.

The central slogan was: "Every Citizen Connected!" This slogan of the municipal strategy for the information society was the main end in itself.

e-Government in THE HAGUE

The new technologies play an increasingly dominant role in daily life. New opportunities arise, but there are also threats to people that will not manage to "get connected".

Two main priorities dominate the approach to the role of local government in the information society:

- On the one hand, the local government wants every citizen and every firm to use technology to its full potential.
- On the other hand, the new technologies are put in place to renew municipal service delivery, to streamline municipal organisation and improve the quality of local government.

Under the first priority, the new technologies are implemented to promote social cohesion at grass roots level and to fight the digital divide. This strategy aims to improve quality of life and to strengthen a sense of community. It includes reinforcing the relations between people and groups of people in the city.

E-GOVERNMENT PROJECT: TRANSPARENT CITY HALL

The second priority of the council strategy for the information society addresses the accessibility of public information and public services for the inhabitants and other "users" of the city. At the same time, it aims to lead democracy to life in a transparent and open culture of local government.

A framework for action was developed under the title of "Transparent City Hall". The main ambitions of this framework for action are:

- Improving the citizens' commitment to local government. This includes the dissemination of local government documents, the live transmission of city council meetings, electronic opinion polls and Internet-based discussion.
- Improving citizens' participation at neighbourhood level. This includes a neighbourhood-oriented dissemination of information, electronic participation in the decision-making process and digital neighbourhood centres.
- Improving the quality of public service delivery. This can apply to any municipal service. Within this framework, electronic service delivery is being implemented on the basis of Internet and additional technologies (e.g. integrated call centres and smartcards).

e-Government in THE HAGUE

The vision of the role of local government in the information society is implemented following a strategy of pilot projects. The underpinning idea is:

- To take the customer as a starting point (i.e. a demand-driven approach).
- To integrate the services in one physical and virtual public counter (a one-stop shop).
- And of course, the success of this approach depends heavily on adopted standardisation and co-operation within.

The overall aim is to implement a balanced approach of citizens' demand for, and the municipal supply of, services. At the end of the day, the citizen is in charge! Therefore the council looks to the citizens. They can take many different roles. A couple of them may be highlighted.

First, the citizen is a visiting customer. He or she approaches the municipal organisation, looking for relevant municipal services. This may or may not lead to the actual "buying" of one or more services.

Second, the citizen wants to have an impact. He or she would like to know what the legal basis of the government's acts is, what the prospected service quality level is, and what the costs of service are, both for the individual customer and for the municipal budget as a whole. In other words: the citizen demands for transparent and accountable government.

If this is taken one step further, it transpires that citizens would like to contribute to the design of municipal policies. Maybe they just want to be heard. Maybe they want to be co-producers of municipal policy. And in some occasions they may want to take part in the decision-making process.

Modern local government implies that the supply of public services has to meet these developments in citizens' demand. Of course, the success of this approach depends heavily on standardisation and co-operation between the different actors in the city hall.

E-GOVERNMENT VISION

In the course of the years, The Hague has tried to bridge the gap between public administration and the local community.

In the sixties the council hoped to be able to make the public a more approachable partner for government through a process of community building, by giving them the feeling of being more involved in their living environment.

In the seventies, the council sought to bring the government closer to the public by de-concentrating its municipal organisation, namely by dividing the city into districts.

In the eighties a businesslike approached was introduced in the municipality. Profit was the buzzword, and strict internal processes determined the course of municipal government.

In the nineties, municipal organisation was changed, creating separate front and back offices.

And today, in the new millennium, more new windows for contact with the public (such as websites, call centres) have been introduced.

Thus, the city was in constant change, being the missing component to equip the public (and the business community) for interaction with the city. They still felt that they were there for the sake of municipality, and not the other way around. The public has still to be empowered.

In the meantime, information and communication technology has evolved substantially. But a better information supply and improved technology alone do not suffice. Changes will only be successful if they are supported by both the citizens and the employees within the government organisation.

These changes must take shape via an outside-in-approach. Customer logic must be the leading principle in this. And we shall have to ensure that these change goals are anchored in all the genes and fibres of everyone who has a part to play in this process.

One of the conclusions was that ICT projects that start out as small acorns may grow into mighty oaks if based on a sound strategy and vision.

This has also been The Hague's experience and opinion: an approach aimed at the implementation of new information technology alone will again be doomed. Successful changes can only be realized if they are based on a vision of what the municipality wants to be and what it stands for. Subsequently this ideal image must be taken, translated and anchored in manageable change goals within the domains of organisation, information and technology. Changes within one domain will contribute to changes in another.

In this respect, the city developed a clear vision of the future and translated this vision into workable goals. By 2007, The Hague wants to be the most customer-oriented city in the Netherlands. This ambition is broadly supported by both the political and the civil service components of the municipal government.

Secondly the council looked at how the organisation structure must change in order to definitely become more customer-oriented. In a few words, organisational changes all targeted the one-window philosophy. Or to be more precise, The Hague seeks to function as one undivided municipality. Whichever window the citizen chooses to contact the municipality through, he or she must always receive the same answer to the same question.

Like other cities The Hague has several windows: physical counters and desks, a call centre, and its website. A secondary goal in this respect is one single city-telephone number, which the public can call with all their questions.

Organisational changes are the most difficult changes to implement because there is often no sense of urgency.

And because the organisation culture of municipalities is too internally oriented. Changing the mentality of civil servants is a challenge indeed: it involves bridging the gap between the public and the municipality.

The challenge being how these business and organisation goals could be translated into information goals, a new municipal information structure was designed geared towards accomplishing these goals.

One very important aspect is that the municipal information supply has to be organised in accordance with the principle of single storage and multiple retrieval of data. And derived from this, each individual citizen must have the opportunity to manage their dealings with the city themselves. They must, in short, be able to monitor how the administration processes their requests for services, and their status.

But what is equally important is that the citizens could have a directing role in managing all data pertaining to them present in the municipal administration. Who better than the citizens themselves to check whether these data are correct? The city can even go as far as – and The Hague plans to do this – giving citizens the opportunity to store supplementary information in their own digital safe. They know that this information will be safe in the hands of the government. This might be information on their medical records, for example, or financial information. The citizens can indicate then at the same time that this information may be made accessible to others.

They will certainly like to do this if it avoids their being approached unnecessarily with requests from the authorities for the same information. Of course, the government will inform them when it makes use of this personal information.

Single storage of data is crucial for the quality of the municipal information structure, otherwise it will never be possible to reply to the same question with the same answer at each window (channel).

Organizing a wedding? That's digital in The Hague!

Organizing a wedding ceremony is a complex issue which normally requires a well-coordinated approach. Whether this could be part of an e-Government service wasn't clear until May 2005, when The Hague Wedding service was launched. Since then more than 1,300 couples have benefited from its advantages.

Because there is central city repository system in a secure environment, the municipality of The Hague keeps a full digital copy of any citizen registration, thus enabling any customer to get digital services 24 hours a day, 7 days a week from any location. All they need is a valid DigiD (digital identification) and a PC.

This is valid not only for extracts, legal copies, change of name after marriage, moving from one house to other but also for The Hague Wedding municipal service. Interested couples can make all the arrangements for their forthcoming marriage fully online and only have to visit the registry office on the big day.

The service is instantiated by first checking the preferred wedding location agenda to make sure that the day and time chosen are still available. In the worst case two alternative options are proposed. After having decided the data and the location, the couple has to fill in some downloaded documents and sent them back. In this step the data already existing in the central repository is naturally reused. Payment can be made either by credit card or by secure access to the preferred bank.

The remaining steps before the big day are the designation of witnesses and the registrar, who is duly appointed. The couple can choose the registrar they prefer from a proposed list of candidates, where their photographs and some personal details are provided. A young registrar or an older person, woman or a man, everything is possible. Finally, they can also choose a colour cover for the wedding certificate (standard, black, red, white or leather).

Last but not least the big day arrives. This will be the first time they physically meet the registrar of the municipality of The Hague.

Having married 1,300 couples since May 2005 that used our The Hague Wedding, the municipality of The Hague can confirm that this service has been a successful initiative.

NEXT STEPS

Efficiency is good for the organisation, the access is good for the citizens, but it is not where we planned to be 12 years ago.

At the beginning of the nineties there were plans to build a new town hall. The highest-ranking civil servant at the time had decided that the new building would have a ‘one-stop-shop’ in the big hall of the building, called the Atrium. The work processes of all departments would produce one counter for the public, so he thought. As a consequence, fewer counters were going to be needed. In turn, the architectural design provided for fewer counters. But thinking about something and actually doing it is not the same, so in the end, more

counters had to be made before the finishing touches were put to the town hall.

And that is the situation to this day. There are many good initiatives with the possibilities of new technologies.

Let me tell you another story. There is a central point for information to citizens. They use information technology. The civil servants in the department responsible for the public space had also made a centre for information to the citizens, but of course only for the subjects on the public space.

So here is 'how it works': two organisations grew independently but will be merged in the near future to make one central point for the citizens.

These are the lessons to be learned: in the last 12 years the great ambition of the 'one counter' had not come true. But there were so many good projects, developed from within the departments, that now more than ever make it likely that the one counter for citizens will become a reality. So the 'future ambition' of the past is now just beginning.

The WOZ Infodesk started out as an Intranet application for the municipal tax office. It has now also been implemented as an Internet-based application. It provides citizens and companies of The Hague with direct access to information about the value of a specific piece of real estate property (land, homes, and business premises).

The users of the system can access cartographic data, floor plans, administrative data, such as cadastral maps, and cycloramas (360° pictures of buildings and streets, covering the whole city).

For private individuals and companies based in The Hague the system presents a number of considerable improvements on the provision of services as well as savings in terms of cost, time and effort. In the past, users desiring to obtain information on the assessment of immovable property had to request it in writing from the local authority. They can now obtain such data online. Furthermore, they may react online if they disagree with the value assessment.

This development saw the transformation of the front office away from a purely fiscal approach to a more service-oriented approach, putting the costumer in the centre.

The back office saw the integration of the data systems and work processes of a number of different municipal departments, as well as some national and regional public authorities. The business circle goes

from citizen's demands, internet, processing, transactions and services. The concept of click-call-face, in essence multi-channeling, has been enhanced by the launch of a Second Life island, dedicated to all the citizens of the world.

Digital Identification (DigiD) Optimizing the access to parking licences

In The Hague you are required to pay for parking in several districts. The cost is higher in some parts of the city, like the downtown area, or in the Scheveningen district (on the seaside). Citizens are allowed to park in those districts by applying for a parking licence, which they are expected to clearly exhibit in their car, otherwise they can get a parking fine.

To get such licences, the citizens from The Hague can go to one of the eight city hall offices, but for a long time now it has been much easier to apply for it via the Internet (www.denhaag.nl). To do so, they access the so-called 'digital office' and search for parking licence for inhabitants there. They are then asked to complete a digital form, for which purpose they can optionally use their DigiD (digital identification).

The main advantage of using DigiD is that they no longer have to fill in all their personal information that is already known by the council (like their name or address), as this is done automatically. Since the system knows the correct address, the prices of the different parking zones are applied automatically and the cost of the parking licence is immediately calculated and proposed.

The service requires the citizen to declare the period for which they wish to have the parking licence as well as their car's registration number, for verification (actual ownership is checked against the main registry). Payment can be made either by credit card or by secure access to the preferred bank. The parking licence is delivered to the home two days later.

When a new car is bought the old parking licence becomes automatically invalid. To resolve the issue, the citizens can go to the Internet (www.denhaag.nl) and search for the 'change car registration number' service. By using their DigiD they only have to fill in the registration parking licence number and the new car registration number on the digital form, confirm and send it with a simple click. They will have their new parking licence the very next day. As they have already paid for it, they simply just have to enjoy their new car.

PETRA DELSING

CEO departament of personnel organisation and information of the city council of The Hague

Petra Delsing is CEO of the Department of Personnel organisation and Information of the City of The Hague.

She has a degree in Politics from Radboud University, Nijmegen.

Her working life has been dedicated to policy-making on the one hand and to implementation of ICT projects on the other. She had worked as policy researcher in a highly renowned Dutch research institute and as a productivity consultant for the European Productivity Institute.

As of the mid-nineties she held several functions within the Ministry of Transport, Public Works and Water management as project manager, head of maintenance advisory unit and senior financial advisor.

From 2002 to 2006, Petra Delsing was the director of the Department of Infrastructure and Intelligent transport system of Rijkswaterstaat, the organisation for traffic and water management.

How can you explain, and what is your perspective about the current strategy of your city as far as e-Government is concerned? How can you describe the strategy and also the evolution of e-Government from your perspective?

In 1998 some local politicians and civil servants who were really insightful decided that the future would be e-Government. Consequently, they started designing a really good service-oriented architecture, based on state-of-the-art, web-based technology.

The aim was that all our services should be available for the public on the Internet.

We faced four different stages: stage one is when you can only read the information on the Internet; the second stage is when you can download the form (for which you still have to have your pen and write the answers in it, put it in an envelope, go to the post office and post it to the government); the third stage is that you can upload the form and thus send it back via the Internet; and stage four is the most sophisticated level: information, download, upload, paying via the Internet etc.

In stage four plus the citizen gets maximum benefit from all the information that we already have. In stage four plus we promise the citizen we won't ask for information we already have. So if you want to move from one house to another, you only have to fill in your name and digital identification number and your wish to move. The form will then fill itself in with all the information we already have: name, address, telephone number, family members etc. You only have to answer a few questions: Does family member so and so also want to move? Etc. This way, the transaction is quick and easy

and you receive an email saying "Thank you for your information and within one day we will change your registration. You can follow it up at www.denhaag.nl". It's all about self-service by maximal use of data and ICT-intelligence.

So the strategy is to fulfil all these four stages, as you refer, with respect to e-Government?

Yes. That is one huge part. Most of our services are at level three. And our policy is that by the end of 2007- beginning of 2008, we will have all our products at stage four (everything via the Internet). Maybe it's too optimistic, but in two years time we will even have all the appropriate services at stage four plus.

Another thing we would like to do, but that will take us to the next service generation (we are talking up to three-four years) is to avoid having to execute all services separately, although they are interconnected. That's what we call the integrated services offer.

If you need to use a wheel chair, you can fill in the stage four form, but you also need your house adjusted–that another stage four form. And you also need the street adjusted, and you also need a special parking place as well. What we really like to do, but which will take three or four years, is that when you fill in the form to ask for an apartment (stage four) the system recognizes that the citizen is getting about in an electric wheelchair, and consequently the application self-modifies on the fly to apply for any house or street adjustment required or the need for a special parking space. So you don't have to fill in all those different forms separately, because we manage to make smarter integrated services available to the public. Integrated services via smart integrated stage four plus forms, maybe even including the provision of delivery times (you will have the license in three weeks).

From what you say, it appears to be intended to get, maximize efficiency and the effectiveness of the services that you are providing. Who have been the key stakeholders?

The most important period of our e-Government City Model started under the guidance of our Mayor and the Vice-Mayor in charge of ICT six years ago. As both of them were ICT-aware, they put a lot of effort and political support into it, thus resulting in a clear mandate that put a lot of pressure on the organization to begin with the architecture, which was quickly and properly implemented under tight technical specifications.

Almost immediately, we started to win awards, an interesting aspect which is highly appreciated by politicians. We were recognized as the most client-oriented organization of the Netherlands last year.

Two years ago we were also recognized as the most innovative ICT government of the Network of Cities of the Netherlands in 2005. This has also helped our evolution, as recognition is a really good drive for politicians. And on March 20, 2007 we won a national Award for being the best e-Government organisation of the Netherlands.

We have built a significantly high profile in collaborating with everybody who is involved in ICT in cities. The Hague is really active, really participative, proactively offering what we design, contributing to the definition of national standards. For that reason our politicians constantly receive a lot of compliments, which reinforces our positioning as a City and confirms the relevance of their backing and support.

You still have the same mayor in the city?

Yes, for ten years now, maybe a bit more. He is really powerful. He used to be the Minister of Education and the Head of Parliament. He's really experienced, really knowledgeable and really into ICT.

How important are communication activities like marketing and public relations in the e-Government of The Hague?

The city of The Hague is really modest. This year we will start a campaign in the city to disseminate the fact that the citizens can always get a lot of services on level three, sometimes even level four plus from the local government.

We are really low profile and still have, in my personal opinion, a boring site. We have had some changes in politicians: the Mayor stayed, but now we have a new Vice-Mayor for ICT, who is really into city marketing. He said: "Listen, I want to have a more fashionable, citizen-friendly website and if we are really that good, I want it to be published now". So now we are designing a marketing campaign which will not be only in Internet and local TV, but even on streetcars. We will do everything we can to market it: "Hey, listen people of The Hague, you can do business with us on the Internet in a really smart and quick way".

What do you think were the main barriers that the city encountered throughout the process and how are they related to these phases?

In the past, and even now, every department within the city has a high level of autonomy. Although we have a really good architecture, every department within the local government can go to its own vice-mayor and disagree. We always have to reach consensus, which is a really nice Dutch thing, but it is not quick. We have to talk to everybody.

Also, the old legacy systems are sometimes a barrier to process renewal. It takes time to change to a 100%-implemented services-oriented architecture. Some legacy systems are expensive and not yet at the end of their economic lifespan.

Under my responsibility I have already started a process of establishing the rules for success to speed up the process. We are probably going to have a further budget available, but with the needs of the citizens in mind, decisions will have to be taken in a centralized place, guided from the ICT Department. We will set the agendas, we will be in charge, we will drive the process. And this has been accepted.

What do you think are the benefits that you have already gathered from the decisions that were taken earlier?

The main decision was our architecture, because they made a data model for all information (central databases for persons, buildings, addresses, etc.) implemented under a centralized and single infrastructure.

This has corrected the previous situation where every department had their own database with their own language. Now if people apply for parking places, or if they are going to marry or start a restaurant, all the application forms, all the different departments use the same database. And that makes a huge difference. It makes it so quick and easy.

This was a very brave decision at that time, but it proved to be very beneficial later on, for years and years and years.

And they also decided to invest in broadband. This means that all the offices are connected to this broadband network, which also connects all the cultural institutions and all the schools. So it's really easy for us. Distances in the city are not a problem, as broadband has endless capacity. Of course, the world is not perfect and we have a lot of legacy systems. Not everything is perfect, but our target for the next four years will be well supported due to the fact that we can rely on our SOA architecture.

What are the killer services?

Eighty per cent (80%) of our clients come to do things like getting a passport, get married, change home, things like that, transactions. You have to focus on the most social and relatively easy services like: moving, marrying. We have started with those services which most clients are need. I would rather not start with a service for something that hardly anybody needs. I was in Sweden recently and saw a perfect example of what you can do for blind people in libraries. And it was really impressive, and maybe we will do that in time. But, how many blind people do we have? So, we start with simple products: "I want to marry, I want to change my name, I'm moving house, I want a parking license, can you come and pick up my garbage because I am rebuilding my home ..." Simple products which are greatly in demand.

What are the missing components?

It is really challenging and difficult to do everything that has to do with social services, you know... unemployed people, the homeless. There will always be people who will not have access to ICT, because they don't have a home, or because they cannot read or write because they really have poor education.

We are working on an strategy that we call "click-call-face", to describe delivery by Internet, phone or in our offices of the services provided. It depends on the products and the client group, but sometimes you would like to have 90% of your businesses with click and only 10% in situ. Click-call-face also includes a single telephone number and a single call centre for the whole city of The Hague. But we will always have people for whom "click and a call" will be too difficult. You have to differentiate between the products and the users of the products, have an idea about what percentage you can expect to handle via click/internet.

With respect to your "click-call-face", there is a clear "click-call", the most simple explanation of that is the Internet or phone, what about... in a broader way, multi-channel?

"Click-call-face" is multi-channel in essence. This is what we understand as multi-channel.

How do you differentiate between clicking mobile to clicking on the internet or a PC, or on a remote control in a digital TV or interactive TV?

We don't have interactive TV. We don't have that yet. One of the things we have to organize, regardless of whether people use the Internet or phone our call-centre or go to the office, is to ensure that they always get the same answer. This means that the call centre operators will also log onto the Internet, and that they will give to you the same answer as if you had used the Internet. They will find it for you. You can also walk into the office where you only have to take a ticket and wait in a queue and they look at the computer that gives you the answer. It's not perfect because there are still specialists who have their own specialised databases, a set of answers which cannot yet be found on the Internet. For services that require customer representation at the counter, for example, having a passport renewed, we are developing an application for letting the customer make real-time appointments at our website.

What about mobiles? What about access in the street and in companies?

Almost everybody has Internet here. So we are not into "we are going to put a lot of free Internet on the streets". Most people have internet. We will make sure that our local offices will have some computers that

you can use, like in the airports. But in Holland, most people do have Internet at home. We are one of the top ten countries in the world of people with computers at home.

So you understand that the usage model is going to be heavily based on the Internet-based use or offices or at home. So services on mobiles are not that challenging or that important because they're already available in any place that the citizen is at any moment.

One interesting thing, although we don't have an official position on it, is that you should be able to send us an sms if the kids don't go to school. But we are not at that stage yet. That is, for me, an exciting part of the next five years. The main aim now is to work on integrated stage four plus services.

How transferable do you think your experience is to other cities?

I think that other cities can benefit from learning about our architecture. It is something that we can share and would probably be very beneficial to other cities.

Apart from being the Director of ICT, I'm also the Director of Personnel and Organization of The Hague. This helps, because delivering integrated stage four plus forms and services to the public also has to do with organizational changes. If you want to have an integrated service you have to talk to the different directors about how to organize work across organisational boundaries. It is about being customer-focused instead of craftsmanship-focused.

Also of the utmost importance was that the aim of the former highest-ranking civil servant of the city of The Hague was to be "the most client-focused city in the Netherlands". Under his guidance we started a campaign to train all the 8,000 employees of the city of The Hague to be client-focused. It also meant that "being client-focused" and "being able to cooperate with colleagues" (necessary requirements to make integrated products!) are now the two major skills for every civil servant in The Hague.

What do you think are the key challenges that you will be facing? And how will the coming changes affect your current strategy?

An exciting challenge will come from the need to develop services on a national level with partners who are not the city, like when you are unemployed and you need to get your money. That is a different organization from ours. When there is a need to move house, we are not a housing cooperation. If you want to have knowledge about exactly how big your plot of land is, you have to go to the cadastre. It's all about the integration of public and private services.

e-Government in **THE HAGUE**

We are now addressing cooperation between the City of The Hague and the Ministry of Internal Affairs and other huge institutions. As a consequence we need to have the same standard, the same language, the same interfaces.

We all use SOA, SOAP-XML. But we still have to decide: How are you going to present your products? Would it be in alphabetical order or by life-events? We proposed life-events. If while working together we decide that on a national level the services will be organized by life-events, I will have to sell that later within my own organisation. We proposed it because we thought that it was the most appropriate form and now we are bound.

Also, for semantic uniformity we have to make sure that services at national level have the same meaning at City level.

The words should be the same. They should all have the same life-events. Otherwise it will be confusing for citizens.

We don't miss 'hardware' components. It's more the transformation of the organizational behaviour over the next few years. ICT will transform the role of the public administrator. The "new style" public servant must be customer-driven. This mindset is a different way of thinking. A core issue will be the need of the 'Hagenaar' (the citizen). The field of tension is the bureaucratic system of Weber and the opportunities of New Public Management. The challenge is going to be in organizational changes, not in people but in processes. That's difficult because it will imply a significant effort in business process redesign as well.

TURIN

Access to services and opportunities offered by metropolitan, regional, national and international networks is, today, one of the major competitiveness factors of territorial systems. ICTs in all their forms, indeed, are of the essence for enterprises and Public Administrations to issue their services efficiently and effectively.

The Turin metropolitan network is well interconnected with national and international infrastructures. It began its development in the middle of the 90s by reaching, with the contribution of all the involved telecommunications operators, considerable levels of dissemination and capillarity.

The Municipality, as an actor delegated for the promotion of the economic and social development of its territory, wishes to outline a true development strategy of developing the communication networks and new services that are made possible by their improvement (e-Strategy), as a necessary requirement for a globally competitive and "attractive" Municipality.

The main targets outlined, from different perspectives, are:

- The availability of new infrastructures for urban and extra-urban mobility.
- Accessibility to the different areas, also through the telecommunication networks improved on a local and geographical level.
- The new high technological value services for enterprises, connected to the presence of Research centres and excellence and innovation areas of international value.
- Innovative services for residents (entertainment, training, access to commercial services and the Public Administration).

This aims at favouring, at economic level, the growth and the settlement of new enterprises or "cluster" of enterprises, "attracting" new capitals and new investments on the urban territory.

Simultaneously, also thanks to the programming of international events, an increase and improvement of the offered services of an institutional, cultural and tourist nature has been recorded. The increase resulted in improvement of the social quality of the life of citizens, in support for the local enterprises that live and work on the territory and on the increase in the international visibility of the Municipality.

From this point of view, the "Municipality System" is a real enterprise that invests in the territory, produces value in terms of quality of life and pays off thanks to the issued services and the increase in overall wealth produced by the territory. Every investment in the territory, be it public or private, must indeed be considered against a "return" parameter and the measurement of the impact it produces. The formalization of the guidelines of the "e-Strategy Plan" of the Municipality required the definition of a possible development model, taking into account that the timeframe within which the actions of the Plan ought to be carried out reaches 2015.

The e-Strategy plan of the Municipality also needs to be connected to the medium- and long-term follow-up indicators, which are currently being adjusted in the review of the Strategic Plan of Turin now in place.

VISION

The e-Strategy of the Municipality derives from a vision: that of a Turin as a place in which, over the next ten years:

- The majority of citizens and enterprises will be connected (or may be connected as they please) to the employment telematic network for educational or entertainment reasons, to create or strengthen their social relationships.
- Enterprises may find high-quality technological infrastructures and competences.
- Telecommunication networks are to be configured as real exchange channels with full legal value (message security, virtualisation of legal requirements), with certified identity of users and strong competence in the use of this type of instruments also by the citizens who traditionally are not computer literate.
- Public Administration will be oriented towards the citizen and accessible on line for the best part of administrative requirements (which will be simplified and easy to understand for all users).

- Online services will be issued to cover all the main needs of the citizens, also operating in close synergy with the “Utilities” (local public services companies).
- Citizens, professionals or enterprises may have their say in proposing initiatives to improve Public Authorities and the civil society with e-Democracy tools.

Toward e-Government web 2.0 services

User interaction is changing: and this is, in a nutshell, what now we call web 2.0, a way to design and realize services that have new functions and new capabilities according to this paradigm.

Users now have a better understanding of online City services and call for a better interface, easy interaction, error-proofed design. This is the challenge that e-Government services have to cope with. To leverage the use of the services developed so far by adding new presentation and behaviour models.

The City of Turin would like to bring all these interactions to existing and new designed services: we started by enhancing our internal search engine system, both semantically (from a content point of view) and functionally (real-time suggestions, tag clouds). Now we are approaching social tagging for e-Government services that promises to add an outstanding level of usability to user browsing experience.

One great success has been a recently-launched personalized home page using City RSS feed: this capitalizes a long term investment in having RSS enabled-services (when we started, we were not fully aware of the whole range of possible uses).

The question now is on how to enhance the user experience. How to have a ‘design for all’ strategy using up-to-date tools and methodologies. The users are there, and want to use our services best. We are all committed to a better understanding of these possibilities and to moving towards e-Government 2.0 services, now.

e-Government in TURIN

"TORINOFACILE" (www.torinofacile.it)

"Torinofacile" is the Portal of telematic services of the Municipality of Turin, accessible by citizens, professionals and enterprises. Up to 2005 "Torinofacile" recorded 282,118 accesses (October 2001 – June 2005).

User typology (data June 2005)

- Citizens resident in Turin (with the "Torino Facilissima" card): 14,985
- Citizens not resident in Turin: 6,768
- Professionals/Enterprises: 1,072
- Total: 22,825

Access to the main services (data June 2005)

- Calculation and payment of ICI tax on line: 27,084
- "Sportello Facile" Booking of access to building archive: 7,498
- Consultation of taxdata surveys and ICI tax violations: 6,490
- Self – certification: 3,365
- Consultation of interventions on public soil (for professionals): 1,390
- Consultation of Cash Orders for municipal suppliers: 544
- Declaration of change of address: 502

EAR, Easy Appointment Reservation

The EAR service (Easy Appointment Reservation service or Sportello Facile in Italian) is a web-based application through which citizens can choose the City Department they are interested in contacting, among those available in the system. The service allows for browsing the office's time schedule and selecting the day in order for the citizens to choose the time slot they prefer, so that they can have an appointment with an officer and discuss their files.

The true challenge, however, did not lie in setting up a normal booking system, like many others in the market, but rather in designing a booking system that is flexible enough so as to satisfy the requirements of a public administration of considerable size, such as the Municipality of Turin.

The system, developed under a GPL software licence and multilanguage, is able to simultaneously manage the time settings of different counters and provide to each office manager with a complete personalized administration system. Citizen authentication is possible thanks to the TorinoFacile framework, a key entry for all e-Government services. If in a hurry, users can also book by providing a valid mobile phone number, to which a one-time password is sent, avoiding system misuse.

The service managed 40 counters in 2006, having provided 41,018 bookings requested by 7593 registered users. Private Housing Department, Marriage Department and Sport and Leisure Department are, among others, the most booked counters.

ROLE AND OPERATING AREAS OF THE MUNICIPALITY

The large Municipalities and their metropolitan areas are increasingly playing a central role in the process of economic and social development of contemporary societies. With this premise in mind, it is of the essence that the different public and private actors meet as a locally rooted “whole” to develop the necessary strategies and synergies to create a true “system”.

This is the reason why today a “town” can no longer be intended as something limited by an administrative border, but rather as the whole of its metropolitan area: an agglomeration of inhabited centres, production enterprises, institutions and citizens of a territory that goes beyond the limited and intangible geographic borders with which a single institutional subject is identified.

The true challenge is hence that of relating to other wider areas, as Barcelona, Lyon, London or Stuttgart have already done. These are European realities that have set up an “ad hoc” metropolitan authority structure and have been able to create agglomeration plans for tens of municipalities. In wider terms, the issue of governance of large metropolitan areas came to the fore. Simplifying the matter, it can be reached with two different, albeit not necessarily conflicting, approaches:

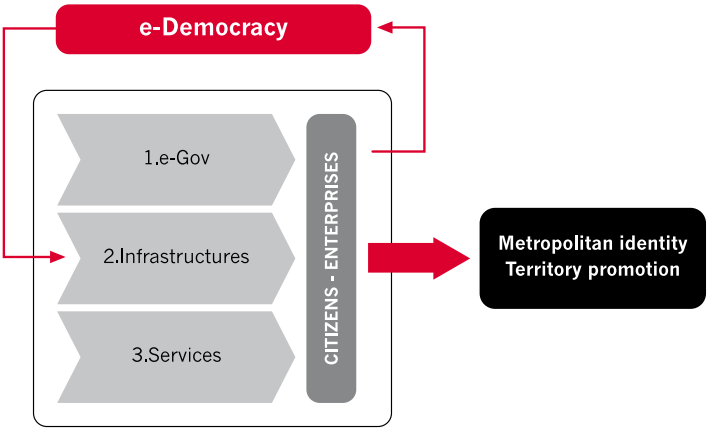
- The first (top-down), with mainly legislative interventions.
- The second (bottom-up), through the growth of the ability and the will to cooperate among all the institutional subjects that operate over a specific area. This favours the progressive growth of a "metropolitan identity" that still takes into account the present institutional pluralism.

The development of an economy based on digital services and more generally on knowledge (core and objective of e-Strategy) needs to be considered in the framework of the bottom-up approach to build and strengthen the Turin metropolitan identity.

It is also worth mentioning that the territory nowadays tends to be organised around large metropolitan areas, whose influence is reflected at regional level. From this point of view, the e-Strategy of the Turin area involves wider areas of the Piedmont territory in different ways.

E-STRATEGY INTERVENTION AREA OF THE MUNICIPALITY OF TURIN

The e-Strategy plan of the Municipality of Turin is developed in three macro-areas of intervention, with e-democracy as a general management element.



e-Strategy

The three areas are divided as follows:

- e-Government: online innovative services offered to citizens and/or enterprises by Local Public Administrations through "Sistema Piemonte" and the new cooperation modes between local level institutions (Region, Provinces and Municipality of Turin).
- Technological infrastructures: where development is shared with other public and private bodies, through to support for setting up redesigning services for citizens and enterprises (today increasingly more disseminated through new multimedia channels).
- Services: in this case, from development through to sharing (be they issued by private actors or are produced and marketed by private parties).

E-GOVERNMENT

The objective of Municipalities, Mountain Communities and Provinces (with the central presence of the Region in setting up the infrastructures) was to develop infrastructure and innovative online services for citizens and enterprises.

The co-funding logic of the projects presented in the First National Call of the Ministry for Innovation and Technologies awarded the "multi-institution" projects that envisage the co-partnership, with a leading Administration, of more Local Institutions. More specifically, this was the set-up of all the projects presented at the Piedmont level (with the so-called "Multi-project Sistema Piemonte") that aimed at making the services available to the larger possible number of citizens or enterprises residing in Piemonte.

The evolution of the e-Government services must thus continue along this road: cooperating in the development phase and sharing results, making it possible to reuse the positive experiences gained in other national contexts.

TECHNOLOGICAL INFRASTRUCTURES

The development of innovative projects in the public ICT framework implies the possibility of having technologically advanced infrastructures, acting not only as a "backbone" of the Information System of every Institution, but also, and most of all, as potential convergence elements between different structures. This evolution guarantees an optimisation of the investments by the Institutions involved and greater willingness to collaborate and exchange information.

The action must clearly be considered from two points of view:

- A first framework connected to the accessibility of services by citizens and enterprises and hence the strengthening of the adopted infrastructures and the widening of the modes in which information and services are exploited (through fibre optic, satellite, Wi-Fi, digital TV, etc.).
- A second framework, no less important, focussing on the back-office components and aimed at increasing the typology of services and information that can be issued through a stronger collaboration between public and private sector.

The development of technological infrastructures by the Public Administration should occur in synergy with the industrial policies of telecommunication enterprises. In this regard, the investment of the Public Authorities should favour the private sector as far as design and implementation of existing infrastructures is concerned. Conversely, direct public investments in infrastructures are not to be excluded a priori, but should be limited to areas in which the "market" is not able to give a positive reply to the needs identified by the territory. Network development should also be aimed at improving Public Authorities and increasing the services provided by private actors.

SERVICES

The new reference context, characterised by increasingly closer connections between the public and private realities of the territory, the reduction of public economic resources and the growth of innovation processes, led to the transformation of the relationship between the public institutions and enterprises. A relationship which is increasingly oriented towards favouring cooperation and coordination to help in the definition of new services available to the public and the private sector.

Their development (be they provided by new enterprises or enterprises that chose to settle in the territory) is based on a twofold public policy:

- Attention to the development of technological infrastructures and to the safeguarding and growth of social capital.
- Territorial marketing policies (on which the Municipality of Turin, already active through local agencies should adopt a more incisive stance anyway).

Moreover, it must be pointed out that the development of digital services must necessarily occur simultaneously with the development of telecommunication infrastructures. Indeed, only the use of services by citizens and enterprises justifies public investments and makes investments carried out by private subjects economically sustainable. The use of private infrastructures by the Public Administration for public services, or anyway non commercial services, may favour investment decisions by private parties.

E-DEMOCRACY

Unlike the previous three macro areas of intervention, e-democracy acts as a transversal driver of the areas. In the new European context there is an increasingly strong need, from the local Public Administrations, to associate the development of innovative services (e-Government) with new forms of involvement in institutional "life".

This objective, more precisely defined as e-democracy, is one of the pillars of e-Strategy action lines and focuses on the reduction of the distances between institutions and local governments on the one hand, and private actors (citizens and enterprises) on the other.

An objective that can be reached through the use of ICT technologies, making it easier to experiment innovative forms of participation, enhance decision-making processes for local Administrations, thus overcoming the digital divide.
e-Democracy instruments make it possible to:

- Stimulate the growth of a sense of belonging to the Turin and Piedmont community.
- Have constant feedback on public policies and therefore on the development policies of the digital and knowledge society.

To guarantee these results, it is necessary to act on different fronts:

- Overcome the digital divide by working on social inclusion.
- Guarantee greater transparency in the operations of the local administration and easier access to public information.
- Make new forms of dialogue between citizens and institutions available.
- Renew the electoral framework, including the processes to choose or select the candidatures and vote, but also online surveys on issues of collective interest.
- Involve citizens, individually or as associations, in specific local development decision-making processes.

For it to be possible to head in this direction, we may leverage the advantages offered today by ICT (rapid exchange, flexibility of the instrument that makes it possible to overcome space and time limits, distance cooperation, etc.) and invest in promotion, also through traditional modes, of these new types of collaboration.

STAKEHOLDERS INVOLVED

The main stakeholders to be involved in the design and activation of the e-Strategy policies of the Municipality are:

- The other Public Administrations in the territory and at national level (for e-Government services).
- Citizen associations (social partners).
- Piedmont Universities and the school system, also as a privileged communication channel (already present in the didactic and training initiatives of the project "Growing up in the Town" of the Municipality of Turin).
- Public service enterprises (e-Government services; and infrastructures).
- Technology parks.
- Telecommunications enterprises (infrastructures).
- SMEs (development of new services).
- Agencies for territory promotion.

SCHEDULE OF EXPECTED ACTIONS

Each of the three areas of intervention (e-Government, infrastructures, services) must firstly detail:

- The present situation.
- Expected activities or those that are necessary in the short term, for which purpose coordination in the e-Strategy framework is called for.
- The actions required of the different actors.
- The results awaited after 2, 5 and 10 years.
- The forecast investments.
- The sources of funding or self-funding.

The three areas include the following action typologies:

- Direct actions: the Municipality acts directly with its resources (alone or together with other actors) or with activities carried out directly by its administrative structure.
- Coordination actions: the Municipality promotes (or takes part in) coordinating activities with subjects that have full political and/or management autonomy. The objective should not be to increase synergies between the present policies adopted by the public

institutions, but also by the utilities or the agencies, preventing the competitive use of limited resources and adequately leveraging existing excellences.
- Actions of financial support or promotion: this line of action, worth mentioning separately considering its importance, can be interpreted as partially overlapping the previous two, as it may require the use of public resources or the coordination of autonomous subjects.

The interventions that can be included in this line of action are characterised by their aim to improve the competitiveness of the Turin (and Piedmont) ICT system, a subsystem of a wider production system that includes many areas of excellence: from automotive to precision mechanics, from automation to design;

- Regulation: it is the line of action that is more closely connected to the role of the Municipality and of Public Administration in general: subjects that are able to impose general obligations on other public or private actors involved.

- Direct actions by private subjects: all the activities that have been launched bearing in mind the enterprise point of view (that seeks to optimise return on investments) are of fundamental importance to the growth of the liveability and competitiveness of the Municipality. Together with public actions, indeed, they are one of the success requirements for the Municipal e-Strategy.

In the medium and long term, moreover, it is necessary to make strategic choices relating to clusters of ICT enterprises that concentrate resources and capacities over a limited number of economic or research areas. Those, to be more precise, in which the Turin territory has a consolidated project and production capacity.

For example:

- Automotive: which is, with reference to the topic of e-strategy, all the legal competences connected to ICT technologies such as mobility or fleet management, to give but one example;
- Training: it is a strategic sector, both with regard to Public Administration and banking or insurance services. Particular importance is attached to sectors connected to the production of new multimedia contents or, more in general, the development of the whole multimedia sector.

- Domotics: everything related to topics such as security and distance control.
- Telemedicine: to create a new relationship between doctors and patients and healing solutions and processes that prioritise people's mobility and time needs.

The development component of financial services that are adequate for SMEs is transversal to the above-mentioned areas, but equally important.

The opportunity (and the possibility) to promote actions aimed at creating a scientific district for mathematic disciplines is to be verified. Such district, that do not require unsustainable investments in resources, would produce important competences transversal to other Turin economic sectors, from the production of models for the automotive sector to models applicable to financial and insurance services through to medicine with diagnostic applications.

In conclusion, there is a need for further progress in strengthening co-operation and project sharing with the other administrations, widening the number of online services, covering all "life events" (not only administrative procedures) and extending the territory covered.

That will allow for a significant extension pf the perimeter of the Electronic Administration (including democratic participation, educational and training services, social inclusion of new citizens), reducing and preventing limitations imposed by the cultural and digital divide (due to lack of technical knowledge to access services, because of access infrastructure deficiencies or costs).

SANDRO GOLZIO

Manager of the city of Turin real estate, company shareholding, information and telecommunication systems

Sandro Golzio is manager of City of Torino Real Estate, Company shareholding, Information and Telecommunication Systems.

He holds a Degree in Politics and Economics and a Master in Administrative Law.

He started in the banking sector and then moved to the Regione Piemonte (Public Body) in the Trade, Handicraft and Small business area. Subsequently, while still in the Regione Piemonte, he was appointed External Relations Manager. In the city of San Mauro Torinese he held the post was the Finance, Public wealth and Taxes manager. In the City of Turin he was first appointed as Auditing manager, then Business window manager.

From 2001 he has been responsible for the planning and management of the City of Turin Information and Telecommunication Systems.

He is also part of the City Board of Government. Under his management the City developed a strategic plan for e-Government.

What is the current strategy of your city as far as e-Government is concerned?

Our strategy can be compared to a journey (as a process). There are common strategies in place to increase the number of services for the citizens. Every year, we release five or ten new services under a general logic or philosophy, which is to cooperate with private sector to develop these services together under a public and private cooperation. There is a mix between non-profit and profit services that are planned and released every year by the city under the e-Government umbrella.

In fact there is a combination of how to guarantee the involvement of both public and private stakeholders, the companies in the city. Since we are using a public consortium as the cooperation vehicle, this is making it easier for us to exchange information. We have public administrations, entities, regional, provincial and a lot of cities participating in our consortium. So as an e-Government strategy, we rely on the co-financing gathered from the Italian Government which is given to serve many medium-size Municipalities that wanted to develop services together.

This is a task that can be done because we are under the umbrella of the Piemonte region. We are sharing a vision, we are sharing the knowledge, and the city of Turin is playing a leading role very well supported by having one of the biggest information systems in Italy.

Due to the early developments that were made in information systems (Turin turned its attention to data processing started just after the Second World War, and a strong unified legacy system was up in 1970) we have also to face a significant renovation of many legacy systems. As a consequence we

have to address many investments over time, as we cannot change our system overnight.

Another important characteristic of our platforms is the existence of significant internal dependencies. In some cases these dependencies between components are not evident from an external service perspective, but the fact is that in many cases you can't change a component in an isolated way without inducing undesired effects. As a consequence, we are devoting our best efforts to consolidating and renovating the overall system platforms to allow us to execute coming innovative projects.

How do you see the challenge that you are facing as far as e-Government is concerned?

At this moment our understanding is that all the different projects of e-Government in Italy are probably working in the same direction, with the same goal, but alone, in isolation.

There are different projects that sometimes try to talk, to cooperate, but in different places, in different cities, people often make or try to make the same thing with a greater waste of sources.

The key challenge for us is about setting a up much stronger cooperation between different projects, to work together, to cooperate in the journey to achieve, at the end, of course, integrated services for citizens.

It is also about developing cooperation to generate integrated technology that can be used by different administration, by different levels of local and national public instances.

It is not viable for the inhabitants of Turin to have one system and a neighbouring city to have a totally different one.

Thinking in terms of metropolitan areas, it becomes evident that you cannot give the inhabitants of the Turin metropolitan area such diverse and different services because they live in different parts of the territory. So e-Government in the next couple of years will be trying to cooperate, integrating services superseded for several local authorities sharing a wider territory.

Could you briefly describe your e-Government city model?

As already pointed out, our main characteristic is that all citizens living in the towns around Turin can use the same kind of service that we are developing in our e-Government project. This is the result of a unique experience of an extensive e-Government collaborative programme

involving all local and regional public authorities in Piemonte, the only experience of its kind in Italy and probably in Europe if we take into consideration its scope and extent.

Basically, the key characteristic of Turin is also that we have not only built a collaborative model for the development of e-Government but also that its deployment is based on the existence of an impressive shared infrastructure which operations have outsourced to a public institution.

Could you explain the key constituency-building phases, the phases which were critical in giving birth to this model you introduced?

The key catalyst has been the existence of a consortium composed of all local administrations that decided to join efforts and resources to deal with the effects of the evolution the needed for their existing legacy systems.

Another decision of paramount importance was to concentrate main action lines on the front-office layer, as a way to tackle the critical problem derived from the existence of many diverse platform sources. In this way the intention was to integrate the output of these back-office systems into a new front-office system specifically designed for citizens. That was the core technological concept behind our e-Government project.

Finally, the importance of the decision to outsource all the information platforms and their operation, development and maintenance should be highlighted. In this regard it has to be noted that our options were not merely about "outsourcing", as in that case we would have ended up choosing a large and renowned international outsourcing company. Our model for outsourcing was "sharing", so a way a public company (CSI) took overall responsibility for this shared infrastructure and all its associated services. This has also resulted in evident cost contention and reduction.

CSI is a big systems integrator company 100% owned by our public administration. They are not necessarily always relying in their internal resources (which are anyway impressive in terms of capacity and competences) as very often CSI goes to the public market, contracting out the involvement of professional software houses.

What do you think about having an explicit and well communicated model which is also used to guide the discussions and further decisions?

We have to clarify. The e-Government project is now a key success factor because the public administration decided to move from internal

considerations of their system to an external view. e-Government changed our culture. It is not simply about getting an internal service up and running. You get it entirely from the outside, as a key component in a larger strategy, intended to build up the innovative concept of a digital city that should also act as a master pillar of our evolution in the provision of services to our citizens.

If you had the opportunity to transfer what you learned through this process to another city, what do you think would be your quick and immediate suggestion for them to take carefully into account?

Well, we would strongly emphasize the need to develop a solid and viable long-term strategy, designed to help the city to evolve from traditional thinking to a fully digital city.

Generally speaking, digital strategies are not short-term related, they are long-term. It is important to be conscious as earliest as possible about this particular characteristic because it takes time to share and develop common strategies. In this respect, every single change at the political, administrative or legal framework will be key, and you need to be prepared. Otherwise you will lose one, two or three years and then you will have to start again having lost momentum and an eventual opportunity.

What do you think are the key assets that the city has been generating in your e-Government project until now?

We managed to develop and implement a very unique operational approach that will allow us to further develop with the appropriate investment models and all the services needed by citizens. We have also managed to shift from isolated local administrations to become a significant stakeholder in the e-Government arena in Italy, thus allowing us to become larger cities much more easily than ever before.

Our approach helped us to deliver better and more sophisticated services to our citizens, but also to deliver the internal services needed for back-end purposes. This richness in scope does allow for a more efficient execution of our services, releasing our citizens from the need to move and carry information which is subsequently automatically dealt with by our systems.

Our models do not imply that all cities and towns in Piemonte have to have the same pace in terms of e-Government deployment. All of us have the option to choose our best way, but if they are part of our particular e-Government ecosystem, all our systems can easily be connected and interoperable.

What do you think the killer services are, those most appreciated by your citizens?

In our case, our citizens are making an intensive use of our booking application component, intended to facilitate booking to get access to public services. The use of our systems supporting e-Commerce is also significant, intended to cover bookings and payment (like renting a tennis court, tickets to a musical performance). These two components are part of TorinoFacile, one of our successful service umbrellas.

What are still the missing components, the components that you still don't have or that you're planning to have in the near future?

The most important infrastructure that we need to seriously reconsider and which we are now beginning to develop is the core of the administration, the back-office system. It will include extensions for document and content management, plus all the associated workflow management functionalities.

In essence, it will be a system in which citizens can send their paperwork (forms) duly signed digitally to a well-defined service paperwork (transactions). The whole process will of course be regulated by the in-place regulation giving full validity to the overall documentary cycle. This approach is also intended to allow us to become, in the near future, a paperless public administration.

Of course it does entail a serious reengineering of the back-office platform. As a fundamental project, it will be shared with the region of Piemonte and technically backed by the Polytechnic of Turin.

Does this imply changes in regulations? At the national organizational level or local level?

There would be some changes in the local regulation to make it possible to keep our eye on the overall process to facilitate effective tracking. Regulatory changes are also expected at national level with a view to facilitating local pilots needing refinement in the applicable administrative rules.

How are this and other services going to be affected by the need for multi-channel and multimodality in the interfaces with the citizens?

We believe that multi-channel and multimodality are very important as key components to win in the digital environment. The multi-channel strategy is the key factor for the future, for us.

And not just for the citizens, but also for the internal use of the Council, since, for instance our police could use these facilities to fill in and

submit to the internal system through any channels and keeping track of them later on from any of the available channels.

What do you think would be the best couple of examples in Turin that would best explain the benefits that you got of your particular city model?

The booking system is very popular among professionals because it's very useful and cheaper than having to pay a lot to intermediaries in normal conditions to get a ticket.

We also have now a new system based on web 2.0 technologies where you can personalize the information you want to get when you go to the homepage of the Turin call-centre website. You can also receive it easily on your mobile because you subscribe to the feed and the feed comes to you automatically, with all the main information about traffic or cultural events.

What we have done in recent years about converting some parts of the website to different format is now the other way round. We let the system automatically provide the RSS feeder with headlines or information. In the very near future we will also choose a multi-accessing system.

How transferable do you think your city experience is?

Over the years we have worked very efficiently because we've never had a 'no' from our politicians, as they trusted all the developments we carried out. Our City Information System is well known around Italy, not because of its size or complexity, but rather for its value.

We also think the real value for many politicians was the consolidation of the Torinofacile trademark and the relevance of the Turin information system in the e-Government system in Italy. This has opened up a sustained space to facilitate cooperation, and also to see our approaches copied elsewhere, which we see as a confirmation of our vision.

Is it then your experience that branding should be considered as a key component in the definition of e-Government strategies?

Branding is as important as gathering an appropriate balance with regard to cost reduction and getting a suitable return on investment.

In spite of the fact that our politicians have continually backed our proposals, we have been very conscious about every single request and about the scope and the extent of new projects. Turin is a very well-known municipality in Italy due to the advances we have made in applying technology to improve our services to the citizens. But technology is not always the adequate answer. When a certain problem

or area for improvement lacks a minimum degree of economies of scale, the solution does not necessarily come from technology.

This sustained consciousness has been well appreciated by our political level, and we are in fact relying on their support to continue to evolve while also continuing to be efficient and effective e-Government services, without losing this ground-based appreciation of the value that we are committed to providing to the City.

So, branding improvement has consistently helped to position our City as an advanced player in the deployment of e-Government in Italy, but has also forced us to develop a very pragmatic and credible approach well suited to tackle both financial limitations and specific requests to deliver value to the city and to our citizens.

What do you think are the key challenges that you will have to face in the coming years and how this could affect your strategy?

From a political standpoint, we will start using technologies with significant potential to induce changes at social level. Clear examples are the implementation of social network technologies, social bookmarking, and social activities on the web, fully aligned with the radical change imposed by web 2.0 technologies.

We understand that preparing ourselves and our citizens for these technologies will result in a greater commitment and engagement of our citizens in the overall process of many radically new services, not just as passive stakeholders but as active contributors. Our aim is not simply to improve our 'personalization' capacities but to offer the most sophisticated technical components to facilitate the seamless integration of citizens in the City's daily life.

Another challenge for the near future is about developing new contents, created specifically for fully multi-channel services, strategically aligned with the evolution of Turin as a city of knowledge.

VIENNA

Vienna is the capital of the Republic of Austria. It is the country's biggest city and seat of many international organisations (official UN seat, OECD headquarters). Its 1.65 million inhabitants live in a space of 414 square kilometres.

Vienna has a special position in Austria as it is both a city and a federal province. The mayor of Vienna is also the governor of the province, while the City Council also acts as provincial government. The City Council consists of 100 members and constitutes the City's highest official body.

The City's policies are geared, in principle, towards sustainability, regional relations, gender mainstreaming, active location policies, as well as public relations and participation.

In 1995, the City of Vienna launched its online appearance with a press review. This was soon followed by the "Digital City" which consisted of a fictitious underground map with lines and stations directing users to the city's Internet services. In 1996, interactive city map search was introduced which continues to be the city's most popular online service. In the following years the design was changed several times and adapted to user needs.

In 1998, the project WELCOM "Wiener Electronic Commerce" was introduced with the objective of making the City of Vienna fit for eCommerce. In 2001, the City embarked upon the "e-Vienna" project to expand its e-Government services at a new, easily memorized address www.wien.at. Thousands of information pages were offered along with interactive services saving customers visits to the authorities, enabling them to pay online and even book some of the City's resources via the Internet. The "Virtual Office" was born.

Since 2005, the maintenance and further development of Internet services have been carried out through an open source "Content Management System".

MAKING DATA MOVE – MAKING TIME FOR PEOPLE

The Vienna e-Government approach is summarized through its choice of slogan: "Making Data Move – Making Time for People".

The City vision (e-vision) is that by means of ICT the objective is to continuously expand and optimise its comprehensive range of high-quality administrative services for citizens and the business community. Thus, the target is to further enhance quality of life for people and keep Vienna attractive as a business location.

In strategic terms, the City of Vienna has defined corporate objectives in terms of performance and outcome, customers, economy and management, which serve as sign posts on the road towards an up-to-date service enterprise with social responsibility.

Information and Communication Technologies (ICT) as an innovation motor play a key role in this development process. ICT strategy is geared to the enterprise strategy of the City of Vienna and aims at optimising the added value of ICT services and products for the implementation of the overall strategy.

In particular, ICT supports the two cornerstones of administrative modernisation, i.e. customer-orientation and effectiveness.

More particularly, the targeted strategic objectives are based upon significantly increasing the utilisation and intensity of e-Government applications, the further expansion of e-Government Virtual Office services (wien.at) and the automation of processes.

Vienna business register (WGR)
e-Business Vienna

e-Business is part of a new public management strategy to modernise procedures at the Vienna City Administration and represents one of the first e-Government processes applied across all administrative areas. It is there to support citizens and staff at the City Administration with services as diverse as filing applications (through traditional channels or via the internet), (electronic) delivery of relevant administrative decisions, payment of fees and swift back-office processing. Networking of all departments involved in the "Administration of Businesses" means that customers deal with "one" authority only. Each department has access to all relevant files. High-quality data are entered once only, be it at the decentralised Municipal District Offices or at MA 63, and are transferred to the central federal trade register (ZGR). The local chamber of commerce has also been incorporated into the system.

The e-Business project consists of the following elements:

- The Vienna business register (WGR).
- Business-online plus website.
- Business workflow.

The application WGR was made available on 1 January 1997. It covers all functions required to administer the register including issuance of documents and records and communication with the central federal business register (data transfer, reports).

Business-online went into operation in August 2001 as part of the e-Government project. It supports the following processes:

- Applying for a business licence.
- Applying for confirmation of personal suitability.
- Applying for exemption from submitting proof of qualification.
- Registering the appointment of a new managing director or withdrawing the registration of a current managing director.
- Changing a business address in Vienna.
- Registering an additional business establishment in Vienna.
- Registering a change to the entrepreneur's name or company name.
- Relinquishing a business licence in Vienna.
- Relinquishing an additional business establishment registered in Vienna.

The individual masks provide information in six languages (German, English, French, Croatian, Serbian, Turkish). In principle there are two processing paths to choose from, new registrations or change of registration. To change a registration users are required to enter their old registration number. Once all the necessary entries have been made and the process has been completed and sent off, users are notified by return e-mail of which department their application has been sent to (determined automatically). Included in the e-mail is an identification number allowing users to send additional complementary documents (by e-mail or fax) as needed.

Installation of the workflow process in all organisational units concerned with "Administration of Businesses" in Vienna makes it possible to utilise subjects of records at all times (comprehensive presentation of records and files, register of documents, options to check in registers).

THE VIRTUAL OFFICE

The Virtual Office covers all e-Government services offered by the City of Vienna. The services required can be accessed in three ways, by indicating a person's current situation in the life cycle (e.g. birth), by entering a term of reference into a specific domain search machine or by looking up a service in an alphabetical list.

With this structure it is not necessary for users to know which municipal department is handling their request. When using the life cycle situation access the system permits access to personal documents, society and social matters, health-related issues, leisure time and sports, environment, business and economy, financial matters, construction & housing and traffic and transport.

The administrative assistance pages were created to assist users in dealing with the authorities and provide information on services offered by the city administration. Structured and coherent elements were chosen to explain and facilitate the administrative steps involved and eliminate them where possible.

Depending on the services required administrative assistance pages include information, download forms and online forms, as well as facilities for making appointments and payments online.

As of 1 December 2006 the Virtual Office has consisted of more than 340 administrative assistance pages, 160 form sheets and 80 online procedures. The Office also provides links to other regional authorities and administrative procedures which lie outside the sphere of competence of the City of Vienna to direct users to the services required.

ELECTRONIC REGISTRATION OF BUSINESS AND TRADE

The Internet service for registrations of business and trade rose from 1,121 (8%) in 2002 to 8,383 (34%) in 2005.

The use of this service allows for saving at least one hour for each applicant and at least half an hour for the authority concerned. These e-Government services are also supported by enabling translation facilities for several languages.

VIENNA CITIZENSHIP INFORMATION SYSTEM

The Vienna Citizenship Information System was created to help individuals wishing to take on Austrian citizenship find out whether or not they meet the necessary requirements.

This service saves time and money both for the person concerned and the authorities.

The number of online applications increased by 10% between September 2003 and June 2005. The Internet expert system has reduced the number of personal appointments by 33% and telephone requests by as much as 50%.

Applicants are also saved unnecessary visits to the authorities' offices while members of staff at the authorities can concentrate on de facto citizenship cases.

ONLINE VOTING TICKET APPLICATION

Citizens wishing to avail themselves of their right to vote but are away from their home district on the Election Day can now order voting cards online with or without citizen's card.

e-Payment at the Vienna City Administration

The objective of e-Government is to support applications for administrative procedures and their processing via the internet.

Accordingly, it is also necessary to regulate automated notification of costs accrued and to offer facilities for direct payment via the Internet. The central database records all cases and the financial obligations involved. Applicants are thus given a clear defining argument which is attached to a payment service and is subsequently re-determined for final clearing. The following payment options are available:

- Payment via the Internet.
- Payment by money order.
- Payment at the cashier's office.

The e-Payment project takes into account customer demand for streamlined administrative procedures and new forms of payment via the internet. Internal processes are optimised simultaneously. Immediate payment of charges helps to speed up processes. The actual amount of payments received has no bearing on processing times.

Customers can choose from the following payment options regardless of whether their applications are handled via the internet, in writing or directly with the authorities in charge:

- Payment via the internet (credit cards, eps, maestro cards) at www.wien.at.
- Payment by money order.
- Payment at the central cashier's office.

The City's Internet platform and electronic payment options are available round the clock. Customers who avail themselves of this service enjoy the added comfort of no-paper transactions with Internet-banking remittance forms.

Online payment confirmations automatically inform the relevant department of payments effected. As soon as a case is recorded in the database the payment effected is reported to the relevant application (e.g. ELAK – electronic files). Optimised transfer of information allows the authority to continue processing without delay. Customers/ businesses enjoy reduced payment processes and rapid settlement of their transactions.

Processes for handling arrears have also been automated and optimised (deadline-supported form sheets for costs orders and demands for payment).

In the event that federal fees have not been paid within the time limit for payment an automated report is delivered to the tax office for fees and transactions taxes. Electronic transmittal is top priority.

The project has successfully installed an infrastructure readily available for departments of the City Administration and authorities outside.

The Austrian citizen's card was conceived with two functions in mind: clear identification of the citizen and high-quality authentication through safe electronic signature. The electronic signature is used instead of the personal signature.

During the 2006 general elections, 27% of applicants for voting tickets made use of the online service and saved themselves at least one visit to the authorities' offices.

Those who used their citizen's card saved also the authorities the trouble of having to check their identity and received their voting tickets right away.

OFFICIAL ELECTRONIC SIGNATURE

The first-ever official electronic given in Austria was issued in Vienna on 10 May, 2005 in the course of an "e-Government runner", the land acquisition for foreigners, on an approval to sell a freehold flat to a non-EU citizen, and it was signed electronically in accordance with the law. Relevant fees were also paid electronically.

ELECTRONIC DELIVERY

The first electronic delivery by delivery server in Austria was made on 21 July 2006 in accordance with the Austrian e-Government act and the delivery act.

Austria was one of the first EU states to install an e-Government act which came into force on 27 February 2004 for the purpose of promoting communication and, above all, electronic correspondence with public authorities.

E-GOVERNMENT TAKE UP INFRASTRUCTURES AND ORGANISATIONAL CHANGE

The Virtual Office and its administrative assistance pages provide a structured overview of administrative processes which also helps to increase internal knowledge management. The Internet offers improved information while administrative procedures are dealt with more efficiently. Citizens who are well informed are more satisfied and develop a more positive attitude towards staff members of the public administration.

Standard questions are no longer handled by officials but via the Internet, thus allowing officials more time to deal with more complex requests.

Increasing utilisation of the websites requires improved usability, which in turn increases utilisation and customer expectations. In this sense, it has to be noted that e-Government has contributed substantially to developing customer orientation.

By October 2006, 27 million visits to www.wien.at had been registered. In 2006, the Virtual Office was used approximately 350,000 times per month.

The Austrian e-Government act provides that by 1 January, 2008 the last official Internet sites offering information and electronic support with procedures must be designed in accordance with international standards, including barrier-free access for people with disabilities. A style guide for electronic form sheets and barrier-free access to Internet services was drawn up and published accordingly. The style guide is to introduce systematic, standardized and user-friendly form sheets, thereby motivating citizens and members of the business community to avail themselves of electronic services to the benefit of both sides.

INTEROPERABILITY AND COOPERATION WITH OTHER PUBLIC AUTHORITIES

Interfaces are among the main challenges to be mastered to ensure continuity of processes. Several technical and structural aspects had to be dealt with before electronic delivery by delivery server was first performed in accordance with the law.

Widespread acceptance (adoption) of e-Government essentially also depends on the number of citizen's cards distributed and used for electronic identification and authentication.

As early as 2000, a decision was taken to intensify cooperation and exchange of information at the national level and to pursue e-Government across provincial borders. Two working groups were installed to deal with legal and technical issues. The Austrian government subsequently passed a resolution to install the Plattform Digitales Österreich e-Government platform. The platform relies on networking, integration and cooperation of all key players in the field. Its objective are to promote intensive cooperation at e-Government level between the federal government, provincial governments, municipalities and other public institutions and the business community.

Top priorities for the working programme include securing the sustainability of e-Government applications, promoting innovation and competence, and increasing interoperability and international cooperation.

Main emphasis is also placed on improving implementation of online procedures, on reforming the administration, reorganizing and networking procedures and methods used by the administration and on improving transparency of lawmaking processes for the public. Working groups are currently engaged in handling specific items, including, amongst others, the citizen's card ("Bürgerkarte"), the implementation of e-Government and its corresponding accompanying training measures, technical communication architecture, standardized registers (for addresses, registration, etc.), style guide and electronic delivery.

CITIZENS' ADOPTION OF E-GOVERNMENT PUBLIC SERVICES

In 2005 a representative survey was carried out among people in Vienna to assess the acceptance of the City's website and e-Government services. The following conclusions highlighted that 2/3 of the adult population in Vienna use the Internet, 54% of all Viennese were aware of the existence of www.wien.at and that 46% of all Viennese have already used it.

The most popular service was the online city map and the address finder, whilst 50% of all users have accessed the Virtual Office as a source of information, with 25% of all users having already used e-Government services.

The City's general web site (www.wien.at) was visited frequently (October 2006: 27 million visits), as was the Virtual Office itself. In 2006, administrative assistance pages were visited between 300,000 and 400,000 times per month.

FUTURE TRENDS AND CHALLENGES

In keeping with the EU i2010 Initiative, in late 2005, the Austrian federal government defined a political mandate as part of the Administrative Reform.

First target was the facilitation of contact between citizens and the administration by speeding up communication between individual administrative offices. In order to address this objective, some improvements were duly identified. Among them, the need for common technical standards for electronic accounting (where the administration shall cooperate with the business community), the need to improve speedy electronic payment transactions between citizens and the administration (e.g. by credit card and e-payment), the need to extend, to all areas of the administration, the electronic delivery of official documents to citizens and members of the business community, the need to make the electronic form sheets public-friendly on the basis of the standards prepared by local authorities (e-Government style guide).

The second target was to speed up administrative procedures by placing the emphasis on increasing the utilisation of electronic registers (e.g. central register of residents, commercial register, land register, central trade register) by simplifying interfaces and improving harmonization of registers, in developing additional registers, especially in transaction-intensive matters of personal status and citizenship; and in intensifying electronic networking between local authorities. The third target was to cater to the need to train officials in the administration to act as multipliers and to provide the public with relevant information.

Finally, the need to adapt and revise relevant legislation was envisaged in order to speed up and simplify the implementation of e-Government for specialized procedures.

VIRTUAL OFFICE EXTENDED FUNCTIONS

The City of Vienna's Virtual Office is to be extended in increasing the utilisation intensity of e-Government applications by a number of corresponding actions:

- Focus on "professionals" (lawyers, builders, medical doctors, property management, ...).
- Improving usability.
- PR with customers.
- Awareness-raising measures for members of staff.

Further steps should also be taken to extend e-Government services by: (wien.at / Virtual Office).

- By the end of 2007, barrier-free information pages (administrative assistance pages in conformity with WAI) will be available for all major, customer-relevant processes at the Virtual Office.
- The Virtual Office shall provide downloadable form sheets (PDF, RTF) for all customer-relevant processes which now have individual paper form sheets by the end of 2007. Nationwide style guide for form sheets should also be implemented.

Other additional measures will be:

- Forging ahead with online form sheets.
- Complete barrier-free access to web sites in conformity with WAI.
- Installing electronic payment functions to give citizens freedom of choice.
- Arranging for personal appointments electronically.
- Automation of procedures.

As well as other developments and improvements with:

- Electronic delivery (in accordance with the law).
- Signature cards for electronic signatures, signature infrastructure.
- Official signatures – for approving transactions.
- Utilising form sheet generators to create form sheets in conformity with WAI.
- Identification of applicant.
- Developments in e-Payment.
- Preparing directory services.

e-Government in VIENNA

JOHANN MITTHEISZ

CIO of the Vienna city administration

Johann Mittheisz is CIO as the head of the strategic ICT group in the Chief Executive Office of the Vienna City Administration. He has been working for the City of Vienna/ EDP department in a managerial position since 1972.

As of 1989 he was responsible for implementing EDP at the new Vienna General Hospital, acting as provisional technical director for some time. In 1994 he was entrusted with restructuring EDP at the Vienna Hospital Association and headed its EDP department.

Since 2002, he has been handling as deputy CIO various strategic issues (e-Government, ICT security, electronic files, geodata, e-Health) at the Chief Executive Office. Since 2005, he has been responsible for developing ICT strategies and represents Vienna in its triple role as Province-City-Municipality on a number of national ICT committees.

What is the current strategy of your city as far as e-Government is concerned? How can you describe this strategy?

First of all I would like to highlight our strong orientation to customer service and to the improvement of effectiveness. This is very important for our activities. Our customer is the citizen, but also the enterprises, the business community as we call it. We have different action lines that correspond to our identified and targeted interest groups. In this respect we have one action line for citizens and another one for business or enterprises, as well as a final one for public authorities as well.

How do you see the evolution in e-Government from the city perspective?

As a result of a recent survey carried out last December 2006, we concluded that 58% of our citizens were already aware of our Internet website and that 48% of the citizens of Vienna were also using it. This is a positive and encouraging result, which highlights a good perspective from our customers.

As far as the addition of more services or the increase of channels, our understanding is that the simpler an application is, the more used it is by the customers.

If our application and our Internet platform weren't simple enough to be used, they wouldn't be used by the citizens. We have to make applications simple, because complicated applications will not be used. We used to believe that the information component was not all for the customers.

Moreover, participation and interactivity are important. The European Union reported in the papers that information was the most important service for the citizens and

correspondingly we significantly improved information, but now we are also offering interactive services like e-Payment or electronic schedules. So, the new functionalities are mostly intended to improve the participative and interactive dimension of our services.

In your document, there is a slogan that says "Making data move making time for people"

Yes, this is our slogan. It was created by our mayor around 1998. We have had it since our mayor was elected. Now we still have the same mayor and the same slogan.

Could you try to briefly describe what you think your city model in Vienna for e-Government is?

I'll give you some background to try to provide a meaningful description. In the early developments carried out by the city of Vienna in 1998 there was originally a project named "Welcom – Wiener Electronic Commerce". Its objective was to enable the city of Vienna for e-Commerce. Three years later, in 2001, the city developed the project "e-Vienna". The goal was to deploy e-Government services at a new and easy-to-memorize website address (www.wien.at) and since then interactive services have been offered, serving customers visiting the website, and enabling them to pay online or even book some city resources via the Internet. The Virtual Office was then born and since 2005 maintenance and, moreover, the development of Internet services have been carried out through a Content Management System. Since then, the city model has evolved upon all of these developments and decisions.

From the way you explain the model you are also tackling the phases to be faced for the city model's constituency building. What about the engaged stakeholders, those who participated during this process? Who do you think were the critical ones? How did the City manage to get them involved? What was the role of politicians and the priorities that were set?

For the preliminary creation of our systems we developed the infrastructure for key-applications, i.e. e-Payment by our EDP department, as responsible for the development of the tools. The departments in question are in charge of contents (for instance, the social or the youth department). All departments use a common Content Management System to instantiate Internet pages and the EDP department was responsible for their operational transfer to the Internet. The PR department is responsible for compliance by layout with the corporate identity guidelines.

Another dimension of paramount importance was the involvement of our politicians. These city politicians were interested in Internet services and our mayor -according to our slogan- wanted data to move and not the other way round (people having to move). The fallback aim was that in those unavoidable cases in which people have to move to get access to our services, a one-stop e-Government access was mandatory. So, from the outset the priorities were coming from the political instances: this is the main data we are providing; it has to be transformed into services.

What about the need to establish a model to build and develop information data structure and system infrastructure?

Let us take electronic payment as an example of our infrastructure systems. Our EDP department designed and implemented the infrastructure architecture for electronic payment. Since then, every department has been enabled to embed this application as a component in any new service they want to deploy. Thus, with electronic payment being an integrated functionality of our Internet platform, this enabled us to improve all new services as well as to allow for richer and more efficient service concepts. Another similar example would be the case of electronic schedules, which allow the different services to make it possible to arrange an appointment with departments or resources.

In this way, the available infrastructure system is ready to be used by any department, which can take it freely and use it for the deployment of any service. In doing so, we make sure that several departments in the city of Vienna have not had to develop isolated non-common payment systems based on their own infrastructure, relying instead on a common shared infrastructure for the whole city of Vienna, which obviously is managed directly by the city, but not by the departments.

How is budget managed at the city level?

We have two budgets available for the development of e-Government in Vienna. The departments are all responsible for their own budget, which is used to deploy services on the Internet, but we also have a centralized budget which is used to create, operate and maintain a common infrastructure. The access and use of that infrastructure by the corresponding departments is consequently charged internally.

Is the use of this central infrastructure mandatory or is it just optional for the departments? Can they also create their services outside the centralized infrastructure?

The departments cannot create services outside the centralized infrastructure. They have to get in touch with our central EDP department and allocate the required infrastructure from the central EDP resources. So, this trade-off between the centralized part of the budget and the decentralized part of the budget is clearly part of our model.

Which do you think were the main barriers encountered during the creation of your e-Government City Model over time?

In the past, the main barriers were the lack of awareness and the need to effectively advertise. We had to spend more time than we had originally expected in awareness-raising among citizens and employees alike. But unfortunately we did not have budgets to advertise our projects at that time. As a consequence, after having an application ready and fully operational we found that investing in advertising for its implementation was not envisaged. We realized that this was a barrier to deployment, and corrections were correspondingly applied. Our most important barrier today to the further consolidation of our model is the need for the highest security in each one of the new applications.

It is common knowledge that Vienna is one of the most committed European cities to Open Source Software deployment. Does that mean that you feel that the price of software licences and other general economic questions is one of the main barriers to e-Government deployment?

Economic issues are not a problem in general but there is a particular issue associated with software licence cost. So far, however, we are using both Microsoft applications and Open Source Software. In terms of the City Model, and in particular for those other cities which are in different stages in the process of deploying e-Government services.

Which do you think are the main benefits of having an e-Government City Model, compared to the risks of not having one?

Our understanding is that implementing a number of projects does align smoothly with a well thought of e-Government City Model that provides clear benefits for the citizens first (better and more effective services) but also to the City staff (with a significant improvement in their overall efficiency).

What about the risks?

Without a clear e-Government City Model, it is very difficult to continue to deploy more services for our citizens without needing more personnel. Nowadays we are getting much more involvement from our citizens but we have to keep working with the same number of employees.

Having our EDP department provide our e-Government solutions allows us to manage, for instance, the provision of more official notifications (a significantly higher number of transactions) with the same employees. One of the lessons we learnt is that if you are not totally aware of what your model is, you will not be able to totally identify ways to get benefits on economies of scale and on effectiveness of the processes, using different components that had already been developed.

What do you think the main assets that the city has generated until now are?

We create assets for our customers by saving their time, so they save money. By reducing the time needed for the interaction between citizens and companies with the public authorities they have more time for work and for leisure. These are assets for our customers. The assets for our employees are that they can devote time to complicated form applications and not simple questions. Simple questions could easily be answered using the Internet, through our information web pages. If citizens or other customers send us an application form, they write the names and data in the Internet platform, so that there are no mistakes on the submitted information. This results in a significant improvement in quality and reliability (for example, in a phone conversation we may not hear their name properly or misspell the address). With the systems in place we avoid the possibility of many possible mistakes in application forms.

Which are, in your opinion, the killer services, the most appreciated or most useful ones for the citizens today?

One very useful service is the registration of a businesses. There is another service that is not very often used, but it is a very sophisticated application. It is the permission for building sites to occupy space in streets with traffic. It is a totally interactive application. The third is renting flats. The city of Vienna provides many flats for the inhabitants and if these citizens want to rent a flat, they can do so via the Internet.

What are the missing components?

Missing components are availability of the official signature and electronic delivery of applications. For this reason they are also our main target for 2007.

Which is the role and importance of multi-channel in your e-Government strategy? Do you have a specific strategy in this regard?

Thanks to our multi-channel strategy citizens can send us application forms by post, they can come to our offices, they can call by phone, they can send us an e-mail or they can do it directly on the Internet platforms.

They could choose the way they prefer to contact the city of Vienna. Via the Internet the city of Vienna services are always available to our citizens, 24 hour a day, 7 days a week.

We have also advanced in the implementation of multimodal access, thus allowing our citizens to start a transaction in one channel and then easily switch to another one without getting lost. They can initiate a transaction on the Internet and can pick up the permit or claim at our offices. It is all possible with this facility.

Are you considering opening new services?

We plan to have most of the important processes in the city of Vienna operational by December 2007, all of them grouped in an official information website.

Which two cases, two examples, would be the most appropriate to describe the success stories in the City of Vienna?

Registration of business and flat applications.

How transferable to other cities do you think your city experience is?

We have developed a style guide for forms and we have also created a very specific structure that we refer to as the Virtual Office web page. These two experiences are developments of the City of Vienna that will be broadly implemented all over Austria, targeting the use of forms and structure of information pages for all customers in other regions in our country. So I think it could also be considered by other cities in the European Union.

How do you get the right balance between technologies and politicians? e-Government is something which is in the middle. How do you see this balance between the political instances and the technological applications of delivering services?

Politicians can use the Internet platform of e-Government solutions to improve democracy in city governance. As an example, we offer our users the possibility to follow up the meetings of our city Council via Internet.

This results in increased transparency. In the case of consideration of a new urban planning discussion, the politicians can ask the citizens about their opinions via the Internet. Consequently, these instruments are seen in Vienna as a political tool.

All of these possibilities are ready on our e-Government platform and politicians sometimes use it, the most used one being the discussion platform, which is frequently activated by our politicians to reinforce discussion and the consultation processes with the citizens.

What about the near future? What do you think are the key challenges for Vienna in coming years and how they could affect your strategy?

In Austria there is a project, the so-called "Citizens Card Concept", which is intended to be the solution to electronic delivery and also the answer for the official signature. I think both of them will be our key challenges in the coming years.

CONCLUSIONS

This study is part of the work done by the e-Government Working Group of the EUROCITIES Knowledge Society Forum - TeleCities, led by the city of Barcelona. Every year, many surveys, articles, websites and conferences can appear, providing information and analyses about plans, pilot projects or innovations in which many European cities are taking part. The group took a different view, focusing on how cities are currently delivering e-Government programs to their residents, tourists and investors and on how they manage and deploy these projects in their real lives.

Thus, the focus is on how cities provide an advanced level of complete transactional e-Services (not mere information and communication websites), being city or council-wide programs (not just for a function or department) and being reasonably integrated with their back-office operations and with external service delivery organisations (For those interested in e-Government literature, the focus is on cities placed in phases 4 and beyond in their e-Services 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 from 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 different 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 only holds some 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 re-engineering. 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. As one participant says, now 'it is a must, something that people take for granted' – residents or business 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 the 'business' - being the deployment of new services, improving existing ones or re-engineering operations. Moreover, as was mentioned by the Mayor of one of the participating cities, "It is no longer possible to imagine any public policy without the support of information and communications technologies".

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.

- Change of residence or business address.
- Payment of taxes and fines.
- Permits for home improvement work.
- Making an appointment with a city office.
- Registrations of business and trade.
- Questions, claims and complaints.
- Application for public housing.
- Access to parking licences.
- Permission for works or events at streets.
- Registration of dog licences.
- Organising a wedding.
- Application for a post as civil servant.
- Voting ticket application.
- Book loans at a public library.
- Submitting and checking bills.
- Documents of the city registry.
- Downloading information on registry and cadastre of a piece of land.

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 with urban planning, mobility and all kind of permits are growing. For individuals, the most popular services are those related to housing, libraries and getting documents related to the census.

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

Making People's Life 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 being now 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 further back in time. 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 they are 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).

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. One of the participants in the study 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 wars.

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, as was mentioned in the closing panel in Barcelona, the CIOs and proponents of major investments and support for e-Government programs should no longer complain of the lack of interest of 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 cities' strategies of transformation, growth, inclusion or better Government; how ICT can really deliver; how politicians and senior executives can capture the potential benefits of these investments.

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 of 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, they 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.

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 and 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 processes 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.

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, being 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.

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.

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.

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 user the 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.

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.

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 one of the participants 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.

AFTERWORD

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.

The work carried out by the e-Government Working Group of the EUROCITIES Knowledge Society Forum - TeleCities and reported in this document evidently cannot fully address such an important issue in its entirety. There is plenty of room for further refinement and improvement, for expanding the analysis to other Cities or identifying and working out other relevant subjects based upon the findings provided by this exercise. The reactions gathered during the public presentation and discussion of this study have provided evidence of the need for and importance of taking this work further as the baseline for an even more ambitious target.

The editors would like to sincerely thank the contributors for their sustained and enthusiastic support and for their unswerving patience and understanding.

E-GOVERNMENT CITY MODELS:

CASES FROM EUROPEAN CITIES

Cities are where things happen first. For the first time ever, this book tackles the key role played by cities in the development of e-Government. The study contains an in-depth analysis of seven major EUROCITIES member cities, including an interview with the CIOs and heads of the e-Government units. The report elaborates on ways to successfully deploy a new Public Administration, much more citizen-focused, effective and efficient.

Barcelona JOSÉ RAMÓN RODRÍGUEZ
Birmingham GLYN EVANS
Munich HANNELORE SCHNELL
Stockholm JOHAN SÄRNQUIST
The Hague PETRA DELSING
Torino SANDRO GOLZIO
Vienna JOHANN MITTHEISZ

ISBN: 978-84-9850-028-8

EUROCITIES

Ajuntament de Barcelona