

# Chapter 10

## Electronic Government: Challenges for Public Services Consumer Behaviour and Value Creation

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### ABSTRACT

*E-government has become a priority for many governments around the world and one of the main change drivers in the provision of new services in the public administration context. As public services are part of a complex network in which citizens are the main players, public authorities are increasingly trying to identify and deploy programmes that promote the modernisation and simplification of public services based on knowledge management. This chapter aims to understand the impact of e-government initiatives on consumer behaviour, as well as the importance of knowledge management for value creation in the public administration context. The Simplex programme, the main initiative in Portugal to develop administrative simplification and e-government, is analysed within two contexts: the central administration and the local municipality of Oporto. This chapter highlights that e-government has been an important factor contributing to both the administrative simplification and the improvement in the quality of public services.*

### INTRODUCTION

Little has been said about consumer behaviour in public service institutions. However, just as private organisations, public institutions also “suffer” with the increased complexity of today’s world. Due to the excess of information and the changing needs of customers and citizens, organisations

must face the new socio-economic landscape in which customers have become more demanding and more aware of their roles within business firms and public service institution.

With the advent of E-government, the administrative and legislative simplification has become a priority and an essential task for many governments around the world. In response to these

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challenges, electronic government has been one of the main changes in the public administration context in the last decades.

As a result of the many changes the world is undergoing, consumers are becoming more demanding, presenting a new behaviour in their relationship with institutions, whether public or private. This reality is even clearer when talking about services. With the improvements achieved in the delivery of public services, citizens are experiencing new behaviours with regard to the institutions. Thus, it can be said that changes in the behaviour of citizens is a growing and irreversible reality.

There have been contemporary trends that call into question the traditional governance mode, with the authority concentrated in a state in which the government embodies the will and general interest of its citizens with formalised, top-down intervention. These trends include privatisation, liberalisation, deregulation, creation of incentives for the involvement of civil society and promoting the involvement of citizens in all levels of government, through the sharing of tasks and responsibilities (Fonseca & Carapeto, 2009). In this context, governments worldwide initiated the development of E-government projects at all levels of public administration. E-government presents a great growth since the 2000s and evolved from a stage where information was available statically on websites to a stage where two-way communication tools between government and citizens and other stakeholders are available.

As information is disseminated through different channels and speeds, knowledge has become one of the most significant factors in generating value and wealth, being considered the only sustainable competitive advantage (Nonaka & Takeuchi, 1995). For the first time in history, mankind is creating far more information than one can absorb and is accelerating changes with much greater speed than one can follow. Certainly, this current scale of complexity is unprecedented (Senge, 1992).

It is therefore essential to develop knowledge management in the organisational context. The changes undergone by public and private institutions in order to secure competitiveness in their markets are characterised by the rapidity with which their activities are developed to suit the requirements of their customers and other stakeholders. The development of knowledge management, and the consequent learning processes, allows organisations to keep abreast of newness, to add value to their products and services and to enhance their sustainability. The ability to absorb new knowledge is directly related to the organisational environment conducive to collaboration between organisations and to the commitment and motivation of its employees (Moreira, 2009).

Government agencies are continually interacting with a broad range of individuals, which is one of the major challenges governmental institutions are facing. In this manner, being customer-centric focused is a challenge that public institutions face today.

In Portugal, the Agency for Administrative Modernisation (AMA), is the entity that, according to its mission, "...identifies, develops and evaluates programmes, projects and measures to modernize and simplify administrative and regulatory framework and promotes, coordinates, manages and evaluates the system of distribution of public services, within the policies set by the Government" (AMA, 2014). In Portugal, AMA is responsible for the deployment of customer-centric approaches and knowledge management within public institutions.

Created in 2006, AMA is a public institution that operationalises transformation initiatives and fosters the participation of all different stakeholders in the implementation of knowledge management in the public administration sector. Its main focus is to improve services for citizens and business firms alike.

AMA's main responsibilities are: a) to support the government in the definition of the strategic lines and general policies related with the admin-

istrative regulation and regulatory framework of electronic government and public policies; b) to mobilise the Information and Communications Technology (ICT) in order to support the modernisation of the public administration sector and the interconnectedness between central, regional and local institutions; and c) to manage and develop all specialised, integrated and multi-service public distribution channels.

Clearly, one of the main challenges in the public sector is to assure that the relationship with all individuals and business firms are based on the principle of equality, i.e., all users are to be equal. In order to achieve that principle it is mandatory that AMA has the ability to deploy knowledge across a wide range of public institutions and the use of E-government initiatives is a key issue.

The main objective of this study is to: a) understand the impact of E-government initiatives on the behaviour of users, and b) the importance of knowledge management for value creation in the public administration context. The Simplex programme, the main initiative in Portugal to develop administrative simplification and E-government, created and managed by AMA is analysed in two scopes: the central government context and the local context of the municipality of Oporto.

The important factors to consider are: E-governments initiatives, value creation and consumer behaviour changes. The questions to be addressed are put forward in the objectives section.

Ultimately, this chapter intends to answer the following research question: How important E-government initiatives are both in the Portuguese central government and in the municipality of Oporto in the creation of value for the stakeholders and in changing the customer behaviour.

### **CONSUMER BEHAVIOR AND PUBLIC SERVICES**

If service management is a difficult and complex task, the public services involve a greater complex-

ity given that they involve the mandatory service provision method and the involvement of a very wide audience with very heterogeneous needs. As if was not enough, there are central and local (or decentralised) services that have completely different characteristics. At sectoral levels, there are different classes of services – legal, health, education, among others – that are demanded by different users and involve different stakeholders with diverse needs. Clearly, it is not expectable that private consumers and public users to behave homogeneously.

The importance of the public sector in Western economies has been growing since the 1990s, leaving behind a public provision perspective based on legislative and bureaucratic approach, placing great emphasis on rules and procedures, but introducing new management techniques, largely originated in the private sector, defining performance indicators and modernizing human resources management (Pollitt & Bouckaert, 2000; Bovaird & Loeffler, 2003). In practice, this set of changes led to a change in how public managers now manage their institutions and departments.

The legitimacy of the administration of public services depends largely on (Broom, 1995): the effective performance improvement, the orientation to achieving results and public accountability. Thus, the measurement and performance management are now considered essential to the modernisation of the public sector and on the provision of public services (OECD, 2000), which is part of the spread of administrative reform (Power, 2000).

The reasons for the importance of performance measurement are related with the setting and clarification of the goals of the organisation, the ability to reduce costs and the implementation of quality improvement measures (Doherty & Horne, 2002). The growing importance attached to transparency and accountability by public services to their different stakeholders gave a new life to the purpose of providing information on the quality, efficiency, accessibility and efficiency of services provided (Vigoda-Gadot & Yuval, 2003). On the

other hand, the strengthening of public legitimacy to attract resource allocations and to assist public management to adjust its organisational structure and processes, led public managers to set a new agenda deploying a greater focus on the evaluation of outcomes (Wechsler & Clary, 2000).

The unique characteristics of services – intangibility, heterogeneity, inseparability, reliability, and perishability – have shaped the literature on services marketing and consumer behaviour (Zeithaml, 1981; Wolak, Kalafatis, & Harris, 1998). Moreover, the process nature of services has been conditioned by both the need to simultaneously produce and consume it and the customer's participation in the service production process (Grönroos, 2000), contrary to what occurs in the traditional marketing of physical goods. The presence of, and interaction with, customers have clearly marked the services arena, regardless if they are public or private.

The importance of services changed the research agenda from a product/goods perspective, based on tangible outcomes, to a service/process perspective, based on trust and loyalty of the relationship, which implied a research initiative that reflects a relationship-based service-dominant focus (Vargo & Lusch, 2004). This success of the service/process perspective in private businesses influenced the expansion of public services.

Services can be organised according to a multi-stage approach when analysing consumer behaviour and service performance, based on three major stages (Lovelock & Wirtz, 2011): the pre-purchase stage, the service encounter stage and the post-encounter stage. This framework has given researchers and businesses a clear focus and direction, in identifying the stages that need the most improvement and therefore need more resources allocated to them (Blackwell, Miniard, & Engel, 2003; Hensley & Sulek, 2007; Tsiotsou & Wirtz, 2012). Research has been conducted on all three stages to examine their major determinants, influences (direct and indirect), processes and outcomes. Clearly, this multi-stage approach has

given services firms, whether public or private, the possibility to follow very different approaches followed when marketing goods.

The pre-purchase phase of the decision-making process for services is more complex when compared to what occurs for goods due to the participation of consumers in the service production process (Fisk, 1981). Moreover, consumer expertise, knowledge and perceived risk play significant roles in this purchase decision process for services, due to the intangible nature, variability of the service and price uncertainty (Byrne 2005; Diacon & Ennew, 2001).

In the pre-purchase stage, an arousing need triggers consumers into action who start searching for information and evaluate alternatives before deciding whether or not to buy a particular service (Tsiotsou & Wirtz, 2012). Needs may be triggered by the unconscious mind (e.g., impulse buying), internal conditions (e.g., hunger) or external sources (e.g., marketing mix). Once a need or problem has been recognised, based on the notion of “planned purchase behavior,” consumers tend to look for alternatives to satisfy their needs in this pre-purchase stage (Alba & Hutchinson 2000; Mattila & Wirtz 2002).

Normally, consumers employ multiple sources of information depending on their orientation, their tendency to innovate and the perceived pleasure of the shopping/servicing experience, in order to save money, to reduce risk, to develop performance expectations of service offers and to explore alternative service providers (Konus, Verhoef, & Neslin, 2008). They use a wide array of sources to gather information (Boshoff, 2002; Zeithaml & Bitner 2003; Lovelock & Wirtz 2011; Tsiotsou & Wirtz, 2012): from the Internet to compare service offerings and search for independent reviews and ratings; from trusted and respected personal sources such as family, friends and peers; from firms with a good reputation; from the search of guarantees and warranties; after assessing service facilities; and from tangible cues and other physical evidence.

Although sometimes it is very difficult, multi-attribute models have been extensively used to evaluate important attributes before making a purchase, namely (Zeithaml, 1981): search attributes, experience attributes and credence attributes. Search attributes help consumers to better understand and evaluate a service before making a purchase, as price, brand name and transaction costs (Wright & Lynch 1995; Paswan, Spears, Hasty, & Ganesh, 2004). On the other hand, experience and credence attributes are very difficult to assess even after making a purchase (Galetzka, Verhoeven, & Pruyn, 2006).

The service encounter stage takes place when serve consumers move on to the service experience and interact with the service firm. Accordingly, consumers co-create value and co-produce a service while evaluating the service experience (Tsiotsou & Wirtz, 2012).

This service encounter stage involves different perspectives for consumers that include the functionalities of the process, the appearance and behaviour of service personnel, the atmospherics (lighting, colours, music, scents, smells), the equipment, facilities and layouts, among other cues, that can create or destroy customer value, quality and satisfaction (Noone & Mattila, 2009; Tsiotsou & Wirtz, 2012). On the other hand, service providers are much more focused on processing the service as close as defined as possible.

The importance of service encounter is omnipresent as its outcome shape consumers' expectations (Coye, 2004), satisfaction, loyalty, repurchase intentions and word-of-mouth behaviour (Bitner, Brown, & Meuter, 2000; Tsiotsou & Wirtz, 2012). Due to its importance several models have been put forward to assess customer behaviour during service encounters, namely the following ones: the moments of truth, the role theory, the servuction model and the servicescape/environmental model.

The service encounter has been regarded as a *moment of truth* as the consumer's experience of the service encounter is the main factor

contributing to the perception of overall service quality (Normann, 1991; Edvardsson, Gustafsson, Johnson, & Sandén, 2000). As a result, during this *moment of truth* the relationship between the consumer and the firm is at stake (Normann, 1991).

In order to diminish the variability of the service provision, the role theory has been used to give employees a role in service encounters. Role has been defined as "a set of behavioural patterns learned through experience and communication, to be performed by an individual in a certain social interaction in order to attain maximum effectiveness in goal accomplishment" (Grove & Fisk, 1983, p. 45). As such, in very specific settings, employees (specially, front line personnel) are given a role so that they do not feel uncomfortable when providing the service and as a way of achieving productivity and satisfaction of both parties, the service provider and the client (Lovelock & Wirtz 2011).

In order to create a consumer's service experience, the *servuction* (combining the terms service and production) *model* encompasses various types of interactions that include a technical core invisible to the customer, and the service delivery system visible to and experienced by the consumer (Eiglier & Langeard, 1977; Langeard, Bateson, Lovelock, & Eiglier, 1981). This servuction model seeks a pleasant service environment with trained service employees so that customers are satisfied during the service encounter. The main purpose is that each interaction can create value (e.g., a pleasant environment, friendly and competent employees) and generate overall satisfaction, and repeated purchase.

Bitner (1992) identified several dimensions of service environments, including ambient conditions, spatial layout/functionality, and signs, symbols and artefacts that are important during service encounters, especially in high-contact people-processing services. The *servicescape*, also known as *environmental perspective*, takes into account all the experiential elements service con-

sumers encounter in service delivery settings that can enhance or undermine consumer satisfaction.

Ambient conditions involve all environmental characteristics that influence the five senses, e.g. lighting, colours, music and sounds, ambience temperature, and scents or smells (Tsiotsou & Wirtz, 2012). Signs, symbols and artefacts aim to convey the firm's image and identity, and to help consumers find their way. The spatial layout refers to environmental design and includes the floor plan, the size and shape of furnishings, counters, and potential machinery and equipment, and the ways in which they are arranged (Tsiotsou & Wirtz, 2012). Functionality refers to the ability of such items to facilitate the process of delivering the core service. The importance of these dimensions was perceived by Bitner (1992) who defends that they should be holistically integrated so that the service can be of added value during the service encounter.

This holistic perspective is also defended by Lovelock and Wirtz (2011), who defend that servicescapes serve four purposes: (1) they frame the consumer experience and shape consumer behaviour; (2) they convey the planned image of the firm and support its positioning and differentiation strategy; (3) they are part of the value proposition; and (4) they facilitate the service encounter and enhance both service quality and productivity.

The role of frontline employees must not be underestimated. They are key players in the provision of a service as the customer-employee bond influences customer satisfaction. Although there might be huge differences among different services (high-contact services, low-contact services and self-service encounters) the provision of the service must be regarded as an unique perspective where employees must have the ability to not only accommodate all customer needs, but also to respond to all difficulties of the service provision that lead to customer dissatisfaction.

As referred above, this holistic perspective can only be achieved integrating front and back-line employees with ambient conditions, spatial layout/

functionality, and signs, symbols and artefacts in the *Servicescape* model.

Several conceptual models have been used to analyse post-encounter stages, where consumer satisfaction and perceived service quality are the most common ones due to their association with business performance (Brady & Robertson 2001). However, there has been a recent shift on the research conveyed as service quality does not necessarily imply satisfied customers, repurchasing intentions, or consumer loyalty.

The most popular models include the expectancy-disconfirmation paradigm and the attribute-based perspectives, which have led to integrative models.

Oliver (1980) proposed the expectancy-disconfirmation model, one of the most used in the marketing literature, in which the confirmation or disconfirmation of consumers' expectations is the key determinant of satisfaction (Oliver, 1980; Wirtz & Mattila, 2001). Following the expectancy-disconfirmation paradigm, consumers evaluate the service performance they have experienced and compare it to their prior expectations. They will be reasonably satisfied as long as perceived performance falls within the zone of tolerance. On the other hand, if performance perceptions exceed desired levels, consumers will be very pleased and will likely make repeat purchases, remain loyal to the service provider, and spread positive word of mouth (Wirtz & Chew, 2002; Liang, Wang, & Farquhar, 2009). Accordingly, post-purchase attitudes and behaviours such as consumer loyalty (Vazquez-Carrasco & Foxall, 2006), repurchase intentions (Cronin, Brady, & Hult, 2000) and service recommendations to acquaintances (Zeithaml, Berry, & Parasuraman, 1996) are directly linked to satisfaction.

The significance of service attributes in influencing overall satisfaction (Mittal, Kumar, & Tsiros, 1999; Akhter, 2010) has given rise to attribute-based perspectives. Within this perspective both cognitive (expectations) and affective (desires-motives associated with personal ob-

jectives) elements should be considered when examining the consumer satisfaction formation process (Oliver, 2000).

The attribute-based perspectives are used to complement the expectancy-disconfirmation paradigm (Mittal & Kamakura, 2001; Oliver, 2000), especially due to the affective component of services.

The main advantages of the multi-attribute model in understanding the satisfaction formation process are the following ones (Mittal, Kumar, & Tsiros, 1999; Gardial, Clemons, Woodruff, Schumann & Burns, 1994):

1. It is useful for identifying what specific attributes act as antecedents of customer satisfaction;
2. It is useful to segregate attributes, separating those consumers are happy with from those consumers are dissatisfied with;
3. It is possible to analyse post-purchase experiences at an attribute level rather than at the service level;
4. It helps firms identify and manage attributes that have a strong impact on satisfaction and dissatisfaction.

Another advantage of this attribute-based approach is that it can be used in an online context and self-service technologies to explain the link between attributes and quality satisfaction (Yen, 2005).

The integrative models that deal with service recovery, relationship marketing, behavioural intentions will not be discussed here.

The multi-stage model has clear advantages. The first one is its clear focus on services. The second one is that it includes three different perspectives on service assessment: the pre-purchase stage, the service encounter and the post-encounter stage. In what regards to public services there is a great gap to cover: as there is no “purchase” the pre-encounter stage has been greatly neglected,

giving great emphasis to the encounter and post-encounter stages.

The service encounter stage is a complex task. It is a social activity where different types of users interact in a very specific context in order to answer/satisfy different needs. The service encounter stage is merely a “terminal phase,” which is the corollary of a multifaceted process that unfolds in an institutional context, involving two types of main characters: the employee and the user.

Another facet of public services, and in particular the public service encounters, is their social nature, where employees with their experiences and knowledge, try to satisfy the needs and expectations of the public services users. Public institutions define their objectives, organisational structure and processes in order to provide value-added services to its users, but are primarily focused on the supply, not on the particular demands of those services.

As mentioned above, the service encounter stage is a process resulting from the synergy of different variables: user behaviour, the conduct of the employees (directly or indirectly) involved in the service delivery and the environmental/instrumental conditions. However, unlike what happens in the private services business, in most cases users have no alternative to public services. As a consequence, in most cases public services are focused on the supply of the services and on the institutions, as opposed to being centred on the users and their needs.

Ferreira (2000) argues that the service encounter stage is embedded in three main perspectives:

- The institutional perspective, where it is necessary to identify and analyse a set of factors (profile, organisational processes and instrumental resources) featuring the institutional *modus operandi*, without which it is impossible to understand what goes on in the service encounter stage and the effect on its efficiency and quality;

- The employee perspective involves the identification and analysis of all the factors (individual profile, professional competence and health status) featuring the “common operating mode” that guides employees behaviour in service encounter situations so that they can respond appropriately both the users’ needs and to the tasks prescribed by the institution; and
- The users perspective that involves the identification and analysis of all the factors (socioeconomic profile, social representation and satisfaction) featuring how users use the services. This is important to understand users’ behaviour in service encounter situations.

The servicescape framework intersects the three different abovementioned perspectives that circumscribe the physical environmental conditions (space, lighting, music, ambience temperature) and instrumental (material, furniture, equipment). The visibility of existing imbalances and possible incompatibilities between the logic appears in the form of critical indicators (waiting time, user complaints, errors, rework, etc.). Accordingly, the main centre of interest is the interface between the perspective of the user and the perspective of the provider of the service. This allows the development of a set of attributes from which are recovered explanatory and illustrative elements of the critical factors of the service encounter, as well as the consequences for all involved stakeholders: employees, users and the institution. In this perspective, the situation of the service encounter stage is the main dimension in the production of knowledge on this perspective.

During the service encounter employees are mediators between the object and/or institutional perspective and the users’ goals/needs. Although this mediation function may seem particularly simple, as it is prescribed as the object of the service being provided by the institution, it is difficult to implement because it involves various

users’ needs and is based on the object of the public institution, which is often not market-oriented. In this sense, Ferreira (2000) highlights three main facets of the work of mediation:

- From the institutional perspective, the institution, abandoning its abstract entity status, seeks to “embody” the service provider, who in turn tries to solve the problem of users providing standard, broad services;
- From the user perspective, mediation seeks to give the service provider a unique identity to embodying the institutional image in responding to the demands of users; and
- From the service provider perspective, mediation is a “new” moment of truth in which he/she has to manage the institutional interests with what the user wants, trying to fulfil the tasks prescribed, following the institutional framework and professional identity.

Understandably, mediation plays a fundamental role in the dynamics that characterizes the public service encounter, since it has consequences: a) in the user satisfaction, as a core element of the existence of public service; b) in the effectiveness, efficiency and quality of service at the institutional level; and c) in the satisfaction and wellbeing of service providers and in the quality of the service itself. As a result, measuring the service quality implies a holistic and multifaceted perspective of the attributes and of the multiple rationales of the public service encounter. Clearly, there is a need to: a) identify key variables and attributes of the particular service provided; and b) analyse the possible interactions of these variables in order to diagnose the problems encountered in the post-encounter service phase.

In this service encounter perspective, institutions seek to take advantage of the servuction model in the user-producer relationship, in order to take advantage of an institutional image defined by servicescape where the colours, lighting, music,

ambience temperature, image and identity are turned to the institutional image, in which service providers often have a clearly defined role embedded by their behavioural patterns in their social interaction with the public service users in order to achieve their goals.

Finally, the post-encounter stage in public services follow, like in public businesses, mixed approaches of expectancy-disconfirmation models and attribute-based perspectives in order to influence their users (and stakeholders) overall satisfaction. Loyalty and repurchase are not as prevalent in public services as in businesses due the particular perspectives of public services.

## **ELECTRONIC GOVERNMENT**

The administrative and legislative simplification has become a priority and essential task for many governments around the world. In response to these challenges, electronic government (or E-government or E-gov) has been one of the main changes in the public administration context in the last decades. It has changed the environment in which the public service operates, adding new concepts and methods to its operations, generating changes in the relationship between governments and citizens and even in the behaviour of citizens. Furthermore, nowadays E-government has been an effective and efficient way to deliver public services in a context of crisis (Hu, Lin, & Pan, 2013).

The United Nations, in the United Nations E-Government Survey 2012 (p. 2), highlights the importance of E-government to governments as a way for “delivering much needed sustainability in social and economic services to their citizens.” Therefore, more and more governments have invested in this model.

Although the term is relatively new, the concept has been developing since the mid-1980s (Brown, 2005). The surge of the Internet and the World Wide Web has led to the development of

E-government projects at all levels of government worldwide (Park, Choi, & Bok, 2013). The term, however, has become more common only in the early 2000s as the application of electronic commerce practices to the public services, “referring to the delivery of government services to the public ‘on-line’ or to the technological infrastructure required to deliver those services” (Brown, 2005, p.242). Similarly, West (2004) defined E-government as the delivery of government information and services online through the Internet or other digital means. In contrast to traditional structures, which are hierarchical, linear, and one-way, “internet delivery systems are non-hierarchical, nonlinear, two-way, and available 24 hours a day, seven days a week” (West, 2004, p.16).

The main function of E-government is to support communication between public administration and citizens through use of computer technologies. Farther, E-government uses technology to “support a government’s interaction with multiple stakeholders including employees, businesses, and other government agencies” (Joseph, 2013, p.435).

The E-government, thus, evolved from a stage where information was available statically on websites to a stage where tools for two-way communication between government and citizens and other stakeholders are available.

An expanded definition of E-government, however, relates the term to the “entire range of government roles and activities, shaped by and making use of information and communications technologies” (Brown, 2005 242). E-government affects all public administration instances and functions and must be focused on the needs of citizens.

OECD (2008) points that E-government and administrative simplification share the same goal of public sector transformation, focusing on “making the everyday life of citizens and businesses easier, interaction with government for citizens and businesses more convenient and transparent, and public administration better and cheaper.” It

can be argued that E-government is a key tool for administrative simplification.

E-government supports and enhances simplification by eliminating (OECD, 2008, p.46):

- The necessity for rules and regulation through automation of business process value chains;
- Redundant procedures and regulations through resource sharing;
- Unnecessary regulation of semi-automatic or manual processes and procedures by linking services and data together through electronic networks.

Therefore, E-government presents a great growth in recent years and is characterised as a large generator of changes, both in the public administration itself and in its relationship with stakeholders. The citizen-centric approach to the delivery of E-government services puts citizens at the centre of the issue of internal and external processes and requires that ICT be used to provide public integrated services across different public administration agencies. Possibly the most important concept inherent in E-government is citizen-centric approach for service delivery. In this model, public administration services should be designed from the starting point of meeting citizens' needs or of helping citizens to meet their civic obligations (Brown, 2005).

On the way to modernisation, West (2004) argues that governments can be classified into four stages: (1) the billboard stage; (2) the partial-service-delivery stage; (3) the portal stage, with fully executable and integrated service delivery; and (4) interactive democracy with public outreach and accountability enhancing features. This model demonstrates that the path to the effective use of e-government is long and difficult.

Moreover, its application has proved a great advantage for governments who adopt the strategy, particularly with regard to administrative simplification, since: it allows administrations

to share information and data internally and with users more easily; it enables administrations to broaden the channels of service delivery to include e-government services; it provides administrations with tools to ensure integrated services (OECD, 2008).

The implementation of E-government is not an easy task. The E-government projects are very complex. There are many technical, social, economic, organisational, and political factors that impact the development of projects (Joseph, 2013). Political factors, for instance, may have great influence on the development of these projects, which may be constituted as major barriers to its implementation. Hence the importance of its implementation within a strategic long-term context, and in conjunction with profound changes in business models and processes, using methodologies such as re-engineering and continuous improvement.

Finally, as mentioned earlier, the implementation of e-government, rather than effect change in the relationship between governments and citizens, causes changes in the behaviour of citizens in relation to public services. These changes originated mainly from citizen-centred approach are similar to changes that occur in private services. The context of change, therefore, is inherent in the current reality, whether in public or private services, and the use of appropriate tools and methodologies makes this process easier and more beneficial for all parties.

## **KNOWLEDGE MANAGEMENT AND VALUE CREATION**

Knowledge management is becoming a key concern for businesses (Moreira, 2009; Ajmal, Helo, & Kekäle, 2010) and has aroused business and academic interest. Nonaka and Takeuchi (1995, p. 3) conceptualize the creation of knowledge in organisations as the “ability of the company as a whole to create knowledge, disseminate it through

the organisation and apply it to products, services and processes.”

A subjective approach suggests that knowledge is inherent in human experience and is constantly being shaped by the social practices of communities and institutions (Vorakulpipat & Rezgui, 2008), which is very pertinent in public service institutions.

Senge (1992) argues that systemic thinking is a frame of reference to see interrelationships rather than events, to see the patterns of change instead of ‘snapshots’.

The existence of cultural barriers (Davenport & Prusak, 2000) and the lack of trust between stakeholders (Sveiby, 1997) can be a great inconvenience to the success of knowledge sharing between institutions. It is then up to the leaders (Ajmal, Helo, & Kekäle, 2010) to provide a favourable environment for collaboration through the construction of shared visions.

Social relationships are characterised as dynamic processes. In this manner, transactions between different organisations are part of a complex network involving a large number of players (Chetty & Eriksson, 2003), in which the actions of one influence those of the others. Similarly, the knowledge generated within a relationship is unique because it is built upon the information and experiences of both organisations. Under the same circumstances, the knowledge generated by a firm with another partner would have different characteristics. Moreover, once created, knowledge belongs to both organisations and is naturally diffused to the other players within the business network. Therefore organisations need to extend their efforts with regard to knowledge management beyond the organisational borders and collaborate with other organisations in order to keep abreast of the network knowledge (Weer, Blomberg, & Löwstedt, 2009).

The success of the learning process is generally perceived as an effective internalisation of knowledge (Becker-Ritterspach, Saka-Helmhout, & Hotho, 2010). The cultural and social contexts

of the “recipient” institution, as evidenced by the commitment and motivation of people, have a strong influence on its ability to internalize this knowledge. An environment focused on collaboration, dominated systemic thinking, a shared vision among the people and an elevated communication flow is highly motivating and conducive to organisational commitment (Becker-Ritterspach, Saka-Helmhout, & Hotho, 2010).

According to Massingham and Diment (2009) an individual’s reactions to a new process or new practice depends on the approach used in its implementation. Accordingly, it is the leader’s task to motivate and generate commitment for a successful implementation.

A corporate culture with characteristics similar to those of bureaucratic organisations, such as centralised decision-making, lack of autonomy in carrying out tasks, individualism, rigidity of rules, control, and a hierarchical structure (Lam & Lambermont-Ford, 2010; Sousa, 2009), tends to generate less involvement and is less conducive to the internalisation of knowledge.

Basadur and Gelade (2006) and Davis (2009) defend that the reduction of the distance between managers and other employees as well as, the adoption of practices of integration between different functions and areas of the organisation decreases the resistance to change (Daghfous, 2004) and promotes knowledge sharing (Davis, 2009).

Knowledge management can be classified as a source of value creation. This is related to meeting the needs and expectations of the key stakeholders of the organisation. For Kim and Mauborgne (2005), the constant pursuit of value creation for the customer is a key strategic factor that leads the company to very positive results.

Although not a new concept, there is some confusion regarding the use of the term “value.” According Boztepe (2007), part of the confusion comes from the fact that value is a highly polysemic word. Its meaning varies between concepts as far as economic return and moral standards. It is common to find settings that relate only to the

needs of shareholders, arguing that the creation of value will increase the value of their shares. In this study, the creation of value for the public is more important, as they represent the main stakeholders of public enterprises. In this case, value relates to the perception of the relationship between what is paid for the services, either directly or through taxes, and the actual quality of the services provided.

According to Basadur and Gelade (2006), value creation is the result of a learning process involving organisations that have some degree of efficiency, adaptability and flexibility, and that can manifest themselves through continuous improvement and innovation.

Senge (1992) argues that learning does not mean acquiring more information, but rather the expansion of the ability to produce a desired result. As a result, organisational learning enables organisations to adapt to changes and acquire new knowledge, skills or behaviours that can transform the organisation.

Knowledge management has major implications for the learning capacity of organisations and their ability to adapt to a changing competitive environment. As stated by Fonseca and Carapeto (2009, p.103), “knowledge allows learning and this allows for change and improvement.” The most important purpose in managing knowledge is learning, as it determines the value of a company (Sveiby, 1997).

According to Guns (1998), learning is rarely easy. However, we are clearly moving towards a labour world where continuous learning is mandatory. All the learning that results from the use of knowledge acquired, stored and shared, can be translated into improved practices and standards that aid in the creation of competitive advantages for companies.

The quest for knowledge and learning becomes an important factor for individuals and organisations. An organisation that learns is an organisation empowered by the creation, acquisition and transfer of knowledge. Consequently, this can

modify an organisational behaviour in order to reflect the new knowledge and insights gained (Kiernan, 1996).

Finally, organisational learning can be achieved by stimulating, in parallel, a continuous improvement and innovation of learning processes. Innovation is characterised by periods of disruption to the practices previously used and therefore, results in further progress in a shorter space of time. On the other hand, the generating process of continuous improvement is responsible for gradual changes over time, enabling the organisation to attain the main needs of stakeholders.

The importance of innovation as a knowledge mechanism that enables or hinders the implementation of changes is well understood in industrial environments (Sousa, 2009). Motivation, recognition of the importance of people in the process of innovation, creativity, and the possibility of developing new knowledge and skills are the main factors that underpin innovation in a knowledge-based environment (Sousa, 2009).

The issue regarding public services value is very pertinent. In fact, the assessment of public services is an even more complex task than in the private context. Given the specificities of public services, it is necessary to consider the various public services and think on what specific performance indicators to use. Moreover, “Given the difficulty of assessing the public services outcomes with financial measures we need to look for another type of indicators that allow us to gauge the performance of the organisation” (Gonçalves, 2000, p. 1). Clearly, the value is not understood as the price of the public service (many public services are provided without any type of payment), nor is the cost of inputs (which are not transparent at all, compared to some variables of political nature).

Bovaird (2001) argues that the value produced by any public service includes, in principle, five types of added value: value to end users, value to indirect users, social value (as a result of social cohesion policies or social justice interventions),

political value and environmental value. Recipients of public services are therefore very diverse, which makes it even more complex the evaluation process, being the performance of public entities judged by various stakeholders, in particular for consumers, taxpayers, employees and politicians (Boyne, 2003). Public services can never be assessed using a single measure: first, not all activities are quantifiable and, secondly, their assessment is largely subjective, as it does not always involve an objective performance measure, but rather the image or identity of the public sector (Roemer-Mahler, 2006).

Doherty and Horne (2002) add Ethics, that covers Fairness, Empathy and Ecology, to Economics (which covers minimizing the cost of resources acquired, in terms of quality, quantity, price and time) Efficiency (optimisation of the relationship between outputs and inputs) and Efficacy (degree of achievement of objectives). In fact, there is a greater complexity in assessing the added value of public services, since it requires them to an ongoing quest for justice, equity and high level of well-being in addition to the criteria efficiency, effectiveness and service.

Boyne (2002) identifies seven dimensions of public service performance: amount of results (outputs), the quality of those results (assessed in terms of speed and reliability of service, courteous staff, etc.), efficiency, equity (fairness in the distribution of costs and benefits among different groups), impact (outcomes), value (value for money), and ultimately customer satisfaction. Moreover, the relationship between external and internal measures of service quality were also analysed, noting that there is not always a correlation between measures of administrative performance and citizen satisfaction, advocating the importance of considering both types of measures in evaluation of public services.

Indeed, as argued by (Neely, Gregory, & Platts, 1995), there is a long way to go to overcome the limitations of performance evaluation, particularly in terms of indicators as performance measure-

ment is a topic that is commonly discussed but rarely defined.

Moullin (2004) advocates a system of performance measurement to ensure high quality services, reduced costs, which meets the users' needs. Moullin (2004) developed eight key issues in performance measurement: a) measuring performance along five perspectives: achieving strategic objectives, user satisfaction and other interest groups, organisational excellence, financial goals, and innovation and learning; b) ensure that you are measuring what really matters to service users and other stakeholders; c) employee involvement in defining the measures themselves; d) obtaining indicators of perception, directly from the user themselves and other interest groups, and performance provided by the organisation itself; e) the need to take into consideration the cost of measuring their own performance, which should be a value-added activity; f) the use of measures such as strategic lever; g) the need to follow a continuous improvement philosophy. Moreover a holistic perspective integrating the institutional, the service providers and the users perspective in necessary in order to integrate this distributed source of knowledge.

## **CONSUMER BEHAVIOR CHANGES AND E-GOVERNMENT**

If consumer behaviour is very important in providing services, whether public or private, it is necessary to have a broader perspective when we deal with e-government and changes in consumer behaviour.

The world is experiencing a kind of second industrial revolution as noticeable changes in the role that governments have with their communities and, above all, how the latter are relating with the former and with themselves. These changes are deeply related to the new perspective of the Information Society, where e-government is a key issue.

The information society has had a pervasive effect in everybody's life. Who does not recall for example: emailing all day long, operating ATMs, observing a minute by minute war on television or on the computer, e-learning online, e-banking, declaring (and paying) taxes online, receiving (and spending!) his/her salary electronically, studying online, running remotely and real-time medical operations, buying and selling shares on line, just to mention a few.

The "digital" technology convergence has allowed the three "Cs" – Content, Computation and Communication – to move the world and to challenge governments to implement innovative e-government practices.

If the goal is to provide relevant information to all citizens, e-government needs to develop services that will serve all citizens, such as: e-learning or e-training, e-employment, the integration of business actions, e-procurement and the management of data bases and of business cases. Clearly, consumer behaviour encompasses a broader perspective than merely concerned with the service encounter referred above. There is a need to link the State to a number of internal relationships to provide services (networks among different levels within the same country) which should include external relations between government and citizens based on a network of networks. In this new perspective, one cannot talk merely on consumers, but stakeholders as they are not only the recipient of information and of public services, but also influencers.

The role of stakeholders is very wide. For example, political authorities, to gain legitimacy, may aim at implementing innovative industrial policies or promoting an inclusive library. They might also want to reduce costs disseminating remote medical attendance. Both the government and citizens need greater transparency and intervention.

For example, at educational level to disseminate programs, products, qualifications, scholarships and research and educational information all stake-

holders alike, institutions, students and educators are responsible, in a joint effort, to update not only the information content, but also all stakeholders generate transparency and information diversity never before achieved.

E-government allows not only an exercise of citizenship in obtaining more information, but also the participation in diverse political and civic spheres. Similarly, local productive forces, trade unions and business sectors can obtain and use information agreements with their needs and interests.

Clearly, the changes in consumer behaviour (we all are consumers!) have a common denominator: the need for transparency, diversity and complementarity of the information provided in the provision of communication and services to all consumers and stakeholders. In terms of impacts, e-government can influence everybody's daily lives in terms of services and citizenship.

## **MAIN OBJECTIVE OF THE CHAPTER**

This chapter aims to understand the impact of E-government initiatives on consumer behaviour, as well the importance of knowledge management for value creation in the public administration context, exploring the cases of Portuguese central government and the municipality of Oporto. Therefore, at the end of the chapter it should be possible to answer the following questions:

**Question 1:** How important E-government initiatives are in the Portuguese central government and in the municipality of Oporto in the creation of value for stakeholders and in changing the citizens' behaviour?

**Question 2:** What is the role of the Simplex program in the administrative simplification process and the development of E-government in Portugal and in the city of Oporto?

## **ELECTRONIC GOVERNMENT IN PORTUGAL**

Portugal initiated in 2006 the introduction of a programme for administrative simplification and the development of E-government, the Simplex Programme. According to the OECD (2008), Portugal is one of the very few countries which have integrated E-government and administrative simplification as part of one policy and strategy. Portugal has an advanced E-government infrastructure, providing many services completely online. This model placed Portugal near the top in the last years in the e-Government Benchmarking, released by the European Commission (AMA, 2014).

The first initiative towards E-government, however, came much earlier in 1991 with the release of INFOCID (Interdepartmental Citizens Information System) program, which allowed the integration of more than 50 government departments. In 1996, it enabled to citizens send their tax returns over the Internet, which happened for the first time around the world.

The Simplex programme, initiated in March 2006, is the main government program aimed at administrative simplification and e-government. The programme involves a number of administrative and legislative initiatives to further reduce bureaucracy, increase authorities' transparency and public administration's efficiency, and improve the relations between citizens and government. The programme mainly focus on improving front-office-oriented public sector business processes with direct impact on users (citizens and businesses) and how these simplification activities can make users' interaction with public authorities less burdensome. E-government is a key engine for successful implementation of the Simplex programme, as simplification of front-office business processes depends on obtaining an integrated and coherent E-government back-office (OECD, 2008).

The Portugal government's key objectives in terms of E-government include (Rodousakis & Santos, 2008): increasing citizen satisfaction; increasing efficiency and reducing costs (process re-engineering); enhancing the transparency of the bureaucratic structure, thereby increasing citizen trust in public services; promoting citizen participation in the democratic processes through the improved dissemination of information; promoting the advancement of the information and knowledge society through an innovative public sector.

To achieve these objectives, Portugal's E-Government strategy focused on seven priority principles (Rodousakis and Santos, 2008): citizen-focused public services; a modern and efficient public administration; new technological capabilities; rationalisation of communication costs; efficient management of public procurement; public services that are closer to the citizen, and interactive public services. It was furthermore acknowledged that these objectives could only be achieved if all stakeholders (government, public entities, businesses, and citizens) collaborated and actively pursued the realisation of their tasks and responsibilities. That's why the importance of collaboration between all parties for the success of the programme.

The Agency for Administrative Modernisation (AMA, Agência para a Modernização Administrativa, in Portuguese) is the body responsible for managing the Simplex programme. AMA was created in 2006 with the objective of identifying, developing and evaluating programmes, projects and actions to modernize and simplify administrative and regulatory framework. AMA seeks to promote, coordinate, manage and evaluate the distribution system of Portuguese public services within the policies set by the Government.

For AMA (2014), administrative simplification and electronic administration are key challenges to raise competitiveness, economic growth and quality of life standards in Portugal. AMA's main targets include facilitating the lives of citizens and

economic agents' by making the interaction with public institutions more convenient and transparent as well as streamlining of Public Administration services.

As public institution created to promote and develop administrative modernisation, AMA acts in three main lines of action: customer/citizen services, simplification and E-government.

Seeking to improve customer/citizen services, AMA is responsible for developing and managing new models of customer service, which enable citizens to interact with the state in an innovative and efficient manner. The Citizen's Shops (*Lojas do Cidadão* in Portuguese), initiative begun in 1999, are one of the most emblematic initiatives of this area, a pioneering concept of centralisation of public services in one place.

The simplification is the core of the great effort of administrative modernisation in Portugal. It assumes administrative and regulatory simplification, which results in the simplification of procedures, processes and legislation, which, in turn, allow clear gains in improving the quality of life of citizens and as a stimulus to the economy, among other benefits. The main initiatives in this area are zero licensing (*Licenciamento zero*), entrepreneur counter (*Balcão do empreendedor*) and other projects with international recognition.

Finally, in the E-government line of action AMA assumes the role of primary facilitator within the Public Administration in Portugal, constituting a centre of innovation and support, strongly anchored in the development of Information Technologies and Communications. The main initiatives in this area are: Citizen card (*Cartão do cidadão*), a worldwide reference project, iAP-Interoperability in Public Administration (*Interoperabilidade na Administração Pública*) and a global strategic plan for costs reduction on information and communication technologies. The E-government perspective in Portugal is presented in Table 1.

AMA's strategy is tuned with the European Union policy, which is focused on the modernisation of services, the simplification of the regulatory framework and the deployment of economic growth.

Public administration, despite its apparent homogeneity, is quite complex as is composed by the central, regional and local administration, which report to different ministries and town halls that do not always hold the same interests and objectives (Fonseca & Carapeto, 2009). In Portugal, public institutions belong to the public sector, which can be controlled by the national, regional or local authorities.

Many changes have been implemented in the public administration sector in Portugal in response to pressure from citizens for the creation of better services. The growing importance of municipalities in the provision of services to citizens (Costa, Pereira, & Blanco, 2006), in the search for the mainstreaming of their organisations and in the creation of integrated one-stop shops (Fonseca & Carapeto, 2009), has urged AMA to develop the Municipal Simplex programme in order to improve services and to create value for citizens through the transfer of knowledge.

Throughout two years the Simplex programme has aimed at simplifying the Portuguese central government, resulting from the implementation of simplification measures by municipalities and encouraged by local authorities, who wished to voluntarily engage in this common goal. Thus, the Municipal Simplex (*Simplex Autárquico* in Portuguese), launched in July 2008, spurred by the Government, first gathered measures proposed by the nine municipalities that volunteered in this project: Águeda, Cascais, Guimarães, Lisbon, Pombal, Portalegre, Oporto, Redondo and Seixal.

Simplification in the local context is of strategic importance to improve the citizen's quality of life, to increase the competitiveness of the municipality and to improve the transparency of decisions and

*Table 1. Situation of the E-government in Portugal*

	<b>Situation</b>
<b>Beginning</b>	The administrative simplification process began in 1991 with the release of INFOCID (Interdepartmental Citizens Information System) program. In 1996, it enabled to citizens send their tax returns over the Internet, which happened for the first time around the world. The Simplex programme initiated in March 2006.
<b>Beginning of the Simplex Programme</b>	2006
<b>Responsible for Managing the Simplex Programme</b>	Agency for Administrative Modernisation (AMA)
<b>Key Expectations for the Programme</b>	Administrative simplification and E-government are major challenges to raise standards of competitiveness, economic growth and quality of life in Portugal. The Simplex programme is the main initiative in this sense.
<b>Accompanying Measures</b>	AMA has a set of indicator to measure the performance of the administrative simplification and E-government, as: <ul style="list-style-type: none"> <li>• Number of new services available on line;</li> <li>• Number of services implemented in interoperability platform;</li> <li>• Number of renovation and, or improving in citizen’s shops;</li> <li>• Reduced amount of spending on technology infrastructure and communications;</li> <li>• Number of initiatives and, or public services with performance evaluation.</li> </ul>
<b>Main Initiatives</b>	Citizen’s Shops (Lojas do Cidadão) in Portuguese); Zero licensing (Licenciamento zero); Entrepreneur counter (Balcão do empreendedor); Citizen card (Cartão do cidadão); iAP-Interoperability in Public Administration (Interoperabilidade na Administração Pública); Global strategic plan for costs reduction on information and communication technologies.

the image of local governments. There are four pillars of strategic action (AMA, 2014):

- To qualify and optimize the internal operations of municipal services through innovative leadership and actions, namely by streamlining of processes, by the adoption of flatter organisational structures and by sharing common services
- To improve services to citizens and businesses in terms of quality and accessibility, providing services through different channels, particularly electronically and applying the principle of one-stop shops;
- To promote the interaction between the different public administrations, through the strengthening of cooperation among them, the sharing of information and the dissemination and replication of best practices;
- To contribute to the strengthening citizenship and quality of democracy, by enhancing the transparency of the municipality.

In order to understand the relationship between E-government and the changes in citizens’ behaviour, besides analyse the Portuguese case, this chapter analyses the case of the city of Oporto. The Municipality of Oporto, with 237 591 inhabitants, the second largest city in Portugal, was invited to participate as founder of the Municipal Simplex programme, in 2008, due to their advanced stage in the search of administrative simplification. The E-government perspective in the municipality of Oporto is presented in Table 2.

The definition of the nine founders of the Simplex programme, though voluntary, happened through calls made by AMA and the Secretary of State of Administrative Modernisation (SEMA) to the most advanced municipalities. These were

Table 2. Situation of E-government in the municipality of Oporto

	Situation
<b>Beginning</b>	The administrative simplification process began in 2003 with the deployment of a series of structural changes, including the creation of the citizen's "hotspot." Played an important role in the development of the Simplex programme.
<b>Beginning of Participation in the Simplex Programme</b>	2008 (Founder of the local phase of the program)
<b>Number of People Directly Involved with the Programme</b>	Three
<b>Awareness of Employees</b>	Awareness sessions. Menu for dealing with the simplification of the Employee Portal.
<b>Key Expectations for the Programme</b>	AMA's contribution in raising awareness of other players to the importance of the plans and actions. To achieve progress in areas where there was less internal expertise.
<b>Main Difficulties</b>	Excessive ambition in the first year of the programme, internalisation of the principles of continuous improvement and little prioritisation by other important stakeholders
<b>Adaptation of the Programme to Local Reality</b>	The programme was adapted to the previous measures
<b>Accompanying Measures</b>	Development of software for project management, used to follow up the measures.
<b>Main E-government Initiatives</b>	Virtual Service Desk (Balcão de atendimento virtual); Simulator municipal taxes; Electronic Bulletin; Electronic Procurement Platform; Electronic invoice; ITC platform that uses the share point concept that allows the sharing of information between people located in different places.

chosen in terms of simplification of their procedures, which ensured the success of the Simplex programme in its first year.

The deployment of previous steps in the search for administrative simplification was reflected in the greater participation and commitment of their employees in the Simplex programme. An important and distinctive aspect of these municipalities was the existence of a standard procedure for the programme assessment by means of data processing systems.

A key aspect to the success of the Municipal Simplex programme was the definition of a detailed work plan, mentioning the activities to be undertaken by each of the Municipalities in every week of the year.

Due to the autonomy of municipalities, AMA has no control "power" over local authorities. Thus, despite the assessment being done by AMA of the fulfilment of defined deadlines and

milestones, their achievements depend only on the commitment of local authorities. AMA also lacks any form of reward for good performance in the Simplex programme. Public recognition is the only award given to participants.

Each municipality developed its own strategic plan to promote the different actions of the Simplex programme. Those plans proved to be an important tool in the municipalities of Oporto, that also deployed the project management tools and the monitoring of action plans in order to manage their involvement with the Simplex programme. These actions not only demonstrated their total commitment to the programme, but also contributed to its success.

The ISO 9001 quality standard certification and the participation in the EFQM's programme, by the municipality of Oporto, show their high concern for the continuous improvement and facilitate the implementation of necessary changes

## **Electronic Government**

in their services and processes within the Simplex programme, due to their commitment to quality management systems. On the other hand, the participation in the programme also increases the awarding probability by EFQM.

In order to improve services, the municipality of Oporto has invested in the last years in several E-government initiatives, such as the Virtual Service Desk (Balcão de atendimento virtual) that provides several online services for citizens and businesses through access to a single internet site, Electronic Bulletin, Electronic Procurement Platform and Electronic invoice.

However, one of the main uses of ICT within the Simplex programme, contrary to AMA's expectation, took place within the municipalities in the management of the plans and actions. The ITC platform, created in 2008 to underpin the Simplex programme, uses the share point concept that allows the sharing of information between people located in different places and involves discussion fora, a documentation warehouse, sharing news, sharing projects information, sharing timetables, etc. It is, in essence, an internal tool focused on the employees of central and local administration, but that can also be used externally by citizens and businesses.

The most significant benefit of this ICT platform is its capacity of safeguarding stored documents, which ensures the preservation of historical records and the assessment of all changes. It is possible to know who changed which documents and when all documents were altered. The use of the platform for document management purposes was one of the main assets of the Simplex programme for satisfactorily coordinating the whole data flow.

### **Collaboration**

The concept of collaborative governance is gaining more relevance as it is based on a collective process of governance conducted by partners seek-

ing to develop alternatives for action, identifying solutions, aligning priorities and taking decisions.

This collective process means that coordination occurs through collaborative mechanisms. These innovative approaches, based on networks of partners and on the involvement of stakeholders to achieve public policy goals, allow (Fonseca & Carapeto, 2009):

- The creation of effective intergovernmental partnerships;
- The development of innovative solutions for different groups of stakeholders;
- The lowering of the barriers in the adoption of new solutions, due to the dissemination of successful cases and lessons learned;
- The easiness of the transfer of technology because it relates researchers and users;
- The development of human capital by learning; and
- The development of a permanent dialogue between and among stakeholders.

Regarding the collaboration issue, the Municipality of Oporto sought collaboration with other local authorities only sporadically, which produced few benefits in these relationships. In both cases some difficulties in maintaining these relationships were reported due to the low interest/involvement of their partners.

AMA has sought to encourage the maximum exchange among the Municipalities, through a series of events as well as from the sharing of experiences. AMA's support to local authorities was also considered from the outset, as a crucial point to the success of the Simplex programme. Therefore, AMA tried to be very present during the implementation of the actions, while recognizing that success depended on the deep commitment of the local municipalities.

Moreover, the initiative to have contact with other municipalities depends both on the willingness of the person responsible for the programme and on the availability of human resources in the

local municipalities. Although AMA could play a greater role in this aspect, facilitating and further promoting contacts and meetings between the participants, it was left to the local bodies to decide who to contact with and how to do it.

## CONCLUSION

In essence, the creation of added value has been a success for all stakeholders involved in E-government initiatives for both the central government and for the Oporto municipality. The changes are quite intangible in nature, but have sparked among all stakeholders not only an improvement in their quality of life, but also a sense of newness in public services and an improvement in the relationship between government and citizens and in the participation of citizens.

This chapter also addressed the importance of the Simplex Programme in what pertains to the administrative simplification and to the development of E-government initiatives in Portugal and in municipality of Oporto.

There are indications that the added value is real, and the knowledge imparted in the sphere of public institutions can be used in other public and private institutions, which allows new initiatives to benefit from the knowledge that has been generated.

An undeniable feature is that E-government includes the provision of information, communication and services. In what pertains to information it is clear that it has been sound success, which was expected, since information is at the base of the pyramid of E-government.

There has been a bilateral communication from institutions to users, and vice versa. However, it is necessary to deepen the understanding on how communication has been used, and the degree of adequacy and satisfaction of users in both ways of the communication, i.e. between the institution and users and between them and the institution.

As regards to the provision of services, the analysis was fairly generic. However, it was found that there is a clear need to understand the differences between the pre-encounter stage, the encounter stage and post-encounter stage, since it was verified that there are no data to analyse these stages. Clearly, there is a focus on the provision of services, perhaps markedly guided by central administration, giving great emphasis to service encounters, whereas the analysis of the satisfaction of the demand is not being analysed. This is one of the gaps found in the provision of services that may be related to the embryonic stage public and E-government services are, in general.

The analysis of the case study analysed exposes the potential of the Simplex programme as a source of administrative modernisation through E-government. The constant improvements of services and the simplification of procedures can be considered an important step towards the formation of next generation of public institutions, focused on the transfer and internalisation of new knowledge.

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## KEY TERMS AND DEFINITIONS

**Administrative Simplification:** The modernization of the public administration in order to improve services to the customers/users through the dematerialization, zero bureaucracy and electronic government.

**AMA:** Public institution responsible for the administrative simplification in Portugal.

**Cooperation:** The process of sharing information, experiences or other resources by members of the collaborative network. The main facilitators of a cooperative relationship are the following ones: a systemic thinking, a shared vision and a proficient dialogue capability.

**Electronic Government or E-Government:** Entire range of government roles and activities,

shaped by and making use of information and communications technologies.

**Knowledge Management:** The intentional process of creation, acquisition and sharing of knowledge and its utilization as a key factor in the creation of added value. It is an inextricably human and cooperative process.

**Simplex Program:** One of AMA's programmes created to deploy administrative simplification in the Portuguese local public sector.