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# From Bureaucratic Administration to Network Administration? An Empirical Study on E-Government Focus on Catalonia

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**Abstract** This article aims to (1) analyse the extent to which there is a movement from a Weberian bureaucratic administration towards a new organisational model that we call network-administration and (2) consider whether the premises of New Public Management (NPM) theory are present in this process of transformation. The study centres on the analysis of the channels for citizen attention and the processes of technological innovation around these channels carried out by the Catalanian Government. Our initial conclusions indicate that while there is a change in Public Administration (PA), this change is incremental and has several nuances: a slight evolution towards network-administration is observed as currently existing alongside the traditional hierarchical and compartmentalised bureaucracy. In parallel, the private sector is increasingly involved in a relationship that tends to be more

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The Autonomous Community of Catalonia is in the north-east of Spain, it has its own language, Catalan, furthermore the Spanish language and a population of seven million. Catalonia currently has a high level of political autonomy, with its own parliament and government (the Generalitat). Catalonia is one of the main industrial and economic motors of Spain and heads the rankings for e-government of the 17 autonomous communities in Spain (For more information about the Information Society development in Spain see Jordana et al. 2005; Welp 2004).

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controlled by the public sector. We should add that there is also a new emphasis being placed on the relationship with the citizen as a service-user.

**Keywords** E-government · Network administration · Weberian bureaucracy · New Public Management (NPM) · Governance

## Introduction

The traditional bureaucratic model described by Weberian theory emerged with the rise of the industrial society, as a response to the new mass society, the consolidation of the monetary economy, and the resulting growth and expansion of the administrative tasks of the modern State (Osborne and Gaebler 1992; Dreschler 2005; Jain 2004; Fountain 2005). The main objective of this bureaucracy was to seek efficiency and rationality in executing its functions. It was ensured by unified management and the uniformity and the predictability of routines and processes. The stability of the system is prioritized over change in the personnel structure, meaning the system functions irrespective of who fills the position (Weber 1992). In the 1980's, there was widespread agreement about the crisis this model faced; however there were proposals that emphasised the existence of subtle differences. It has been highlighted that bureaucracy's rigid hierarchy, and the inflexibility of the processes and regulations did not permit the possibility of appropriate responses to the new problems encountered in this more complex and changeable environment; an environment characterised by the globalisation of markets. It was considered that the structure of public employment, with its guarantee of job security, irrespective of performance evaluation, rewarded inefficiency. In turn, this accentuated the tendency of bureaucracy to reproduce and increase its own working structures, along with the high costs and poor management associated with them. Finally, it was alleged that these changes accentuated citizen discontent and the need to search for new options. This was a development that went against the competence of the public sector, sustaining the provision of citizen services (Barzelay 2001; Osborne and Gaebler 1992).

The Anglo-Saxon countries—especially the United States, New Zealand, Australia and the United Kingdom—were pioneers in putting forward an alternative model to the Weberian bureaucracy. This alternative model centred on the proposal of *New Public Management* (NPM), which has been one of the most influential proposals in the context of post-bureaucratic theories. The NPM proposal is based on the private sector competency model and seeks to create smaller administrative structures that are decentralised and enable a degree of administrative flexibility. Less hierarchical models were sought, with emphasis being placed on efficiency and effectiveness, and on an orientation towards the citizen (Hughes 2001). Amongst other things, NPM promotes the formation of an *entrepreneurial government* that puts service-providers in competition with each other and displaces control from the bureaucracy to the community. Another criterion that it employs is the evaluation of the efficiency of public agencies, based on results rather than costs or foreseen budget. It also redefines users as clients. Lastly, we should say that authority is decentralised through participative management and market mechanisms are favoured over bureaucratic mechanisms (Osborne and Gaebler 1992).

Even though initially NPM theory did not analyse the possible influence of technology in the change of the Public Administration (PA), for some authors, writing after the emergence of this line of argument, there is a convergence between their assumptions and the possibilities created by Information and Communication Technologies (ICT). Technology has been seen as a tool to break from the rules of the bureaucratic administration (Hughes 2001; Heeks 2001). It is thought that ICT—and, in particular, the development of e-government<sup>1</sup>—could increase PA's efficiency, in that it operates as an infrastructure that allows management to be decentralised in various agencies, which are as a result less hierarchical and more flexible. This would enable, for example, the creation of shared information systems that would reduce costs, reduce and simplify administrative processes and even broaden the processes of participation, making the activity of governments more transparent (Bhatnagar 2003; Hall 2002; Hague and Loader 1999).

Many authors put the change of the Weberian bureaucratic structure down to a new form of working (Hinnant and Moon 2001; Fountain 2001<sup>2</sup>), although some consider the influence of NPM to be important. We propose to call this new organisational model *network-Administration*<sup>3</sup>. This model is basically characterised by (1) the connection of information systems and management procedures, and their ability to work together, both between units of the same administration and between distinct administrations (Hinnant and Moon 2001; Dunleavy and Margetts 2000); (2) the tendency to adopt more flexible management methods, with flatter relationships than those that predominate in the Weberian style bureaucracy (Huse 2003; Mayntz 1998, 2001; Rhodes 1997); (3) a noted orientation towards the citizen (Grandori 2000; Bimber 1999; Barber 1998; Fountain 2001); and (4) we associate the concept to some elements of *modern governance* (Mayntz 2001), particularly in what is referred to as the more co-operative way of governing, which includes the direct interaction of public and private actors in the public networks.

However, after little more than a decade of intense promotion of ICT in this sector, the results are far from clear. In the literature, we find many comparative analyses of government portals as a new space for management and citizen relationship (Accenture 2004; Gartner Group 2000; La Porte et al. 2000; Demchak et al. 2000; Dunleavy and Margetts 2000; SIBIS 2003; Wong and Welch 2004).

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<sup>1</sup> There are many definitions of e-government and they generally come from the private sector or international institutions. The point in common is the determinant weight given to technology and in particular to the digitalisation of public services (Gartner Group 2000; SIBIS 2003).

<sup>2</sup> Different authors indicate the elements that characterise this new form of management (Grandori 2000; Hall 2002; Hinnant and Moon 2001; Fountain 2001) but a systematic theory along this line has not been developed nor is a consensus in the definition of a concept.

<sup>3</sup> The concept of network-administration is derived from the concept *network* developed by Castells (1996, 2001), which indicates that this organisational form has consolidated as an efficient response to the crisis faced by capitalism in the 1970s. This organisational form developed especially in the leading sectors of the business world. In that moment the advances of science and technology gave the economic agents access to a series of tools to overcome the crisis by increasing flexibility in economic management and globalisation of capital, production and trade. Basically it involved organising activity around projects with time limits, internal decentralisation of management and cooperation with other companies (with the proliferation of alliances and connections between these company networks).

Research also shows that there have been limited changes in the structure of the administration (Hinnant and Moon 2001), and this indicates the need for PA to adopt new management strategies (Hughes 2001; Laing 2003). Critical analysis has been done of the not so positive consequences or linear benefits of incorporating the private sector into public management (Fountain 2005; Dreschler 2005). The effect of ICT is that there has been an improvement in democracy and political involvement that has resulted in different evaluations (Hague and Loader 1999; Chadwick and May 2003; Bimber 1999; DiMaggio et al. 2001). Amongst other things, after a decade of much criticism of bureaucracy, a wide range of authors have pointed to the importance of keeping different aspects of the bureaucracy (Dreschler 2005; Olsen 2006; Fountain 2005).

In this context, this article addresses a double objective: (1) to carry out an analysis that makes it possible to understand the extent to which the suggested move from the bureaucratic administration to the network administration is taking place and with consequences, and (2) to observe if there is a convergence between this transformation and the proposals made by NPM in relation to the processes of technological innovation. This investigation will be developed based on a case-study of the Catalanian Government. The article is structured as follows: firstly, the methodology used is outlined, explaining why the object of the study focuses on the channels of citizen contact that have been selected: phone, Internet, and desk attention. Secondly, a framework for the analysis is outlined. Thirdly, an empirical analysis is carried out. Finally, the conclusions of the study are presented.

## Methodological approach

A good proportion of e-government studies have adopted a determinist perspective oriented towards identifying the impacts of ICT on public administration. Many of these studies have centred mainly on analysing the digitalisation of services and processes of the PA, placing special emphasis on comparative studies of portals (La Porte et al. 2000; Demchak et al. 2000; Dunleavy et al. 2003). An advantage of these analyses is that a large number of cases can be compared at a relatively low cost in terms of time and resources. However, they have a weakness that come from supplying partial and indirect evidence of the transformation taking place in administration because, with few exceptions, they focus solely on the external transformations (front office) visible in the portals.

Similar comments could be made about the “best practice” studies, common in the context of e-government research and conducted especially by consultants (Accenture 2004; Gartner Group 2000). They place too much emphasis on the design of initiatives, without special consideration of their uses or the overall results of the processes of incorporating technology (Urgell et al. 2005; Fountain 2005). Two general criticisms identify basic problems in these two approaches: a determinist vision of technology, which is understood as an efficient recipe *per se* to change the way things are; and a “depoliticised” conception or at least a conception divorced from the context of the PA. Thus, it is assumed that both these problems and their solutions are easily extrapolated to different institutional contexts (Aibar and Urgell 2004; Aibar et al. 2006; Fountain 2001).

We understand that the introduction of ICT and, in particular, transversal information systems affect the entire administration, its relationships and processes, the provision of services, and consequently contact with the citizen and with other actors. Accordingly, we changed the focus of our analysis, choosing to carry out an in-depth study of the processes of technological innovation, considering not just the internet but also the traditional management processes and the intervention of different actors.

We chose to analyse the interface of the citizen–administration relationship—the three channels of attention: in person, telephone and Internet—and the projects related to this interface. Specifically, the projects aim to introduce new information and management systems, improving and/or completely reforming existing systems, the decision making process and the management of computerisation in the Public Administration that are analysed.

Our reasons for this selection are the following: (1) the channels of attention allow us to analyse both the internal structure and the operation of the administration in the provision of services, as well as; (2) the role played by technologies in the provision of public services in a key area for technological innovation; (3) the role of the private sector in the design and implementation of these initiatives, as supplier or co-manager of the administration in the provision of public services and particularly in the management of technology; and, lastly another, reason is that (4) the majority of the interaction between citizens and government (excluding the elections) is concentrated in and around the channels of attention, which enables us to evaluate the evolution of this relationship between citizen and administration<sup>4</sup>, and how it is approached.

The study is based on a combination of qualitative (interviews with key actors, monitoring projects, documentation, etc.) and quantitative techniques (analysis of questionnaires of users of the Catalanian Government's public services, analysis of websites of the Catalanian Government, etc.). The information compiled on the case includes:

- (1) Monitoring projects that have special impact on channels of citizen attention: we attended meetings on the design and/or management of the channels of attention, as observers. We monitored projects including the restructuring of citizen information databases, the implementation of a new manager of web contents, the design of a new portal for citizen attention, and the process of merging two citizen attention telephone services;
- (2) Interviews of actors involved in these processes, included records-managers and training staff, civil servants responsible for information system maintenance, politicians promoting the projects, and private sector actors involved in the design and implementation of the innovative projects. (It were done a hundred of interviews between September 2004 to December 2005)

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<sup>4</sup> We should note that the structure of the administration is varied and in each department, agency or unit has certain features related to its management. In this respect, our analysis and conclusions focused on attention to the citizen cannot be generalised in a linear manner across the entire government. Nevertheless, this snapshot enables us to understand trends in the restructuring of public management in this specific area.

- (3) Access to documentation generated in relation to these initiatives and the channels of attention (proposals from different actors, indicators of use for the channels of attention, questionnaires and other types of user studies)

Given our interest in evaluating the extent to which a transition process towards a new organisational structure can be observed, we have chosen to focus on a regional government. This type of structure should have more flexible and less hierarchical relations with the different actors involved in the provision of public services and, in particular, this should be characterised by a new *orientation to the citizen*. Regional governments may be more inclined to adopt a network form as they are intermediate government structures that must coordinate actions with both state and local governments. The process of decentralisation and regionalisation observed in recent years and the fact that the promotion of ITC does not require specific authority makes them relevant actors in the promotion of technological innovations in the administrative environment (Jordana et al. 2005).

As already noted, the first objective of the article is to analyse both the internal transformation and the reconfiguration of the relations with the citizen and with the private sector that might constitute a new network-administration model. The second objective is to consider the possible influence of the premises that NPM depends upon in the context of this transformation. In order to understand the scale and extent of the transition towards a network model in the Autonomous Government of Catalonia we will analyse the following three dimensions:

- (1) *The organisation and operation of Public Administration*: We hope to observe how tension appears between administrative compartmentalisation and the network administration; whether or not the work of public employees has changed from being guided by hierarchical instructions to being guided by a flatter and more dynamic style; and the tendencies in change management.
  - a. The organisational structure of the channels of citizen attention.
  - b. The administrative work related to these services.
  - c. Changes in management.
- (2) *The relations between public and private sector actors*: We will analyse the areas where the private sector is involved in the management of information and how it becomes involved. To identify the trends, we will focus on the historical evolution.
- (3) *Orientation to the citizen*: We will analyse the general strategy of the administration and the mechanisms used to determine the needs of citizens and the improvement or changes to the channels of attention.

## Discussion

Focusing the study on the channels of citizen attention and the technological innovation projects related to them, allows us to combine a static component (we have observed the structure of the channels of citizen and administration interaction during a specific period) and a dynamic component (the processes of change and the participation of actors from different areas in the design and implementation of the

initiatives). The following discussion considers each of these dimensions from the perspective of NPM and other perspectives. The selection of indicators is based on this revision where these indicators are used to know how the administration is organised and what model it is evolving towards.

(1) The organisation and operation of the Public Administration (PA)

Some authors have noted that in the Weberian model the rules end up becoming goals in their own right; the lack of flexibility and adaptation of the rules generates inappropriate results; the administrative units generate objectives that conflict with the objectives of the organisation and this leads to a “resistance to change”. This resistance should be the consequence of the priority given to hierarchy, control and predictability (Jain 2004). NPM, with a markedly business-like model, affirms that the bureaucracy is a model to overcome, reducing the state’s influence and incorporating new actors from civil society and the private sector. NPM is critical of the PA for its excessive size, which leads to huge running costs; the compartmentalisation of departments that are hierarchically linked generates rigidity in management and greater complexity; and the rigidity of a public employee structure that becomes increasingly inefficient because there are no external incentives to generate results (Osborne and Gaebler 1992; Barzelay 2001).

However, other authors argue that bureaucracy is necessary for various reasons. If its parameters are met, they will guarantee that the procedures will be equitable (Dreschler 2005). These authors argue that many of the problems identified, such as the supposed resistance to change, arise because the premises of bureaucracy are not met and coordination between politicians and bureaucrats does not work, generating conflicts between different groups (Olsen 2006). It is also noted that bureaucracy has a relevant role in the process of transformation towards a more efficient PA. The same civil servants that the theory proposes to transform are those that lead the transformation process within the administration and what is more, they have the knowledge and legitimacy to undertake this process (Fountain 2005). The process of creating new systems that are adequate for the design of policies and carrying out of government operations is part of the same transformation of the state. Jane Fountain (2005, 2001) states that, although privatising may appear to offer the easiest course of action, the state should make decisions concerning their specific resources, namely knowledge and skills that exist within the government.

(2) Relations between actors in the public and private sectors

Closely related to the factors outlined previously, for NPM to privatise was considered to be an efficient response so long as it occurred in a competitive environment (Osborne and Gaebler 1992). There is a certain degree of agreement about the need to incorporate new actors in the management of public affairs, partly in order to sustain the provision of services, in spite of the fiscal deficit, and partly due to the decline of the state’s role as producer as in previous decades (Peters and Pierre 2001, 2005). In this respect, the ICT industry emerges as the dominant domain in the private sector and, as such, then becomes the supplier to the public service, a role that is also extended to consulting firms that have expanded their market in recent years (Layne and Lee 2001).

In spite of these basic agreements, some authors note, for example, that there is a risk if some services and systems are privatised to avoid internal difficulties in the



governmental integration of back-office functions, those that involve different administrative units (Dunleavy and Margetts 2000). Fountain (2005) argues that in some cases privatising can be an error because the negotiations to introduce technology involve both a learning process and cultural change. Lastly, Renate Mayntz (2005: 92) notes that the horizontal co-operation with private sector actors and the establishment of policies in these networks highlights the problem of accountability and legitimacy of the private actors in the public policy networks do not generally have democratic legitimacy<sup>5</sup>.

### (3) Citizen focused

NPM adopted the metaphor of client-focused to redirect the relationship between the citizen and administration. E-government, in its initial development, (improving the quality of public services, increasing access to information, creating new channels of interaction), was focused, at least in its rhetoric, on the citizen. Some analysis indicates that these initiatives were predominantly aimed at the improvement in the provision of services that using citizens as clients, rather than using them to boost the potential of democracy (Chadwick and May 2003; Gareis 2004). Arguing against this it has been noted that there are differences of legitimacy: governments have the obligation to provide services to the public, and the relation between the public and their administrations is different from the relationship that exists with the private sector. In the market, clients have different options but there is only one option for citizens with government services and obligations. Clients pay for services, whereas citizens have a deeper relationship with and responsibility to the government than is implied in payment for a service. The metaphor of a client-service in democracies, especially in its most commercial form, is a degradation, minimisation and perversion of the state-citizen relationship. Moreover, while differential treatment in the private sector, based on client history or wealth, is acceptable, it is not strictly appropriate for government to treat citizens in this manner (Dunleavy and Margetts 2000; Fountain 2001).

In short, we observe that, in relation to our analytical objectives, there is a coincidence between the elements that are emphasised in both e-government and NPM. The need to transform the administration is highlighted by both and involves the private sector in the design and implementation of public policies, and the reconsideration of the State-citizen relationship. However, there are differences with respect to the redefinition of what is public, the manner of cooperating with the private sector and the conceptualisation of the citizen. While these issues remain in debate, we will analyse the current situation in Catalonia with respect to the issues that dominate this debate. This analysis aims to uncover the extent to which a change in the structure and operation of Public Administration has occurred. The extent to which PA has become a network-administration and the degree to which this evolution reflects the premises of NPM.

<sup>5</sup> It should be noted that the bureaucracy is not necessarily associated with democracy. This is a controversial area that has been discussed by various authors. Along this line, whilst some studies show that there is a positive correlation between a well functioning bureaucracy and democracy, which is reflected by low levels of corruption (See analysis cited in Dreschler), other authors show that bureaucracy has coexisted with authoritarian regimes without this leading to contradictions between them (Oszlak 1984; Oszlak and O'Donnell 1981).

## Empirical findings

### The organisation and workings of the Public Administration

#### *The channels of citizen attention: interactive tellers or reflexes of the bureaucracy?*

The organisation of the three main channels of citizen attention of the Autonomous Government of Catalonia provides the first clues to understand the current situation. The face-to-face contact reflects with sufficient clarity the existing compartmentalisation, which is particularly prominent in the information and citizen attention offices. This administration has 453 information points (which includes offices of nearly all the departments<sup>6</sup>). With the exception of the general-purpose offices of the Presidency and to a certain extent Social Welfare (which operates in areas that often require communication with other departments), other departments only provide information related to their own area. As outlined in recent studies commissioned by the Catalanian Government, this is very costly, both financially and in terms of human resources (in an extreme example, one of the offices receives an average of one visit per day). In addition, it complicates the map of procedures and queries made by the citizen. The compartmentalisation, in this case, is not just indicated by the reproduction of the administrative division in the territory, something that is especially notable in the larger cities, but also in the efforts to transform this distribution and the way of working. It can be seen that departments are reluctant to share information with other departments regarding the nature of the requests made by citizens or the number of visitors they receive. Information appears to be an instrument of power, rather than a resource to be used via network formations. Consequently, opening up databases and sharing information is perceived as involving both a surrender of power and a loss of influence.

Curiously, even though the internet does not have a very long history, the presence of the administration on the Internet presents a scenario that is not very different from the attention given in face-to-face contact. An analysis of the current situation of the Catalanian Government's presence in the Internet, requested by the organisation as a starting-point for the reorganisation of its internet sites, shows that the Autonomous Government of Catalonia has 267 web sites. The panorama is found to be even more complex on observing the degree of heterogeneity that exists in the visitor indexes, the organisation of contents, infrastructure and technological formats, and even with respect to the addresses where pages can be located (URL). In contrary to what would be expected, this leads us to consider that the initial phase of e-Government has probably generated greater inefficiency. A new relationship layer has been added to the existing complexity which reproduces the bureaucratic logic and the workings of the relatively autonomous units, more than it does to the hierarchical organisation.

Finally the telephone, a channel that has probably received the least attention in the literature, is working and organisational model that is different from the traditional bureaucratic administration. In 1998, in response to a European

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<sup>6</sup> The Autonomous Government of Catalonia currently has 16 departments or ministries.

regulation, the citizen attention telephone line of the Presidency of the Catalanian Government was changed to 012. It ceased to be a telephone service for a specific government unit and instead became the number for the entire autonomous administration, and it began to be managed by a private company. Privatisation resulted in a 24-hour-service that operated independently from the restricted timetable of the public employees and gradually it became a well known number; in turn, services were expanded to provide other information of relevance in the area (such as information on entertainment, non-administrative addresses, etc.). The main source of telephone information is a transversal database. In other words, the service is based on information available in a network. Another characteristic of this strategy is that it has made it possible to overcome certain obstacles to improving the quality of attention, which previously represented a significant digital divide<sup>7</sup>.

*Public employees: resistance to change or perverse incentives?*

There is a general belief that one of the main difficulties in carrying out the transformation processes and technological innovation is the observed “inherent” resistance to change by public employees. This resistance is seen in individual attitudes and in the difficulties found in undertaking cooperative work between different units of government. It is assumed that this resistance acts as an obstacle, causing projects to fail. Cooperative work and the creation of transversal systems between government units are dimensions of the network administration. Contrasting these ideas with the reality requires clarification of the dimension that is being analysed as it is not just a question of observing whether a change occurs as a result of hierarchical or individual work in the network modes. We can also consider that networks and cooperation may be found in a horizontal relationship model or in a highly hierarchical structure. It is also possible to differentiate between participating in work and participating in decision-making.

We find in the projects analysed that the emphasis placed on the improvement of citizen attention and the reorganisation of information is not always accompanied by an improvement in the working conditions of government employees. For example, the System of Citizen Attention (SAC), the first database with transversal information, which combines data on organisational structures, procedures, support, etc. of the Catalanian Government, is fed with material from operators in each department who write the corresponding records, update the information, and so forth. Currently, this work is done by entering the system with a user-code to complete the information, then exiting the system and re-entering with a different code to verify the information and create the record. This process of entering and exiting the system is mainly done by the same person, this being the person responsible for SAC in each department. The same information that is written in the SAC must be replicated on the website and, in some cases, on the intranet. In some departments, the same person who does the same work twice, as the formats are incompatible and the automation of these processes has not been planned. In other cases, different people do the tasks, which not only leads to the duplication of tasks

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<sup>7</sup> Catalonia Internet Programme.

but can cause information on a subject to be inconsistent or out of date if there is a lack of co-ordination.

When analyzing the process of creating the new website for the Catalanian Government, we found that the situation was different. The distinction here was that the initiative was developed in parallel with a series of meetings that took place and involved the unit managers for the new site within each department. The objectives were to agree on a common line of action, rationalise the information and close the websites that did not receive visits or lacked a clear purpose (this excludes the main website for each department, which will surely continue to operate). It was found that in the context of a highly hierarchical tradition, this negotiation process was best established with middle management and those directly responsible for running it. It should also be noted that this relationship is characterised by a very high level of centralisation in which the predominant relationships are between one administrative unit and each of the participants, and not e different departments and units with each other in a more horizontal structure.

### *Change management*

With respect to the technology innovation projects we have observed a tendency to rationalise economic resources and the organisation of information. With the early years having passed of intense ICT promotion that led to the creation of websites and digitalisation of contents and services, it is observed that the design of strategic initiatives aimed at reorganising the back-office now dominate. The focus is on integrating information systems (implementing inter-operative technology, unifying criteria for the organisation of information, etc) and improving citizen attention in all the channels, not just in the services provided by these new channels. Studies developed in the context of this reorganisation indicate that the problem is not the quantity of information available but the difficulty in accessing this information and the lack of a system for updates that guarantees the reliability of the information. This causes difficulties for the citizen and also for public employees. The rationalisation, in this case, would seek to create shared databases that would avoid information overlays, provide automatic procedures for updates (automatically eliminating notices that are out of date) and provide information organised on the basis of simple and comprehensive criteria.

### Relations between public and private sector actors

The assumption that a private company serves as a model for the public sector and the “need” to place services in the hands of the private sector is one of the most recurrent themes in the literature (Osborne and Gaebler 1992; Heeks 2001; Hughes 2001). Whereas in the traditional administration the state was found to be the main actor in the provision of public services, post-bureaucratic services put forward a change in the management model that was characterised by a reduction of the presence and functions of the state through the process of privatisation. In analyzing this dimension, we consider the type of relations that are established between the public and private sectors in the management, and design and implementation of services. The following summary of the organisation of

information in the Catalan Government over the last two decades illustrates how the concept of the private sector has changed and the relationship between the administration and its suppliers from the market. The analysis identifies three distinct phases:

- 1) *The public corporation*: In the 1980s the Catalan Government decided to create its own computer centre to assume responsibility for the provision and maintenance of computer services for the entire administration. One of the explanations most widely acknowledged for this decision relates to the need to have specialised personnel. The administrative structure was unable to attract the “best professionals” as the market offered considerably better salaries. The decision to set up a public corporation arose from the need to offer competitive salaries under a different structure from that offered traditionally by public employment. However, in a short space of time, the centre grew considerably, employing more than 400 people (1998 figures) with a high-cost structure and low efficiency.
- 2) *Privatisation*: In response to this scenario, it was decided, in 1998 (as it was showed before, the same year of the phone outsource), to privatise the computer service (the same year in which the citizen attention telephone service was privatised). The computer centre was downsized significantly and a contract was established that gave the company a predominant position in the management and maintenance of computer systems for the Catalan Government. This situation of semi-monopoly led to a new scenario of inefficiencies that became characterised, on occasions, as a poor service at high-cost, with a high dependence on the company that managed the information at all times. In the interviews conducted, references were made to “prices well above market” for the services provided, which in many cases could only be provided by this company under the contract signed, and low efficiency in the results.
- 3) *Recovery of knowledge, privatisation of production*: The current tendency in the Catalan Government reveals a third scenario, with a strategy that has been formally outlined as being aimed at: (a) *Recovering knowledge*: the power accumulated by the private sector in the position of *dominant supplier* is seen as having the necessary know-how in management, such as control over the public information databases. Currently a team of experts is being put together that will be capable of recovering this knowledge; (b) *Generating a management structure, rather than a technological production structure*: there is a certain consensus in the belief that it would not be efficient for the administration to get involved in the production of machinery, an area where the private sector is able to play a more productive role; and (c) *controlling private sector demand*: this is seen in how requirements are presented; in parallel to the concept outlined in (b), it is considered that the private sector can be efficient in specific contexts. On the contrary, in a monopoly situation it is liable to develop a dynamic which are just as inefficient as those developed in the public sector. The optimum context is thought to be one where specialised personnel from the public sector evaluate needs and make specific orders to the public sector, specifying the demand.

## Orientation to the citizen

A literature review that focused on the private sector, academia or government, makes it clear that face-to-face attention with the citizen has been a constant feature in the entire process. However, few studies analyse the conceptual differences that exist in this orientation to the citizen. In this respect, we can differentiate as follows: (1) The citizen as receiver of information: priority is given to improving the quality of information received, which it is hoped will increase confidence in the political and administrative system. The objective is *transparency* in management, which has the effect of control over government and control of citizens over their specific demands (information about the evolution of their administrative procedures, for example). The evaluation is based on the quality and quantity of information made available to citizens. (2) Orientation to the citizen as user-receiver of public services: emphasis is given to service quality. For example, the aim is to organise information according to the citizen's profile (youth, senior citizens, children, immigrants, etc.) or around specific events (retirement, birth of a child, etc.). The evaluation is based on the satisfaction of citizens with the services received. (3) Citizen participation based on the right enshrined in sovereignty: the processes of democratic participation are structured through the use of new technologies (online queries, electronic voting, possibilities of participating in shaping public policy, etc.) (Welp 2006).

In our fieldwork, centred on the channels of citizen attention, we verified that there was an increasing interest in learning about the expectations and uses of citizens as users of public services. This marks a change to previous stages when the design of portals was based on the instructions of experts. Furthermore, there is greater interest in observing the demand for services, rather than the administrative offer when defining attention. For example, the redesign of the system of attention in person includes the integration of offices that provide all information. The advantages for the citizen are clear in terms of being able to avoid having to go from one office to another for each procedure; for the administration, sharing resources leads to their rationalisation whilst also helping to overcome barriers between administrative units. In a similar manner, the redesign of the Catalan Government's portal is based on numerous user-studies that range from questionnaires to focus groups and tests of user-friendliness. This interest in knowing the opinion of the citizen can also be seen in the context of the European directives. For example, the citizen attention telephone service is subject to ISO International quality standards.

In terms of strategy, it would appear that tangible results should be sought in service improvements, improvements which would be justified when we consider the failure to use of the new services. Specifically, the limited use of administrative portals by users requires that the future strategy should be reconsidered.

## Conclusions

The *network-administration* has technological and organisational aspects which are closely connected. In addition to the technological requirements, the interoperability of systems or the standardisation of databases is only possible if the administrative

compartmentalisation is changed. In the context of the criticism of the traditional bureaucratic model, ICT are not only seen as a window of opportunity to change administration but alternatively as a new manner of consolidating the *status quo* (Fountain 2005).

We have observed this in the organisation and operation of the channels of citizen attention, which even in websites reproduce the organisation from the provision of the PA rather than from the demand and requirements of citizens. When a process of transformation commences, the principal obstacles arise as a consequence of the battles for control that are waged over information and resources. As we have noted, the organisation of the channels of interpersonal citizen attention and on the Internet of the Catalonian Government display a high level of compartmentalisation between administrative units. This increases a high structure of costs due to the expense involved in running a large number of websites and, more importantly, offices distributed across the territory. This exaggerates the complexity of the citizen's relationship with the administration, increasing the difficulties that result from administrative procedures: difficulties in getting information, problems of information not either being up-to-date or valid, etc. The telephone service is completely different, with standardised attention by telephone for all the departments. The basis of this system of attention is an information system that has been constructed transversally. The satisfaction of users and the increase in the use of this channel would appear to be positive indicators. However, we should also note that the good operation and evolution of all channels depends on the same process being created and run across all, although not exclusively all, information systems.

Jain has indicated that the relative failure of the first phase of e-government arises because technological innovation cannot be expected to automatically resolve problems that are administrative (2004: 3–4). Other authors affirm that certain characteristics of Weberian bureaucracy are incompatible with some aspects of the *Network-Administration*: that is, bureaucracies tend to identify the control of information (and secrecy) with an increase in power; along the same lines, there are no incentives for co-operation between administrative units to be able to *capitalise* their actions, which in turn strengthens *accountability* within the hierarchy rather than to the advantage of citizens; inertia which acts against innovation; and cooperation, which is suffocated because departments are used to competing for budget funds, something which goes along with the structural difficulties in undertaking joint-initiatives with shared resources (Jain 2004, Fountain 2005).

However, we have also observed that this is not a problem that is unique to *bureaucracy*. In some cases, the *rejection* of change by public employees—*resistance to change*—may be explained by structural obstacles and the increasing complexity of tasks carried out. The difficulty of dealing with this complexity is not accompanied by incentives to increase output, required training, etc. It should also be noted that reforms and innovation often involve the duplication of activities, rather than identifying simplification as a final goal, which in many cases explains the low level of involvement in what of the public employees. The *resistance to change* that is assumed to be inherent to bureaucracy may therefore be understood as an organisational problem and related to incentives (Olsen 2006).

In the relationship with the private sector it is clear that companies have a significant presence in the processes of technological innovation, but a tendency to

increase the decision making capacity of the public sector in the design of projects is also detected. These projects are no longer “under assignment” but instead are the result of working together in response to requirements outlined by the politicians responsible. It is not clear that there has been radical change in the hierarchical workings of the public sector. Similarly, the formation of networks of public and private actors have not necessarily led to better results in the actions undertaken (Mayntz 2001). Specifically, it is argued that the networks between public and private actors have not brought the expected efficiency and, in some cases, they have led to more government expense and a significant loss of knowledge and control, something which then shifts into the hands of the private sector (Dunleavy and Margetts 2000, Urgell et al. 2005). Political leadership appears to be the relevant variable for change in the processes and redefinition of the roles of different actors.

Even though the metaphor of citizen as a client attention has tended to be abandoned, the vision of the citizen as user has been consolidated. The emphasis is placed on evaluating not just the number of users of each channel of attention but also user preferences and interests. Another characteristic of the contemporary tendency is the adaptation of information to citizen needs: a change from the use of bureaucratic language to a more dynamic journalistic style for citizens that is clear and precise. This can be seen both in the tendencies of the organisation of the Catalan Government’s portal and the organisation of information, which is no longer organised for the purpose of serving the supplier’s needs but instead of being in line with the profile of the citizen or critical facts. Another indicator of recent developments is that the priority previously given to websites has been abandoned in favour of promoting all channels of attention. A restructuring plan for interpersonal attention is still to be implemented. This plan aims to integrated offices and provide general training to public employees so that they are able to respond to a range of queries and not just those that relate to their departments; promoting the telephone information service, which has had such good results, and trying to improve the indicators on the use of websites.

In general, we must conclude that there is a limited process of change towards the creation of a network administration which, although far from being consolidated, displays new characteristics. Our analysis falls in line with other empirically based studies which demonstrate that technology is not a mechanical response and that structures cannot be altered with the ease expected (Hinnant and Moon 2001). In this regard, West (2004: 24) points out that the changes are incremental rather than radical. Nevertheless, he adds, given the nature of the development of e-government, which occurs gradually and in co-existence with earlier models of development, it is not surprising that e-government has not increased the confidence of citizens in their governments to date.

NPM and the evolution of e-government in the Catalanian Government have points in common, particularly with respect to the increasing involvement of the private sector and the emphasis placed on the provision of services for citizens. However, the control of the private sector’s involvement and the force of both bureaucratic and political leadership in the management of change appear to indicate the search for alternative models to NPM.

As we have analysed projects that have only recently been initiated, our conclusions are tentative and require further research on consolidated processes. In



any event, we can suggest that the projects studied have been developed in a context where there is growing interaction between departments, with an emphasis on the development of transversal processes and, in some cases, a partial dismantling of the hierarchies in the source and impulse of the strategies. The network administration that appears to be established does not yet appear to lead to organisational change of a structural nature. Instead, it appears that this development is straining the possibilities of the existing organisation. Finally, the network tends to acquire the look of a centralised model, as we have seen in the development of different projects where the presence of one actor—unit or agency—who promotes initiative and assumes a greater level of responsibility, proves to be important and influential as to whether any one particular initiative is to end up being developed.

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