CO-CREATION OF INNOVATIVE EXPERIENCES IN THE SPANISH E-ADMINISTRATION

Belén Álvarez-Crespo *(Complutense University of Madrid, Spain)* ✉

Abstract:

The need to eliminate the existing gap between technological development of e-Government and the development of use by the citizenship forces to raise new approaches. On this basis, this paper explores several concepts which are key factors for a full development of e-Government.

The Spanish Public Administration and the citizens' objectives raises following the co-working direction. The discussed concepts are known by the citizens, and many of them are applied in their relations with the private sector and have satisfactory results for both.

Relationship experiences with the Public Administration lived by citizens occupies a very important place in the advanced e-Government.

Keywords: *e-government*; *co-creation; community; innovation; Spanish Public Administration*

CO-CREACIÓN DE EXPERIENCIAS INNOVADORAS EN LA E-ADMINISTRACIÓN ESPAÑOLA

Resumen:

La necesidad de eliminar la brecha existente entre el desarrollo tecnológico del e-Gobierno y la extensión de su uso por parte de la ciudadanía obliga a plantear nuevos enfoques. Sobre esta base, este artículo explora varios conceptos que son factores clave para un pleno desarrollo del e-Gobierno.

La Administración Pública española y los objetivos de los ciudadanos aumentan siguiendo la dirección del trabajo cooperativo. Los conceptos discutidos son conocidos por los ciudadanos, y muchos de ellos se aplican en sus relaciones con el sector privado con resultados satisfactorios para ambas partes.

Las experiencias relacionales con la Administración Pública vividas por los ciudadanos ocupan un lugar muy importante en el e-Gobierno electrónico avanzado.

Palabras clave: *e-Gobierno*; *co-creación*; *comunidad*; *innovación*; *Administración Pública española*

✉ Faculty of Economics and Business Sciences (Complutense University of Madrid), Campus de Somosaguas   28223-Pozuelo de Alarcón, Madrid (Spain)
  e-mail: *belalvar@ucm.es*

1. Introduction

The Spanish Public Administration has given a strong boost to the integration of ICT in the public sector through the budgets of more than 1.1 billion euros since 2000 (Fundación Orange 2012) and through the development of e-Government. The intended goal is to develop a system that improves the relationship between the Administration and its stakeholders, improving the efficiency of the Administration and promoting citizen participation in public life. On the other side, citizens[1] are changing their own behaviour from passive receptors to active ones. They are becoming receptors facing what affects them and participating more actively in the public service.

However, while the development of e-Government services has grown gradually, the use thereof by the citizenship does not increase as desired, and so it is necessary to find new ways to get it. The need to eliminate the gap between technological development and the development of use by the Administration stakeholders force to propose new formulas.

This paper examines concepts such as innovation, co-creation, and community experiences, all of them currently considered as key factors in the private sector which will be essential to the complete development of e-Government. In this sense, one of the basic pillars of e-Government is to be a provider of platforms which, added to the traditional role of provider of public services, broadens the role of Public Administration. This broadened approach invited citizens to participate, innovate and create new value-added services because the Administration is a means.

Considering the previous premises, experiential marketing is the most appropriate method to develop the relationship between the Public Administration and its stakeholders. The relationship experiences involve and relate emotionally. The living of relationship experiences provides citizens a sense of belonging that induces them to active participation in the community.

2. Key concepts to the development of e-Government

2.1. Innovation

Castells (2009, p. 61) refers to *innovation* as "the ability to recombine factors of production in a more efficient way or obtain one added value in the process or product". It only occurs when social practice changes (Tuomi, 1999). Therefore, in the information society the innovation becomes a constant.

Maybe the public sector has remained impassive to ongoing innovation for many years, but in the 21st century there has been a big change. A number of authors already studied the innovation in the public sector and defined it applying concepts such as new ideas, different, changes or improvement of results. All these concepts are applied in a broad definition of the concept of innovation, regardless of the sector to which it relates. Table 1 shows three examples of definitions of innovation in Public Administration.

Currently, the improvement of public services and administration procedures appears as essential. In this process of improvement, both new technological applications and the contribution of the stakeholders have a fundamental role. In today' environment, to innovate   an opening Government is necessary (Chesbrough, 2011). Following Fountain (2001), beginning a process of reinvention flexibility and removing the limits of the traditional bureaucratic forms are clear requirements.

Table 1. Definitions of innovation in the context of Public Administration

Author/s	Main findings / results
Llano (2006)	Any process of generation and application of new ideas that could improve the operation of the institutions and raise the standard of living of a society. Thus, innovation would be that process of change that is capable of generating a value that tends to translate into higher productivity of factors (efficiency and/or quality) and a more efficient use of resources (increased efficiency and/or quality)
Mulgan (2009)	New ideas that work in the creation of public value
Bason (2010)	Process of creating new ideas and transform them into value for society

Source: own elaboration

---

[1] In this article, the term "citizen" is used to include both individuals and companies.

2.2. Government and Public Administration

Different authors have claimed that Stated Organizations characterized by being centralized, one-way, mass, homogeneous and passive of the industrial age, cannot cope with the current era (Prahalad 2005; Tapscott and Williams, 2011). The emergence of new models of organization and management and the concepts of "e-Government" and "Open Government" based on the bi-directionality and the openness is thus evidenced.

On the one hand, *Open Government* involves the design and implementation of institutional frameworks and appropriate designs of participation (Ramírez 2012). On the other hand, *e-Government* was born with the use of ICTs –mainly the generalised use of Internet and the web–, linked to the desire in public organizations of achieving interactive relationships with the public, social and private actors, at different levels (Criado and Ramilo 2001).

Progress towards reinventing the Administration has been possible because of the Internet (Silcock 2011). The current trend of Governments and Public Administrations should include becoming FAST agencies, that is (World Economic Forum 2011):

- *Flatter*: which seeks to establish more direct and closer relationships with citizens and staff to increase administrative efficiency and intergovernmental and intersectional collaboration that will facilitate decision-making.

- *Agile*: agility, adaptability and flexibility are essential characteristics for innovative Government.

- *Streamlined*: versatility is required to innovate and adapt without losing effectiveness.

- *Tech-enabled & tech-savvy*: technology and human resources that manage this technology will have a very important role in the new stage of Public Administrations.

The e-Government is a means to achieve important goals, but it is not an end in itself and therefore it needs to be integrated into strategic and broader service delivery and reform strategies in governance activities more comprehensive and into promotion of the information society (Torres et al. 2005). However, many of the e-Government initiatives implemented by the public sector do not seem to be the result of developing a plan to achieve concrete objectives, taking into account the changes that will occur in existing processes through the use of new technologies. (Pavlichev 2004).

By 2012 Spain was placed as the twenty-third in the United Nations ranking of e-Government, due to low levels of e-participation and minimal integration of procedures (Fundación Orange 2012). This evidence has been validated over the years with data from other researches (Llano 2006) and official reports (Ministerio de Administraciones Públicas 2000; Ministerio de Política Territorial y Administración Pública 2011;). Based on this information, this paper discusses new models and methods that are currently on the rise in the private sector.
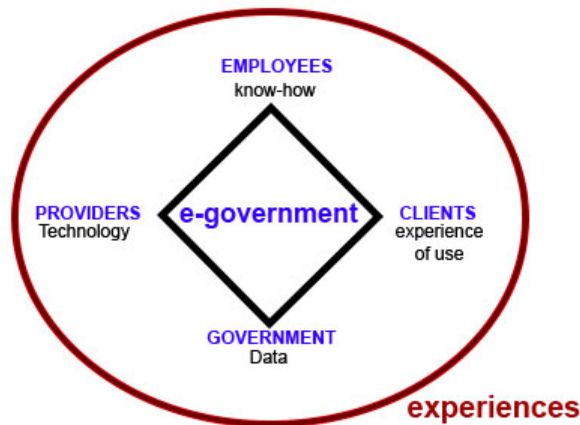
2.3. Value co-creation

Co-creation is another method to achieve citizens participation. It seeks to integrate the citizen in the innovation cycle (Bommert 2010) and it means creating with citizens (Bason 2010). In this process of change, Government and public bodies become platforms for participation of the "human intelligence" (Terranova 2000).

Web 2.0 is based on the understanding of the crowds, on the functionality through collective creation horizontal and on free information. These bases show the potential of Web 2.0 to transform the public sector participation.

In this sense, the concept of co-creation as a way of creating relationship experiences with stakeholders and as a method for producing value represents a clear example of fusion, merging social communication and social production (Zwick et al. 2008). According to the European Union approach for e-participation, the public active participation (involvement) in the decision making process is a key element (Fisher et al. 2010).

Figure 1 sets descriptively which are the main actors forming the e-Government scheme and which are their main contributions to the system. In this model, the e-Government ecosystem develops and acquires value co-creation by all actors involved.

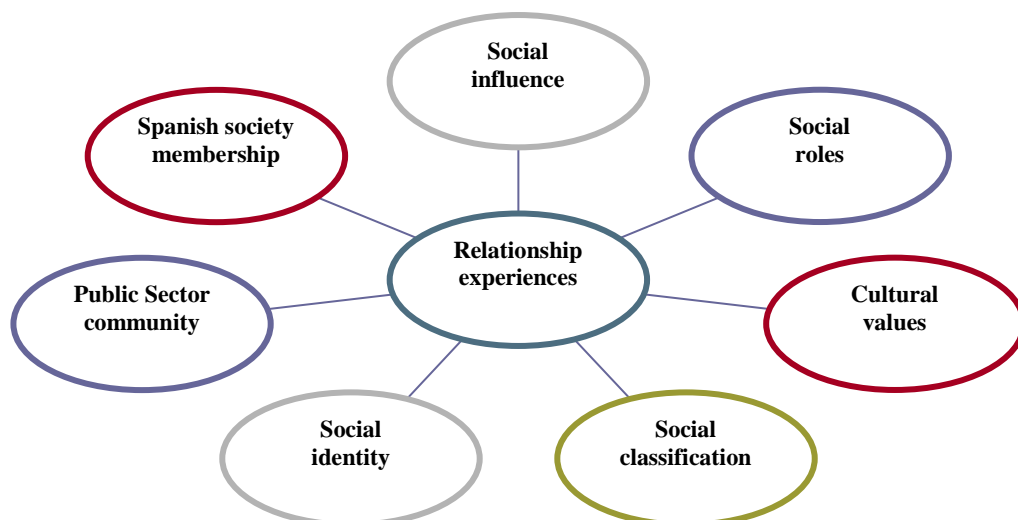**Figure 1.** E-Government and stakeholders: experiences

Source: own elaboration

Public sector bodies must work with the society and companies for the purpose of co-create in order to produce value. To date, public services are mainly produced in one direction, from Government to recipients, but citizens and businesses no longer accept generic goods and services (World Economic Forum 2011). Collaboration between Governments and their stakeholders to improve the interactions between them and to create greater value through their relationship experiences will lead to a complete integration of e-Government.

2.4. Experiences

Experiences are events that engage individuals in a personal way (Pine and Gilmore 1998). A relationship implies a connection with other individuals, social groups or broader and more abstract social institutions as a nation, a society or a culture (Schmitt 1999). Figure 2 includes different types of experiences of relationship that can occur between citizens and e-Government. These kinds of experiences are also motivators of participation and involvement.

Figure 2. Relating experiences with the e-government

Source: own elaboration based on Schmitt (1999)

To a properly achievement of such intended goals in the field of e-Government, Public Administration bodies should:

a) create a social category and give it value for citizens;

b) make citizens join this social category;

c) get citizens participate in this social category by providing positive experiences; and

d) ensure that citizens know that these positive experiences become better if they participate in the whole project, i.e. e-Government design and development.

Within this last stage a genuine community around the Public Sector can be created and it will be born of the interaction between citizens and the Public Administration, but before it is necessary to create a suitable invitation to get citizens feel as part of this community.

3. Research methodology

A review of references which analyzes the Public Administration highlights the need for new approaches to the relationship between Spanish Administration and its stakeholders. On this basis, the purpose of this exploratory research is to analyse the application of concepts which are already providing results in the private sector. The achieved results and goals in the private field validate the adaptation and implementation of such concepts as part of a strategy for the Public Sector.

The development of a strategic plan for e-Government development should answer, to the extent possible, the following questions (Heeks 2006): i) what is the current situation?; ii) where do you want to get?; and iii) what actions should be undertaken to arrive? The purpose of this paper is answering the questions in the context of the current situation in Spain, the objectives to be achieved and the attitudes, motivations and feelings goal to achieve, as well as the attitudes, motivations and feelings intended, all in order to help later in the definition of the actions to be undertaken.

So, on the basis of the concepts discussed and the analysis of the current situation of the public sector in the country, the main objective of the research can be considered as an approach to public opinion about the application of e-Government concepts in the Spanish Public Administration.

A five-concepts index was developed to be used in a telephone interview: *attitude*, *use*, *innovation*, *participation*, and *experience*. The minimum duration of these qualitative interviews was fifteen minutes, and their average duration was twenty-four minutes. The choice of the telephone environment was due to the geographical dispersion of individuals involved in the research. Interviews were carried out from January 20th to February 20th 2013.

Based on the results of the e-Spain annual report for 2012 (Fundación Orange 2012), the geographical area considered included those regions with a development of e-Government services that reached an average of 95%, i.e. the Autonomous Communities of Asturias, Madrid, Andalucía and Navarra.

A sample of six phone numbers of companies and six phone numbers of people from each one of the five above regions were selected for the telephone interview. These phone numbers were randomly selected in the six larger cities/towns of each region. The total number of respondents was forty-eight, including twenty-four companies and twenty-four citizens.
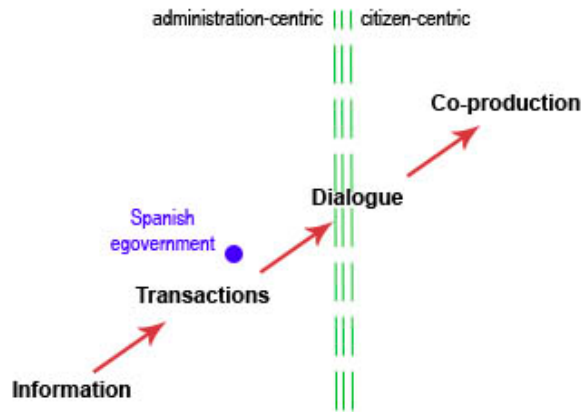
4. Research findings

Once the exploratory qualitative research on the variables proposed above was conducted, the results obtained by performing content analysis are described in the following sub-sections.

7.1. Current situation

There are different models of Public Administration according to the subject who focus their action, namely administration-centric or citizen-centric ones. The Spanish Public Administration at the time of the research continued centred on itself. However, any relationship can evolve and different models of relationships between public bodies and citizens can be developed with a logical progression as shown in Figure 3. Spanish e-Government continued as its core activity and it was necessary to move toward dialogue with the citizen to set citizen-centric and to move forward with him.

Figure 3. E-Government and stakeholders: ways of relating
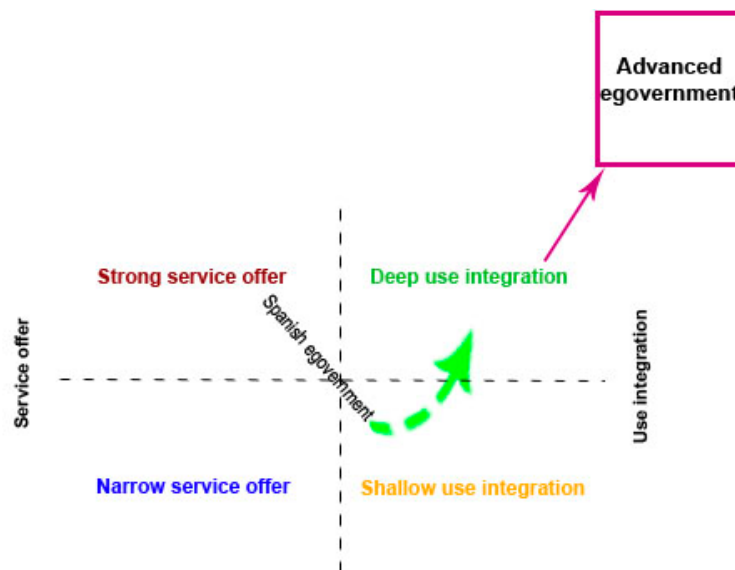

Source: own elaboration

The results of the interviews proved that citizens widely consider that there was no innovation in Spanish e-Government. In those cases when it was perceived, it was associated to the goods and services offered by the Administration. One possible explanation is the lack of knowledge about the processes performed to that outcome offered to citizens.
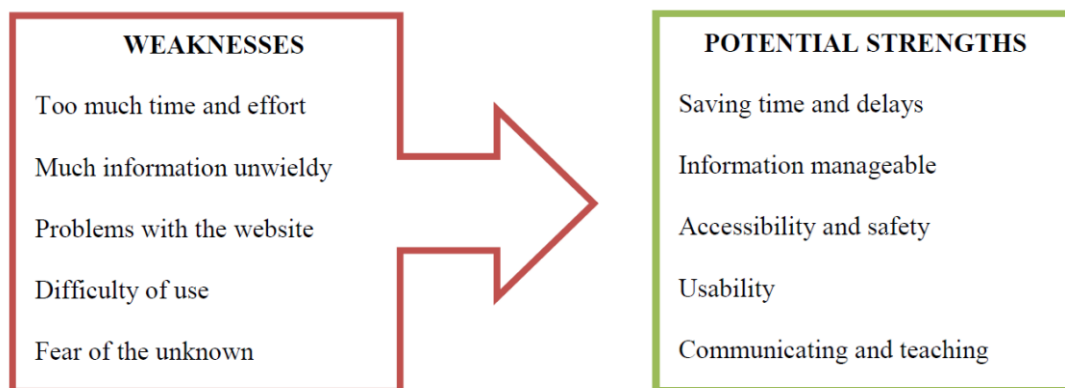
During recent years, the Spanish Public Administration has focused on the development of applications and services to increase the number of transactions made through them. That is the reason why, throughout interviews appeared a common denominator which is the increasing use of e-Government over last few years. Electronic processing increases year after year compared to face-to-face processing.

Figure 4 illustrates the situation of e-Government about the development of Spanish services and their use by people and businesses. As we see, the offer of services and the use thereof by Spanish citizenship as axioms can classify an e-Government in four categories. The Spanish e-Government was positioned with a high range of services and a low use integration. The next logical step (indicated by the flashing arrow) would focus efforts on increasing use to achieve deep integration which, subsequently, convert the current situation of Spanish e-Government into a fully developed e-Government.

Figure 4. E-government maturity model
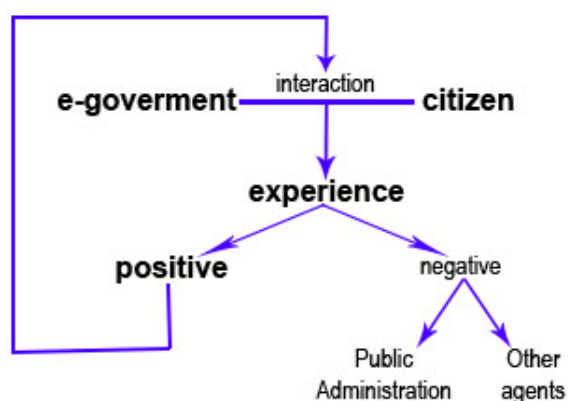

Source: own elaboration

Figure 5. E-government maturity model

Source: own elaboration

An advance from an administration-centric approach to a citizen-centric one is needed to achieve the maximum development of e-Government. It is necessary to put the focus on the development of interactions between subjects. According to the research results, in citizens' view the main five reasons why they do not exploit the potential of e-Government: i) too much time and effort required; ii) much information unwieldy; iii) problems with websites; iv) difficulty of use; and v) fear of the unknown. Figure 5 shows these five e-Government weaknesses and the way they could become strengths in case of Spanish e-Government.

So, the required investment in terms of time and effort and the amount of information to manage are closely related problems as well as easy-to-solve by working together with the citizens. Specifically two are the main areas to work in when aiming to turn these weaknesses into strengths: the technical language use and the route to the main procedures. Accessibility, usability and security are fundamental aspects for the full development of e-Government, allowing the Administration advance from a informative use to a complete management process. One of the main reasons for fear of something that is unknown is the lack of information, training or communication by the Public Administration.

According to the results from the interviews, those citizens unwilling to use e-Government would be willing to use it for the first time if they are advised by the public employee who manage the service. In case of having a negative experience, citizens do not show any intention of using it again and would prefer going back to the traditional channels to interact with the Public Administration or using other agents as an alternative (Figure 6).

Figure 6. First experience with e-government: responses

Source: own elaboration

Just opposite, in case of having a positive first experience, citizens would be willing to re-use the same service without the help of public sector employees and even perform new transactions.

So, we can conclude that positive experiences lived by citizens with e-Government effectively influence on citizen satisfaction, as individuals are increasingly more and more satisfied with services and transactions. However, citizens believe that e-Government could be greatly improved indeed. In this sense, regarding the issue of citizen willingness to participate on improving e-Government, results pointed to a positive disposition, as interviewees proclaimed their intention to help. Moreover, respondents consider that Public Administration should start this new process of participation and co-creation.

Based on the results of the interviews, a significant number of citizens and businesses would be interested in taking a more actively part in the e-Government development and to collaborate as "e-administrators" to improve the Spanish Public Sector (i.e. to act with a level of commitment as correspondent to the apex of the pyramid in Figure 7). To switch from the intention to the action they considered essential that the interactions made with the e-Government must be positive experiences making them feel part of a society that takes into account the citizen and the value of their contributions.
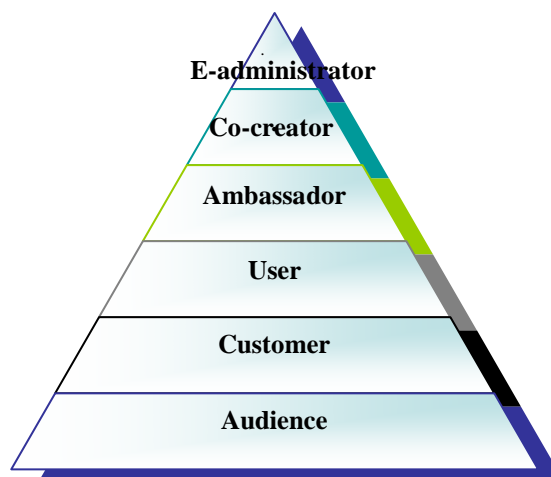
7.2. Improvement goals in Spanish Administration

According to the Spanish Ministry of Territorial Policy and Public Administration, improvement goals to be achieved by 2015 in the relationships between Public administration and its stakeholders are threefold (Ministerio de Política Territorial y Administración Pública, 2011):

1. *Sustainable Public Administration*: it seeks to maximize the effectiveness and efficiency through the optimization of costs and services. It also seeks the development of non-contact care which will improve the efficiency and quality of service.

2. *Productive and cohesive society*: the simplification of the relationships and the use of technologies will reduce the costs of the public service. The Spanish Administration is seeking a widespread use of e-Government through personalized and comprehensive services as well as through the use of mobile communication channels.

3. *Collaborative and participatory society*: the collaboration between a more participatory and collaborative society and a more open and transparent Public Administration will encourage the accessibility and reuse of information.

In summary, the main goal is to provide a more civic and less administrative Public Administration to citizens.

Figure 7. Citizen participation based on their experiences

Source: own elaboration

5. Conclusions, limitations and future research

There is an evolution of citizens and e-Government –although no parallel– towards a more open, accessible and participatory model. On the one hand, the Spanish Public Administration objectives raise following this direction; on the other hand, Spanish citizens are interested in taking more actively part in Public Sector activities and in improving the relationship with the Administration. Different concepts and elements required at this purpose are known by the citizens and many of them have been and/or are applied in their relations with institutions in the private sector. As the resulting effects (experience) are satisfactory, therefore citizens are inclined to apply these concepts and elements in their relationships with the Public Sector.

Once the current situation and the attitude of both sides is known, and specifically when sharing a same aim and purpose, it should be easier to design a strategy to achieve the common intended objective of an effective e-Government.

However, this research has several limitations. So it can be considered as an exploratory and qualitative study that provides enriching results, but these findings cannot be extrapolated to the whole Spanish population because a representative sample has not been used either in terms of sample size or the geographical distribution of individuals. As previously indicated, only citizens living in those regions (Autonomous Communities) with a greater development of e-Government were interviewed.

As a consequence, it would be worthwhile to extend a further research in order to get a representative sample for the whole Spanish citizenship. A quantitative approach would also contribute to assure the validity of findings and results.

References

Bason, C. (2010). *Leading public sector innovation: co-creating for a better society*. Bristol: Policy Press.

Bommert, B. (2010). Collaborative innovation in the public sector. *International Public Management Review*, 11(1), 15-33.

Castells, M. (2009). *Comunicacion y poder*. Madrid: Alianza Editorial.

Chesbrough, H. W., Berlanga Lowy, E., & Pino Moreno, M. (2011). Innovación de servicios abiertos : reinvente su negocio para crecer y competir en una nueva era. Barcelona: Plataforma.

Criado, J. I., & Ramilo, M. C. (2001). E-Administración: ¿un reto o una nueva moda? Problemas y perspectivas de futuro en torno a Internet y las tecnologías de la información y la comunicación en las Administraciones Públicas del siglo XXI. *Revista Vasca de Administración* Pública, 61, 11-43.

Fisher, R., Remotti, L. A., & Fazecas, M. (2010). Study on "eGovernment scenarios for 2020 and the preparation of the 2015 Action Plan". Restrospective Analysis (D4) SMART nº 2009/0069. European Commission. https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/smart2009-0069.pdf. Accessed 26 February 2013.

Fountain, J. E. (2001). Building the virtual state information technology and institutional change. Washington, D.C.: Brookings Institution Press.

Fundación Orange (2012). *eEspaña Informe Anual 2012 sobre el desarrollo de la sociedad de la información en España*. Madrid: Fundación Orange.

Heeks, R. (2006). Implementing and managing eGovernment: an international text. London : SAGE.

Llano Verduras, C. (2006). *La innovación en el sector público*. Madrid: Ceprede.

Ministerio de Administraciones Públicas (2000). *Libro blanco para la mejora de los servicios públicos: Una nueva administración al servicio de los ciudadanos*. Madrid: Ministerio de Administraciones Públicas.

Ministerio de Política Territorial y Administración Pública (2011). *La Administración Pública a juicio de los ciudadanos*. Madrid: Ministerio de Política Territorial y Administración Pública.

Mulgan, G. (2009). The art of public strategy: mobilizing power and knowledge for the common good. Oxford : Oxford University Press.

Pavlichev, A. (2004). The e-Government challenge for Public Administration education. In A. Pavlichev, & G. D. Garson (Eds.) *Digital Government: principles and best practices* (pp. 276-290). Hershey, PA: Idea Group Publishing.

Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97-105.

Ramírez-Alujas, A. V. (2012). Innovación en las organizaciones y servicios públicos: ¿El eslabón perdido? Bases para la transición hacia un modelo de innovación abierta y colaborativa. *Revista Chilena de Administración Pública*, 19, 5-50.

Schmitt, B. (1999). *Experiential marketing*. Bilbao: Deusto.

Silcock, R. (2001). What is e-government? *Parliamentary Affairs*, 54, 88-101.

Tapscott, D., & Williams, A. D. (2011). *MacroWikinomics : nuevas fórmulas para impulsar la economía mundial*. Barcelona: Paidós.

Terranova, T. (2000). Free labor: producing culture for the digital economy. *Social Text*, 18(2), 33-58.

Torres, L., & Pina, V. (2005). E-Government developments on delivering public services among EU cities. *Government Information Quarterly*, 22(2), 217-238.

Tuomi, I. (1999). *Corporate knowledge : theory and practice of intelligent organizations*. Helsinki: Metaxis.

World Economic Forum. (2011). *The future of government. Lessons learned from around the world.* Geneva: World Economic Forum.

Zwick, D., Bonsu, S. K., & Darmody, A. (2008). Putting consumers to work: 'co-creation' and new marketing govern-mentality. *Journal of Consumer Culture*, 8(2), 163-196.