Building eGovernment: European Regions and Alternative Strategies

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■ The context: drivers and pitfalls of modernising government

An evolving vision

The concept of eGovernment took off a few years ago, mostly as the mirror image of eCommerce in the public sector. All the attention was on the delivery of online public services, with local municipalities rushing to build the best-looking web site, feeling a little bit like "no profit" dot.coms. This early enthusiasm is gone and forgotten: the first round of experience has taught much needed lessons and the focus is now on the coordination and scaling up of pioneer experiences to seize the hoped-for benefits of efficiency and effectiveness in public services. EGovernment development is clearly entering a new phase, characterised by the re-engineering of government processes, with as much attention paid to back-offices as to front-offices.

A good example of this conceptual evolution is the definition of eGovernment adopted by the European Commission in its most recent communication, which underlines the role of organisational change in public administrations:

> "eGovernment is the use of ICTs in public administrations combined with organisational change and development of new skills, in order to improve public services and democratic processes and strengthen support to public policies" (European Commission, Sept. 2003).

COMMUNICATIONS & STRATEGIES, no. 54, 2nd quarter 2004, p. 191.

The debate about eGovernment is paying growing attention to New Public Management (NPM), whose cornerstone is improving the efficiency and effectiveness of the management of public processes. EGovernment is increasingly seen as a new paradigm to be built on NPM, focusing on the centrality of users' needs by exploiting the potential for improved interactions allowed by ICTs. The main drivers of this process of change are seen as:

- the need to improve efficiency, productivity and the quality of public services without increasing or even reducing budgets;
- the need to satisfy citizens' expectations of new standards of service provision allowing flexibility, personalisation and 24/7 availability as in the private sector.

In order to satisfy these needs, the new government paradigm should be characterised by:

- a user and society centric approach (focus on users benefits),
- access for all through multi-channel, multi-platform delivery ,
- me-Government – personalisation, mobility and active participation by citizens,
- efficient and "lean" government.

However, this is not enough: the next step in this vision is the transition from eGovernment to kGovernment (knowledge-based government), foreseen for the end of this decade, which is based on two main trends.

The first is to recognise that governments are essentially knowledge-management organisations. Simply learning to manage and better exploit the information created and stored by the public sector could create a very high level of public value (and is probably an unavoidable step towards a user-centred government). Even greater benefits can result if governments participate in the development of the knowledge society, in the true sense to create public shared spaces for the creation of knowledge. According to the last UN report on eGovernment:

> "In the context of organisational change, governments can use ICT to organise for knowledge creation and knowledge delivery."

This has important implications for the development of eDemocracy, for the achievement of transparency and greater citizen participation.

The other main trend is the development of Ambient Intelligence, the technological scenario foreseen by the experts of the IST Programme, which envisages the diffusion in our environment of intelligent intuitive interfaces embedded in all kinds of objects. Ambient Intelligence could create an

environment capable of recognising and responding to the presence of different individuals in a seamless, unobtrusive and often invisible way.

> "The AmI scenario provides a platform for the developing notion of kGovernment and is an essential building block of the personalised "me" government, in which individuals experience seamless and unobtrusive access and fulfilment between various ePublic services, different service providers and across borders" (MILLARD, 2003).

Regardless of whether a structural change of paradigm in government, like the one envisioned, can happen within the next few years, this vision of eGovernment is very stimulating. It progresses beyond the simplistic vision of ICTs as tools for an additional delivery channel of public services. It is a new vision of the role of government, which exploits the potential of technical innovation, without falling into the trap of technological determinism. It highlights a possible tension between "reformers" of government – who will privilege improvements in efficiency and effectiveness to be achieved through reorganisation – and "revolutionaries"– who will strive for a new pattern of interaction between a networked, knowledge-engine government and highly motivated, empowered citizens. Finally, this discussion shows how the main decisions about the eGovernment development process are essentially political, as they should be, since they concern choices about the main priorities and goals of government strategies and actions.

Is there a dot.gov bubble?

The reality is still quite far from the vision just described. The evidence reported by recent surveys is encouraging in terms of the increased availability of online public services, but contrasted by slower-than-expected progress and lukewarm acceptance by users. While political motivation at the national and EU level remains high, implementation problems are building up and threatening the continuation of investments (see also summary table).

The greater effort so far has been devoted to *eServices* (electronic public services to end users, either citizens or businesses), which have been promoted mostly by local administrations. Business applications are more available than services for citizens (and this gap is increasing). The level of interactivity is growing, but there are still very few fully transactional or networked services.

EProcurement (online purchases by public administrations) is promoted by higher-level administrations and typically requires considerable internal government reorganisation. Early experiences show clear benefits in terms of cost savings and improvement of transparency, but there is also strong resistance from local stakeholders threatened by the concentration of purchase activities and other constituencies. A study by the STAR project, for example, underlined the implications of eProcurement for local SME suppliers, who risk marginalization [1]. As a result, the role of eProcurement remains relatively marginal and diffusion seems to be growing slowly.

Table 1: eGovernment in its current stage of development

	Stage of development	*Leading institutional stakeholders*	*Main Problems*
Services	"Simple" services available online, moving towards horizontal integration and greater interactivity	Bottom-up process led by municipalities and local administrations	Mismatch between supply and demand Slow progress in services integration and multi-channel delivery
eProcurement	Gradual implementation of centralised systems and platforms – impact still limited	Top down process led by national or regional authorities	Resistance from distributed local stakeholders Danger of marginalizing SMEs Risk of technology lock-in
eDemocracy	Pilot projects – early stage	Mixed - Some national, some local depending on political context	Uneven commitment by governments – Risk of marginalizing efficiency goals

Source: Databank Consulting elaboration on main published studies

eDemocracy development is still in its infancy, with some pioneer experiences especially in Northern Europe. As the World Public Sector Report 2003 notices: "Very few governments use eGovernment to support

[1] "The adoption of electronic public procurement systems is driven by the need to reduce costs and favour purchases in large volumes, thus limiting the number of contracts. The emphasis is on achieving economies of scale and reducing transaction and contract management costs. This in the long run is likely to favour large suppliers and exclude SMEs, unless measures are taken to avoid such an outcome". STAR Issue report 41.

the genuine participation of citizens in politics and only at a very rudimentary level".

The World Public Sector Report is, in fact, quite critical of eGovernment, classifying main development strategies as wasteful (no optimisation of operations), pointless (minimal impact on development objectives preferred by society) and meaningful (only if both goals of optimisation and creation of public value are reached). The report wonders whether there is a "DotGov bubble": a continuing very active public investment programme that in a consistent way under-produces public value."

The image of a "Dot.Gov bubble" waiting to burst is probably ungenerous, since several eGovernment initiatives are successful and their impact on modernising government is undeniable. However, it seems difficult to transform eGovernment from a pioneering effort by islands of excellence to a mainstream phenomenon, which creates concern about the sustainability of investments. The main bottleneck seems to be government reorganisation.

Government reorganisation

However, what does reorganising government involve? The main dimensions of eGovernment Process Re-engineering have been examined in depth in a recent report on good practice (MILLARD & IVERSEN, 2004) in Europe. They are:

- intra-government process re-engineering (within single administrations),
- inter-governments process re-engineering (between different administrations),
- digitalisation of processes (standardisation, interoperability etc.).

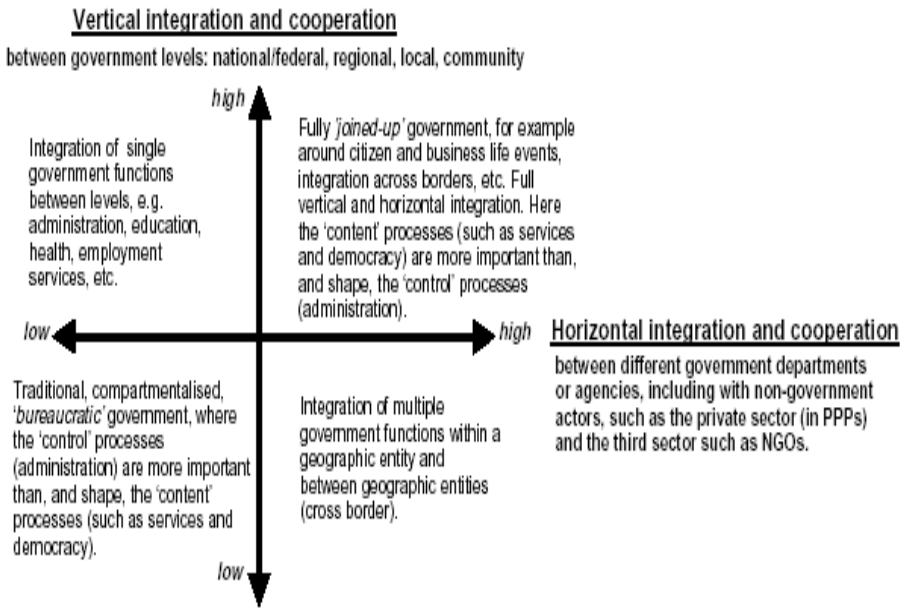
Most efforts to reorganize to-date have focused on the processes within single administrations (e.g. a municipality or a regional administration) or vertically integrated structures (such as finance ministries tax departments with their local networks of executive agencies). The study of good practices documents several different strategies for reorganisation (from the centralisation of back offices, to the back-office clearing-house approach, to the portals approach etc.), which can be successful, depending on different contexts. There is no single blueprint for success in eGovernment. A common element among them is the effort to rebalance back and front-offices, by streamlining internal processes and evolving front-offices, towards multi-channel delivery of services and customer-oriented services.

This approach should lead to cost rationalisation and redirect investments from internal activities to service-oriented activities.

However, so far the public sector has chosen to implement eGovernment by leaving in place most established organisational structures and the division of roles and responsibilities between administrations. The real challenges of government reorganisation are more complex and concern the interfaces between different administrations. Progress in the integration of government activities requires (see also diagram):

- horizontal integration of services (one stop shopping),
- integration of horizontal services (such as identity management, epayments),
- integration of front-offices with one or several back offices, depending on context and function.

Vertical and horizontal integration of eGovernment



Source: EPublic Services in Europe: past, present and future, see ref.

The combination of vertical integration (between the different levels of government, local, regional and national) and of horizontal integration (between different government units or agencies, as well as private partners in the same geographical area) is defined as "joined-up government." This is the ideal model for implementation of the user-centred government, which "surrounds" the citizen or the business user with a single integrated interface, behind which all government units cooperate seamlessly. This concept does not necessarily identify with a centralised organisation, ruled in a hierarchical way. Integration and cooperation can be achieved through a networked government model, which can be either centralised or decentralised.

Governments from hierarchies to networks

Modernising government through ICTs is not the only driver of change in public administration. The whole socio-political system is shifting, transforming the balance of power between government levels (supranational, national, regional, local) and functions. As sociologist Manuel Castells (CASTELLS, 2000) observes, a new "variable geometry of power, commitments, alliances and subordinations" is arising between institutional stakeholders, driven by the twin trends of globalisation and decentralisation and the weakening of traditional political democracy institutions. The European Union institutional and political evolution is putting under pressure the traditional nation-states, reducing their autonomy in some areas, while enhancing the need to cooperate in multilateral networks in others. Local and regional governments, according to Castells, will proliferate, leveraging flexibility, networking and their strong links with local identity, which enhance their legitimacy. In the European Union, for example, there are already several instances in which regional governments cooperate with the Commission, sidelining to some extent national governments (in the management of structural funds, for instance). New alliances between local municipalities-national governments getting around regions are being tested to solve specific problems.

This paper does not aim to enter into an in-depth discussion of the evolution of the socio-political system, but only to point out that the main factors driving the emergence of the network society are affecting the government sector too. The traditional "silos" model of government organisations, focused on defending precisely defined boundaries of jurisdictions, internal standards, rules and structural hierarchies is becoming

obsolete, politically as well as managerially. This does not mean, of course, that hierarchies will disappear overnight, or ever, but they will certainly need to become more flexible and adaptable, incorporating networking elements.

The "variable geometry of power" scenario therefore lends credibility to the perspective of an increasingly networked government. However, networks are social and institutional infrastructures as well as ICT-based physical infrastructures. This includes new personal interrelationships, new configurations of roles, competencies, interactions, conflict resolution patterns in a different context, characterised by more frequent transactions and a stronger element of peer-to-peer interaction across organisational boundaries. A networked government may not be an entirely "wired" and "digitalised" government. Chances are that several different configurations of networked governments will emerge, depending on the local, political, cultural, institutional and economic context, combining technologies and social infrastructures in various ways. The GPR good practices study, presenting the many different strategies for government reorganisation, already points in that direction. Moreover, there is no guarantee that a networked government will be a better government, more transparent, user-oriented and democratic. These goals must be planned and strived for, as the best eGovernment plans attempt to do.

In conclusion, it seems that the "easy" part of eGovernment has already been implemented. Further progress in eGovernment involves struggling with the structural and organisational barriers against government transformation, interacting with the main socio-political drivers of change. Many administrations in Europe, at all government levels, are dealing with these processes of change with varying degrees of success.

■ A typology of European regions eGovernment strategies

The STAR project study

Mapping institutional stakeholders' roles in the development of eGovernment is a necessary first step in understanding the possible dynamics of inter-government reorganisation. A first attempt can be made on the basis of the results of a study carried out by Databank Consulting in 2003. The study was based on interviews with regional administrators in

nine European regions within four countries (Germany, France, Spain, Italy) plus contacts and desk research in the UK (LIFONTI, 2003) [2].

The study focused on regions for several reasons. European regions are crucial "nodes" of socio-economic and political governance, in the simultaneous processes of globalisation and decentralisation. In several countries their institutional powers and role are increasing. European policy has long since recognised the relevance of regions in the development of the Information Society and the Knowledge Economy, promoting the eRegion development model, addressed to exploit directly or indirectly the use of ICTs to build local development, social welfare and sustainability [3].

Within eGovernment, regions have an important role to play, as intermediators between national top-down e-government initiatives (such as the national electronic identity cards projects) and the bottom-up efforts of local administrations (such as citizens portals). The implementation of interoperable e-government networks and databases has to be coordinated at a regional level to be manageable in all but the smallest European countries. The harmonisation of web site interfaces, the persuasion of local governments to accept common solutions avoiding costly duplication of software developments, the transfer of experiences from advanced administrations to laggard ones, can be promoted by national authorities, but needs to be managed in a more decentralised way. So regions *cannot avoid* involvement in e-government. Of course, regions also *want* to be involved in e-government, as a key element of regional information society development strategies.

The typology of regions

On the basis of the documentation gathered by the pilot study, it is possible to go a step further and draw up a tentative tipology of the main strategies developed by European regions to solve the transactional and

[2] STAR is a research project on the development of the digital economy in Europe, funded by the EU IST Programme in 2000-2003, led by Databank Consulting. Data collection was carried out in 2003 and there may have been changes since then in some Regions – for example in Catalonya the political orientation of the government changed following general elections.

[3] See for example "The Regions in the New Economy", Guidelines for innovative Measures under the ERDF in the period 2000-2006 (2000).

institutional problems created by the implementation of e-government, their pros and cons and their apparent success.

Table 2: Typology of regions

Region Type	*Master Region*	*Negotiating Region*	*Experimental Region*	*Absent Region*
Example	Catalonia	Lombardy	London Connects	Hessen
Institutional role and powers	Very high: federal state	High: evolving towards federalism	Low: regions in England have few powers	High: federal state balanced by strong local government
Political relevance of eGovernment strategies	Very High	High	Medium	Low
Strategic goals of eGovernment	Outward looking: modernising public services through multi-channel delivery	Inward looking: networking local government and providing online services	Outward looking: to develop the horizontal integration of eServices through a regional interface and network	Absent Regional plan in discussion: guidelines for interconnection and standardisation
Implementation patterns of eGovernment	Detailed plan and extensive internal reorganisation and planning	Detailed regional action plan based on a series of projects	No profit company with a permanent office and a steering group	Delegated to the IT department of the regional ministry of internal affairs
Relationship with local governments	Master plan involving local government in joint ventures	Variable alliances with groups of local administrations depending on the project	A peer-to-peer effort launched to rationalise efforts, investments and access to external funding	Almost non existent – no support to local administrations

The main characteristics differentiating regions from the point of view of e-government strategies, which constitute the dimensions of this typology, are:

- the institutional framework of the government in the country, and specifically the role and powers of the region in the vertical chain of government;
- the political relevance assigned to the Information Society and specifically e-government plans;
- the strategic goals of eGovernment in the region;
- the level of implementation of eGovernment;
- the type of relationship developed with local administrations.

Another relevant variable should have been the intensity of internet usage in the region. However, according to our study, this seems to be rather an exogenous factor to regional choices in the matter of e-government. The typologies emerging from the study are reported in the table 2.

Institutional framework: role and powers of the region

Most regions in Europe enjoy high levels of institutional power. In our sample, Catalonia (as one of the 17 Spanish autonomous communities) exercises full powers in education, culture, healthcare, agriculture, industry, employment policy, urban and territorial planning. In Spain the process of decentralisation has reached such a level that, nowadays, 42% of all civil service employees and 35% of the total expenditure of the public administration are handled by the Autonomous Communities. Germany is also a federal state and Hessen, like the other Laender, has most of the legislative and executive powers, but within a framework of cooperation and a tradition of self-administration by the other levels of local government. The Italian state is undergoing a profound transformation process towards a federalist structure, which has transferred exclusive legislative and executive powers to the regions in several relevant fields, including healthcare, environment, education and training and local security. This process has sharply increased conflict between local and national administrations, as Ministries, regions and municipalities struggle to define the new boundaries in the shifting balance of power. The long tradition of self-administration by municipalities makes them jealous of their prerogatives and wary of the regional government. Lombardy sees itself as a pioneer in the establishment of the autonomy and power of newly federalist regions and has often taken the initiative in pushing the boundaries of regional competences.

"London connects" is different because it is actually a company formed in 2001 to bring together the 33 local boroughs of the London region, to develop the Information Society. England is divided into 9 regions, which are actually regional chambers and do not have administrative and legislative powers. Much of the eGovernment agenda in the United Kingdom is delivered at the sub-regional level. In order to encourage coordination and interoperability between municipalities, in 2002 UK government funding was made available to sub-regional partnerships to progress their work

programmes. The UK Government is also reviewing the possible advantages of a regional approach for initiatives such as the roll out of broadband, smartcards, regional sharing of services and regional portals. London Connects (where the lead authority is Camden) and the Northwest Electronic Government Group (where the lead authority is Knowsley) are the two most interesting groupings of local administrations on a regional scale for eGovernment.

Political relevance of eGovernment

The political relevance of eGovernment strategies is very high in Catalonia and Lombardy. In Catalonia, the Regional Parliament approved the first strategic plan for the regional information society in 1999, including among its strategic priorities the eGovernment project "Administraciò Oberta de Catalunya" (AOC). This actually preceded the approval of the Spanish National Information Society Plan in the year 2001. In its strategic document 2002-2005 "eLombardia, from e-government to e-governance", Lombardy defines its role as "driving and promoting" the transition process towards the Information Society, in order to "strengthen and consolidate Lombardy's leading role in the international socio-economic system." The strategic priorities include bringing online all public administrations in the region, universal and equal access to information infrastructures, preventing the digital divide, facilitating the diffusion of innovation and technology transfer in the region.

The London Connects strategy for eGovernment is more oriented towards practical goals for the implementation of innovation in the area, even if it includes universal and equal access and increased government transparency in its general goal.

For Hessen, eGovernment does not seem a high political priority and there is no regional plan for its implementation (in 2003). This does not mean that eGovernment is not advanced in Germany, simply that for historical and organisational regions some regions in Germany (as elsewhere) do not play an active role in eGovernment coordination.

Strategic goals of eGovernment

The differences between the regions start to emerge when the strategic objectives of their eGovernment plans are examined more closely.

In Catalonia modernising public services represents the main thrust of the e-government strategy. Main goals are the simplification of the relationship between citizens and administrations, greater citizen satisfaction and the creation of new high-value added and personalised services for citizens. Catalonia believes in the usefulness of electronic identity cards and digital signatures, but believes they are initiatives to be developed at the national level and cooperates with projects with the federal government.

Lombardy's priorities are more oriented towards the modernisation of the relationship between administrations. The regional action plan includes three main objectives:

- development of the integrated network connecting local administrations and public agencies (RRL, Rete regionale lombarda),
- integrated delivery of online public services,
- organisational innovation in public administration.

The action plan includes approximately 100 innovative projects corresponding to EUR 450 million in investments for the period 2002-2005. Most of these investments involve local administrations and public-private partnerships. Several projects are co-funded by the national Department of Innovation, which has also created a network of regional competence centres to provide know how and support to the regional government. Several projects support local administrations improvement of their information systems and delivery of online public services. The region almost plays the role of service provider.

The strategic agreement of London Connects states that its Information Society Strategy should help to reduce the gap between information-rich and information-poor and enable the delivery of electronic government, by addressing the key issues of joined up service delivery, providing the infrastructures, maximising employment, and improving governance. The main thrust of this programme is to develop the horizontal integration of eServices on the basis of networking between administrations.

Hessen doesn't have a Regional plan. At the time of the STAR interview, it was planning to launch a regional plan after consolidating the relative

budgets in early 2004. The regional ministries were discussing the Guidelines for the implementation of eGovernment in the Region, with targets of a very technical and operative level such as:

- standardisation of the IT-infrastructure (PCs, Net, E-Mail),
- enforcing information (e.g. Corporate Identity, Rebuilding of web-site to portal),
- transaction tools (e.g. e-procurement, e-payment, e-learning).

Implementation of eGovernment

Their implementation strategies mark another relevant difference between the regions. Catalonia conceived a Master Plan accompanied by an intensive effort of internal reorganisation and training. In order to achieve these objectives, the Catalan administration focused most of its efforts on building an integrated platform and interface able to support the multi-channel delivery strategy of online public services (CAT365). The region has implemented an intranet network connecting CAT365 and municipalities. Administrations connected cover 70% of the population of the region. The Catalan approach was centralised and carefully planned from the start. The regional government pays close attention to monitoring and evaluating the development of the e-government plan, including cost-benefits and a balanced scorecard.

The responsibilities for the direction and implementation of eGovernment in Lombardy are distributed between different Directorates, which is normal in large regions, but also creates coordination difficulties and the overlapping of functions. The region has instituted a Strategic Committee for the Information Society, which is chaired by the Director of the small business, new economy, research and innovation directorate, where the region's managers meet periodically meet to check the correspondence between strategies and implementation of Information Society strategies. The positive aspect is that e-government initiatives are considered to be relevant for all directorates and there are projects and initiatives across all regional structures.

London Connects has a Chair and Board of Directors drawn from senior representatives of the major public sector players in London. A chief executive with a fully staffed office and four permanent consultants are

responsible for implementing and taking forward the work programme, which is overseen and shaped by an active steering group made up of municipal and public service representatives from across London. Some agreements for discounted or collective purchases on behalf of the members have been negotiated. It is too soon to understand the effectiveness and relevance of its activity.

Within Hessen, the organisation responsible for the development and implementation of e-government is the IT department of the Ministry of the Interior. An intranet only exists at a regional level; the local municipalities are not connected to it. The region and the "Hessische Zentrale fuer Datenverarbeitung" buy goods and services via e-procurement amounting to 2% of the total value of regional purchases. The regional site (www.hessen.de.) is visited by several million visitors. One of the main targets is to transform this site into a portal, integrated with other channels, local and national government levels.

Relationship with local government

The relationship with local governments is a key differentiation factor within this typology. In Catalonia the involvement of local governments was achieved through a long process, including the preparation of a charter of services respecting the competencies of each level of government, especially small administrations. Local administrations created a consortium (LocalRed), which, in turn, participates in joint ventures with the regional government in all the operative agencies launched to implement the e-government plan, with a 40% (Localred) – 60% (Generalidad) model, so that operative decisions are taken jointly. Local governments can use the CAT365 platform and its solutions, but directly implement the content of the services. Great efforts are made to highlight the local agency actually delivering the service and to present the portal as a collective realisation of all Catalan PA, not mainly the regional government.

Lombardy's strategy has attention to local government in common with Catalonia, but within a strategy of developing variable alliances for specific projects and application areas, proceding faster where possible and slower where necessary. Taking advantage of the first call for e-government projects launched in 2002 by the Ministry of innovation, the region has encouraged alliances between municipalities to develop common platform

and services and proceed to the integration of services at a regional level, providing funds to match the Ministry's. A key project for example has been launched with the province of Como, to develop a portal integrating the local municipalities portals, providing a blueprint model for the other provinces in the region.

The region plays a more direct role in the modernisation through ICTs of three sectors where it has a direct responsibility: healthcare (developing an integrated healthcare information system, based on the online connection of all agencies, hospitals and doctors offices), education and training and the development of the regional labour market. Lombardy is in the process of launching the first Italian integrated portal for job searching and placement, which will be coordinated with the training system. A key priority is a regional e-procurement platform for health goods and services.

Lombardy's web site portal opened in 2002, connects to local administrations sites, provides general information about public services and publishes regional calls for tender. Since the network is quite advanced, the region is now working on the development of regional services.

London Connects seems very much a peer-to-peer effort, self-organised by local governments, launched to rationalise efforts and investments and get better access to national and European funding. London Connects focuses on the city and even the proposed portal still plans to be used (at least in the first stage) to centre on the Mayor for London, and other London focused agencies, with a nod to Europe by naming the London Members of the European Parliament. This is probably not surprising when each London municipality wants to be master of the delivery of its own services. The development of a 'European style' London Portal such as those found in Catalonia, Lombardy and the Brussels region would probably require some sort of local government re-organisation.

Hessen doesn't receive funding from the federal government to support eGovernment implementation and doesn't support local administrations. Actually, there aren't contacts among the regions, the National level and local administration. Owing to the substantial investment costs and to avoid a duplication of efforts, an important goal is to boost collaboration between the different levels. Hessen has set up ad hoc partnerships for eGovernment

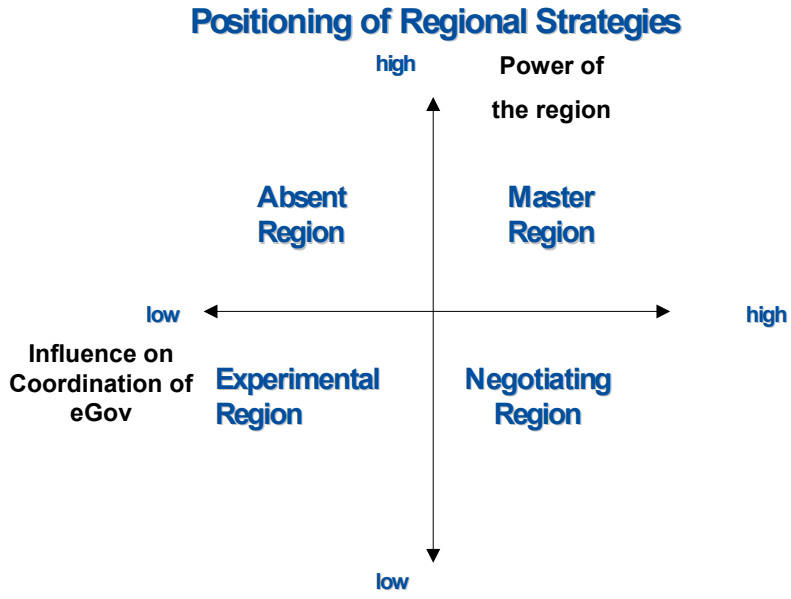
development with Deutsche Telekom (telephone and internet connection) and Microsoft (software products).

■ Comparison of regional strategies

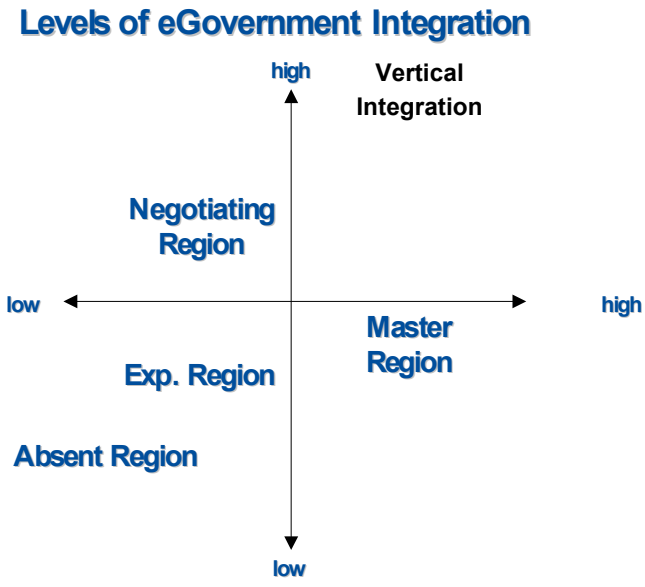
There are some interesting considerations emerging from this comparative view of regional strategies. Unfortunately the most important conclusion, that is how successful they are in eGovernment, is very difficult to judge because of the lack of comparable evidence on impacts and benefits and the early stage of deployment of eGovernment strategies (even when investment began some years ago). From the point of view of the range of online services offered and their quality, it would seem that Catalonia does stand out, while Lombardy also presents some interesting achievements. However, according to the BISER project, both regions are among the lower-ranking European regions in terms of internet adoption and usage. However, since we defined the ability to carry out inter-government reorganisation as a key success factor in implementation of the next phase of eGovernment, it is useful to look at the regional strategies in terms of their impact on re-organisation.

The two main dimensions affecting inter-government reorganisation for eGovernment seem to be the institutional power and competence of the region and its ability to exercise power on the eGovernment strategies of local administrations. Positioning the examined regions in terms of these two main dimensions, (see chart) shows the *Master Region* as enjoying a high level of power and influence on the coordination of eGovernment by local administrations, followed by the *Negotiating region*. The *Experimental Region* has few powers, but an increasing ability to affect local administrations, the *Absent Region* may have institutional powers, but has very little influence on eGovernment in its area. In fact, both Spain and Germany are federal states delegating strong powers to the regional level, but the regions we examined have opposite strategies. The main difference seems to be the tradition of self-administration and independence by local municipalities, which characterise Germany more than Spain reducing the role of regions. However, the political will of the regions clearly plays an important role: Italy is also characterised by independent local municipalities,

but Lombardy is dealing with them and there are examples of German regions active in eGovernment (such as Bremen). An important element is the political context. Italian regions are undergoing a profound institutional change, which naturally makes them more inclined to embrace eGovernment as an accompanying reorganisation tool. Catalonia, on the other hand, has always cultivated a careful independence from central government. In Southern Europe, the political orientation of different levels of government and their interaction plays an important role in eGovernment-related reorganisation.



Looking at the regions examined in terms of the level of vertical and horizontal integration of eGovernment (as defined in the first chapter) none of them seems very close to the ideal of the "joined-up" government (combining vertical and horizontal integration - see chart). The *Master region* seems closer in terms of horizontal integration (thanks to the integrated platform and unified interface at the regional level). The *Negotiation region* seems more advanced in the integration with upper and lower government in some functional areas (healthcare, job search). The other regions are very far from this, even if the *Experimental Region* has still to prove its mettle. The common element in these strategies is an approach of "managed cooperation" with local governments, more or less formalised or flexible, which seems the only way forward to achieve service integration.



■ Conclusions: perspectives for eGovernment development

Mapping institutional stakeholders' roles

How far do the regions examined represent the reality of regional development of eGovernment in Europe? According to the overviews of regional relations presented in two recent studies and summarised in the following tables, they are fairly representative, since many of the aspects described are quoted here. Based on published studies, it would seem that the most frequent typologies are (by and large) the Negotiating Region and the Absent Region, while the Master region is quite rare, even if perhaps Belgium and Austria come close. Similarly the Experimental Region is not common, but there are cases of territorial groupings on a regional scale, even if not matching the regional administrations' boundaries. The main point is that there seems to be universal consensus by government administrations that building eGovernment coordination requires an intermediate level between the national and local ones.

Table 3: Keelan project - overview of regional relations in eGovernment

	Northern Region	*Central Region*	*Western Region*	*Southern Region*
Municipalities interviewed	Finland Sweden Denmark (9 cases)	Belgium Austria Germany Netherlands (5 cases)	UK, Northern Ireland, France (6 cases)	Italy, Greece, Portugal Spain (8 cases)
Egov development	Local initiatives, local funding	Local initiatives, local funding	National funding of local projects	Local initiatives, lack of cooperation with some exceptions
Interaction with state or other government levels	Strong in Denmark, absent in Finland, only national vision in Sweden for aspects such as broadband	National strategies in A and NL. Regional strategies in Belgium. Competition rather than cooperation. Emerging demand for regions to bundle knowledge, coordinate and support smaller municipalities	Integrated strategies driven from the national level	Divergence in political orientation between national-regional-local level constraint on cooperation Growing awareness of crucial role of regions Positive examples Catalonia and Emilia Romagna

Source: www.keelan.elanet.org

Table 4: Mapping institutional stakeholders' roles

Levels of Government	*Role in eGovernment*
European Union	Vision and Roadmap (eEurope 2005 action plan) Reinforce exchange of good practice, monitoring and benchmarking Leverage investment (6FP,eTEN,IDA,Structural Funds) Promote standardisation, harmonisation and development of pan-European services
National Government	National vision and action plans Legal Issues, security and trust Development of horizontal services (identity management, payment) Promote coordination, standardisation and harmonisation of regional/local initiatives Promote inter-government reorganisation Implementation of centralised e-services (e-procurement, tax...)
Region / Federal State	Regional vision and action plans Legal Issues, security and trust at regional level Development of horizontal services (identity management, payment) at regional level Promote coordination, standardisation and harmonisation of local initiatives Promote inter-government reorganisation at regional level Implementation of regional e-services for local administrations (intranets, database integration, e-procurement platforms...)
Province / county / Department	Interface with regional and municipalities initiatives Development of e-services solutions and multi-channel delivery Some Interaction with final users
Municipality/ Borough	Development of e-services solutions and multi-channel delivery Interaction with final users

Source: Databank Consulting

Taking a step back from regions, drawing from this study and the other published sources, we have attempted to describe the vertical chain of roles in eGovernment (see table 4). It is quite simplified, however it clearly shows the different focus of government activities in terms of the relationship with the final user. Local administrations are closest to citizens and to the specificity of local problems: going up in the hierarchy of government levels, administrations tend to become more remote from service provision and the understanding of citizens needs.

This summary table reflects the complexity of the government system, with its stratification of responsibilities and the reasons behind many of the conflicts slowing down eGovernment. Main problematic areas are:

- Conflicts of leadership between different government levels. Egovernment projects often require the convergence of different processes, where different administrations traditionally had authority, and none wishes to appear diminished. The organisation initiating the reorganisation process must be ready to negotiate and pacify "turf" wars or an external authority must arbitrage competence conflicts.

- Contrasting priorities between the different levels of government. National administrations aim for standardisation, harmonisation, cohesion and long term planning to achieve efficiency benefits and show improvements in overall government management. Local administrations tend to be more interested in short-term problem solving, personalisation, effectiveness, political accountability versus final users, because of their close relationship with citizens.

- Contrasting priorities between different categories of players, particularly permanent bureaucracies versus elected politicians. Elected politicians have a stronger operative role in local administrations, including eGovernment projects, and are more interested in the achievement of visible benefits "marketable" with their electors. Public servants are more interested in the internal evolution of the administrative organisation and are more present in larger, higher level administrations. The balance between politicians and public servants, however, may vary over time, as well as within administrations.

- Competition between administrations for the relationship with the final user in a multi-level architecture of delivery channels. Who reaps the political benefits of playing the "public face" of government in the interaction with citizens? This is a typical "channel conflict" problem already seen in eCommerce and private industry CRM (customer relationship management) projects. Local administrations are afraid that integrated portals managed at

the regional or national level may create a visibility problem for them and reduce their autonomy.

■ Conclusions

Observing this minefield of conflicts one is amazed that eGovernment reorganisation ever happens at all. Yet change is occurring, even if this is not happening in a linear manner and certainly not at the speed predicted by some. The typology described by this study shows the relevance of the role of regions in promoting inter-government reorganisation and that this can be done in different ways (commanding, negotiating, experimenting etc.), provided that there is a clear recognition of the reciprocal roles and balances of power between the different institutions. It is really only a start, which hopes to stimulate reflection and research into the socio-economic factors of change in the public administration sphere.

This typology is mainly structural – based on the structural characteristics of regions and their choices descending from their institutional and socio-political context. It would be very interesting to analyse how the consequences of their choices, for example the results of the eGovernment services implemented, feedback into their policies. It would also be important to develop this typology taking into account the relative success of eGovernment implementation, to gain a better understanding of critical success factors.

An important consideration is that in defining the "good practices" of eGovernment innovation, which now seem a prevalent way of helping administrations identify successful modes of innovation adoption, greater attention should be paid to the institutional and transactional aspects of interaction between administrations. The perspective of an increasingly networked government requires the development of political and social infrastructures, as well as technological ones.

Learning from the regional experiences examined, in order to strengthen the emergence of networked government, and to achieve the benefits foreseen from the new government paradigm, the main challenges for policy makers and researchers are:

- mapping out institutional stakeholders profiles, roles, changing powers and motivations, to better understand the factors affecting inter-

government reorganisation and the sustainability of eGovernment innovation;
- focusing on negotiation and transaction processes between administrations;
- aiming for framework rather than mandatory legislation on government processes;
- redesigning public-private partnerships in more realistic ways;
- looking for positive externalities, spill-over effects, critical mass in the patterns of reorganisation of government and the development of e-government.

Even if the *Master Region* model of Catalonia is not applicable to all, the key success factors described by the region for an effective eGovernment strategy are very con-divisible:
- political agreement between all government levels, achieved through a well planned and constant effort to involve local administrations;
- willingness to lead a process of change in the public administration;
- a long term vision of a new society and the benefits e-government can bring, promoted by the top political and administrative authorities in the region;
- the engagement of relevant investments;
- a strong focus on the multi-channel strategy from the start, avoiding the risk of introducing a few online services on the internet as a marginal add-on to the traditional system of service delivery.

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