

E-GOVERNMENT IN PORTUGAL: THE CASE STUDY OF PORTO CITY COUNCIL

João Manuel Proença*

ABSTRACT:

This paper shows the role that Internet may play in Public Administration through the analysis of the *Office of Citizen Services (OCS)* in Porto, Portugal. The Porto City Council has recently created this office that has served in a very satisfactory and interesting way as an interface between the citizen and the city council, making use of the Internet.

The paper discusses and analyses this issue as a case study by linking three different marketing areas: services marketing, public services marketing, and e-marketing. Presence of the *OCS* in Porto City Council website is considered and analyzed by means of the discussion of its general functionalities and its performance, namely at the informative, relational and transactional levels. The study clearly shows that citizens are considered by *OCS* to be real “customers”, and that services are thus organized for the citizens, namely the online services.

Key Words:

E-government; public services marketing; Public Administration; e-marketing.

* Faculdade de Economia – Universidade do Porto, Rua Dr. Roberto Frias s/n, 4200-464 Porto (Portugal). E-mail: jproenca@fep.up.pt

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1. INTRODUCTION:

This paper discusses the interface between citizens and the City Council of Porto (Portugal) through the *Office of Citizen Services (OCS)*. This office is concentrated in only one place (*one stop shopping*), where a modern physical open space is managed and explored in order to serve and answer every citizen face to face. The management of this space is conjugated with the use of new technologies, particularly the Internet, through the e-government. Before analysing and discussing this case in detail, it is worthwhile to make a brief reference to the development of Internet, e-commerce and e-government in Portugal.

Internet and e-commerce in Portugal:

To put into context the recent evolution of the e-government in the Portuguese case, it is important to present some data on the recent evolution of internet use and electronic commerce in Portugal. Several recent studies show clearly the changes of social, cultural or technological nature related with the information and knowledge society as a consequence of the generalised use of Internet in several sectors of the society (UMIC, 2003). In Portugal, the evolution of the electronic commerce in the past six years is remarkable (Grupo Vector21.com, 2005). Between 1999 and 2000, the number of Portuguese with Internet access increased and reached one million (Grupo Vector21.com, 2001). By that time, some researchers did a study that measured the online Portuguese consumer market and concluded that this market dimension was equivalent to the third Portuguese city. Afterwards, there was a period during which the initial expectations were controlled. During this period, the investments on the “*digital economy*” decreased almost all over the world and many “*dot coms*” went bankrupt. In spite of this scenery, in Portugal, the supply and demand kept on growing. In 2001, for example, the number of electronic shops increased from 102 to 519 and the consumption rose from 10 to 32.5 million of euros. More recently, between 2002 and 2004, a consolidation phase seems to have started. In 2002, the online consumption in Portugal grew more than six times and reached about 195 million of euros. In 2003, the number of electronic shops reached 748 and the preliminary data for 2004 indicate a higher growth (Grupo Vector21.com, 2001 and 2005).

It is also relevant to point out some data related to the evolution of the e-commerce in Portugal available from *Grupo Vector21.com* (2001 and 2005) and *ANACOM* (2004). Around 50 % of the Internet users in Portugal do not hold a General Certificate of Secondary Education. Teenagers represent 11 % of the online consumers and show a high potential of growth because they are *earlyadopters*, they have a great technological maturity and great influence on their parents’ consumption decisions. The main reasons associated to the online shopping are: convenience, greatest possibilities of choice (or variety), and lower prices. Finally, the “*exclusively*” online commerce may present important disadvantages since buyers enjoy searching the Internet for a product that they saw and liked in the physical shop, and they enjoy going to the physical shop after they saw the product on the Internet. On the other hand, consumers claim for safer payment procedures, and ergonomics in the websites may be improved as few websites have maps and search engines. It is also advisable to improve client service to increase clients trust (only 11 % of the online shops have a support line and not all of them show their contacts), to increase the information confidentiality, and to improve the information given to consumers, namely information concerning delivery dates, distribution channels, shipping rates or devolution delays (Grupo Vector21.com, 2001 and 2005).

E-government in Portugal:

The e-government is a process of delivery of public good services focused both on the service and the quality of the service delivered to the citizen. This process is based on the new technologies, specially the Internet. The e-government process tries to place citizens and companies in a central position and to improve the quality and the convenience of the public services. Simultaneously, it seems to increase efficiency through the rationalisation of costs and thus contributing to modernize the State (UMIC, 2003) The Portuguese Public Administration intends to follow the business models of the private sector, namely the Internet portals. Therefore, virtual departments are available, which satisfy citizens' (G2C) and companies' needs (G2B) quickly and at any time. Initially, these departments had an essentially informative character, consequently evolving towards a transactional model where it is possible to deliver online public services such as, e.g. tax payment via Internet or renovation of the Vehicle Registration Document/Certificate.

The importance of this topic also relates to the possibility of establishing online operations being essential for necessary cost reduction of the public services. Some studies estimate, for example, that in a very short time (around 2007), whenever a taxpayer completes his online statement, it may be reducing the transaction cost of that service by around 53 % (PWC Consulting, 2001). In the end, e-government relates to e-business. *PWC Consulting* (2001) maintains the idea that public sector faces the challenges presented by a network global economy such as it is the case of several sectors of the economy. That is the reason why in Public Administration some initiatives are developed in order to cover the relationship between citizens, companies, suppliers and workers, thus revolutionising all the previous processes and working models.

It is relevant to understand the recent evolution of the e-government in the Portuguese Public Administration and the profile of its users. The visitors' profile of Portuguese Public Administration sites is mainly young (55 % of the visitors are between 20 and 40 years old and 82 % are less than 40 years old), urban¹ and holding a higher education degree. Students who master the use of the Internet (43 %) are also the ones who visit the Public Administration websites (38 %) the most. However, the average education level of the people who visit the Public Administration websites is higher than that presented by Internet users (PWC Consulting, 2001).

A study on the local e-government in Portugal by the National Unit for Innovation and Knowledge (*Unidade de Missão Inovação e Conhecimento, UMIC*) and published in 2004, discusses the presence of Portuguese City Councils on Internet and concludes that between 2000 and 2002 the number of city councils being present on the Internet grew by 22 %. At the end of 2002, the percentage of city councils with own Internet websites was 72 %. This study analyses the quality of the websites and concludes that not even one gathers the necessary conditions that classify it as having the ideal maturity level. Therefore, according to authors' opinion of the study above, there is still a long way ahead so that city councils may benefit from the advantages offered by e-government services in such a way that they offer services with benefit to citizens and companies. The study by the *UMIC* (2004) also reveals that almost all city councils have Internet access, even though the percentage which are online is lower, around 84 %. As the main reason for having their city councils on the

¹ The distribution of the Public Administration websites visitors per regions and/or great cities (PWC Consulting, 2001) highlights Porto (16 %), Lisbon, Minho and Douro Litoral (14 % each).

web, local authorities point out the need for making forms available, accessing documents or subscribing informative newsletters. Another study on e-government in several countries between 2001 and 2003 concluded that Portuguese e-government has registered little development (Accenture, 2003). Even though Portuguese Governments recognize that new information technologies contribute decisively to reduction of time and elimination of the shallow character of some official procedures (Governo da República Portuguesa, 2004).

Finally, we may also refer that the survey by *Grupo Vector21.com* (2001) on the situation of e-government in Portugal highlighted several recommendations concerning the construction of public websites. Some of the recommendations are as follows: to consolidate the informative performance; to improve the relational performance; and to invest on the development of the transactional dimension. All this in order to reflect the citizens' needs rather than the organic structure of the services, to make the internal communication of the State flexible itself, and finally the launching of a so called "*Portuguese Citizen Portal*". Nowadays, a short time past, we register an important evolution in most of the Portuguese public websites. The informative performance has evolved, the access is easier, some mechanisms increase the relational performance and the citizens' needs are taken into consideration. On the other hand, the electronic internal communication and cross reference of data between the State institutions seems to be just starting to become effective.

2. A CASE STUDY: THE OFFICE OF CITIZEN SERVICES (OCS) OF PORTO CITY COUNCIL (PCC):

In this second section of the paper it is presented a very illustrative case study² on the e-government use in Portugal. This case presents the *Office of Citizen Services (OCS)* of Porto City Council (*PCC*). Throughout the analysis, it is advanced some literature considered to be relevant, namely some concepts related to services marketing. Then, service by *OCS* is analysed through e-commerce and e-government concepts.

The *OCS* was opened to the public on July 9th, 2004 and has registered a very significant number of users. During the first two months of activities, the *OCS* received 21 thousand people (Câmara Municipal do Porto, 2004). According to *PCC*'s President, "*the OCS is the most emblematic work done by the City Council and it is inserted in an enormous effort to improve the City Council's functioning. It is a service that, as the time goes by, tends not only to improve but also to force the other municipal services to answer the citizens in a more effective way*" (Rio, 2005).

Marketing perspective and *servuction* in the *OCS*:

PCC seems to have adopted an entrepreneurial style when it conceived the structure of the *OCS*. This office considers citizens as "*customers*" and therefore they are seen as being the final objective for the existence of the City Council. This philosophy was present when the establishment of the *OCS*, which intends to be a decisive landmark in the relationship between the City Council and "*its customers*", preventing the citizen who goes to the City Council from being left without an answer or from strolling about the services to obtain what he wants. The *OCS* concentrates all relationships between services and citizens. It also works as a kind of purveyor that has the obligation to put pressure on all other services,

² About case study research methodology, see Yin (2003).

there is to say, the mission of the *OCS* is to make sure that the citizen sees the problem that brought him to the City Council solved. In order to analyse the objectives, the architecture and the working method of the *OCS* of *PCC* it is important to discuss some basic concepts of services marketing: firstly, services are immaterial by nature and therefore the beneficiary's experience is determinant for the evaluation of the quality of the service delivered; secondly, services are consumed at the same time as they are produced, through an interactive process between the customer and the service provider; thirdly, because of the numerous factors that may interfere in the production of a service, particularly the interactivity between the service provider and its beneficiary or customer, the quality of the process result may vary in time or according to the place where the service is delivered; finally, services cannot be produced and stored, which makes them perishable and creates countless difficulties to adjust the supply and demand of services (Grönroos, 2000; Swartz and Iacobucci, 2000; Lovelock and Wirtz, 2004; Proença, 2005).

All those features are present in services delivered by the *OCS* and therefore they must be taken into consideration in the conception of the architecture of the service and its working method. Moreover, the process and the action of the services delivered in the *OCS* may be conceptualised through the Eiglier and Langeard's concept of *servuction*³ (1987). These authors established a relationship between process, action and results of services, and developed a concept which characterises service production processes and structures the main elements and the relationships involved: i) the visible part of the organisation, i.e., the material context or the physical format where the contacts are made, the relationships and the interaction between the service provider and its customers; ii) the invisible part of the organisation, i.e., the back-office necessary for the production of the service; and iii) the relationships between the customers, which, in a certain way, are determined by the characteristics of the physical format. All these elements are well structured in the *servuction* by the *OCS*.

Concrete place (the "office") or *OCS* *servuction* is located in the city centre, in a physical space being some 1,400 square metres wide and open Monday to Friday, from 9 a.m. to 5 p.m. (except on Wednesdays when it is open until 8 p.m.). The place is divided into four main areas or sectors: reception and general service, technical reception, back-office, and Internet space. There are several reception points, namely the general reception –with ten working stations–, urbanism –with seven–, and fiscal execution, treasurer's office, topographical maps, and local water supply and sanitation services. Facilities are decorated with colourful furniture and materials such as glass, metal and synthetic fibres (see Figure 1). At the reception point, it is possible to collect a ticket for the waiting lines, which allows the user to know how much time he is expected to wait. Next to the reception desk, there are the reception counters and in a nearby room the Internet space. In this latest place, it is possible to access the Internet without paying or to attend training programs. To fight against "info exclusion", handicapped people are not forgotten: there are eight computers equipped with blind software programs and some of the 42 workers are learning sign language so that they can serve the deaf mute⁴ efficiently.

³ Service assistance.

⁴ Besides this training program, all the workers received 167 hours of in-house training and spent five months working in similar conditions. On the other side, in order to speed up the services, the officials studied the procedures and the average time to solve municipal problems. This was done to inform the user on how to make the request, the documents that are necessary and the status of the process.

Figure 1. The place of the OCS of Porto City Council.



Source: Câmara Municipal do Porto (2004:14-15).

The e-government in Porto City Council – OCS’s website analysis:

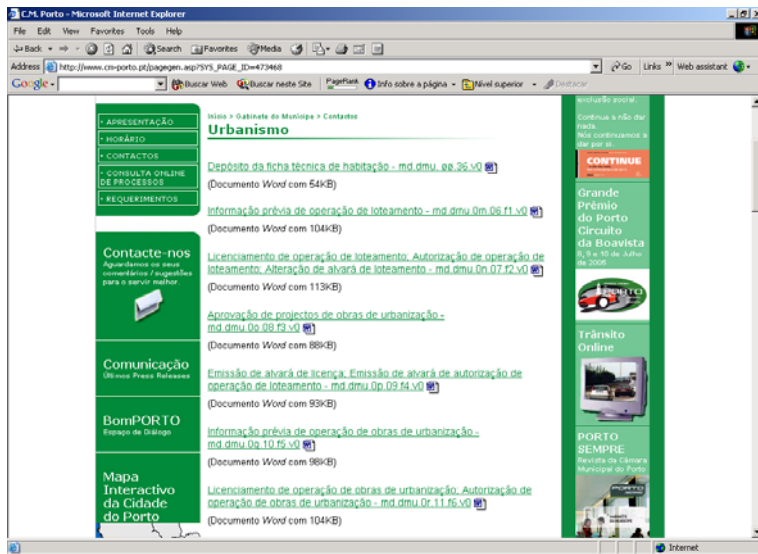
The OCS’s website, located at [<http://www.cm-porto.pt/>] (see Figures 2 and 3) gathers all the vital information for those relationships between citizens and the City Council. It allows accessing requests and downloading them, accessing information on ongoing processes, general information about services from the PCC, and accessing the newsletters.

Figure 2. The OCS’ website of Porto City Council.



Continues ...

Figure 2. The OCS' website of Porto City Council (continuation).



Source: Câmara Municipal do Porto (2005).

Next, some issues on OCS's website are discussed by analysing the items suggested by Laudon and Traver (2002) and Chaffey *et al.* (2003), i.e. the basic functionalities and user-friendly characteristics of the site and its informative, relational and transactional performance (see Table 1).

Thus, and firstly, we can conclude that the website satisfies the most basic *functionalities*, as far as it has a search engine, a map showing the site structure, a help page and another page with the most Frequently Asked Questions (FAQs) and at last, it guarantees confidentiality and the personal data of the visitor.

Secondly, the website shows a good *informative performance*. The amount of available information on the website is vast and useful and includes information on the several competences of the City Council. It does not merely show descriptive information: some of the PCC's organizational charts are available, several publications by some different of its departments, various legislation issues which may interest the citizen, and so other useful information when intending to solve some specific problems. Besides all this, the contents are constantly updated. At this point, we should also mention that it becomes impossible to "simulate" operations.

After analysing the website's *relational performance*, we can conclude that there are mechanisms that allow real interaction between the OCS and the citizens. The website includes some mechanisms allowing relationships and interactivity. For example, citizens have the chance of sending comments and suggestions to the office, and the office can ask for information. However, we think it is necessary to develop components in order to make transactions easier and to allow a more direct relationship with "each" citizen, namely a mailing list.

Table 1. Features and performance of the OCS's Website.

<i>Basic Functionalities</i>	Enables
Search engine	✓
Map	✓
Help page	✓
Confidentiality policy and personal data security	✓
Frequently Asked Questions (FAQs)	✓
<i>Informative Performance</i>	Enables
Institution's organizational charts	✓
Specific legislation of the sector	✓
Publications	✓
Useful information for problem solving	✓
Permanent updating of contents	✓
Simulation operations	X
<i>Relational Performance</i>	Enables
Comments and suggestions	✓
Mailing list	X
Requesting information from the citizen	✓
Citizen's contact allowance	✓
<i>Transactional performance</i>	Enables
Documents downloads	✓
Documents sent electronically	X
Online access to processes	✓
Availability of virtual services	X

Finally, the *transactional performance* was measured by analysing the citizen's real chance of conducting and carrying out processes with the OCS via Internet. It was concluded the *transactional performance* of the website to be reasonable as far as it allows the download of some documents, namely applications of the several available services, and the online access to processes (a password is required). However, in a negative sense, there is not any virtual service and citizens cannot send electronic documents to the OCS.

According to the *Action Plan for E-Government / Plano de Acção para o Governo Electrónico* (UMIC, 2003), there are four main e-government development phases, related to time and complexity of the implementation issues: i) *presence on the Internet/information*, where a website makes basic information available to the public; ii) *interaction*, where the website makes critical information and forms available, the public may contact the institution through e-mail; iii) *transaction/bi-directional interaction*, where websites already have computer applications that the users operate without any help, completing a transaction online, and so Internet complements traditional channels of service delivery, offering enlarged services and services shared between institutions; and iv) the *transformation* phase, where the delivery of public services and administrative operations are redefined.

Table 2. Navigation, content, legislation, security, marketing and transactions in the OCS's website.

<i>Navigation</i>	Satisfactory	Partially satisfactory	Deficient	Unknown
Browsers compatibility				✓
Download speed of homepage	✓			
Html compatibility	✓			
Links on home page	✓			
Navigation bars	✓			
Download speed of pages	✓			
Graphic resolution		✓		
Facility for citizens with special needs	✓			
Search engine	✓			
<i>Contents</i>	Satisfactory	Partially satisfactory	Deficient	Unknown
Maximum information published on the web site		✓		
Information updating		✓		
Document archives	✓			
Additional software		✓		
Forms to download	✓			
<i>Legislation and security</i>	Satisfactory	Partially satisfactory	Deficient	Unknown
Legal questions and copyright	✓			
Privacy policy	✓			
Portuguese Administration members' personal data	✓			
Authentication	✓			
Security		✓		
<i>Marketing</i>	Satisfactory	Partially satisfactory	Deficient	Unknown
Information presentation	✓			
Links to other websites	✓			
Website registration in other search engines	✓			
Links on other websites				✓
Availability of metadata	✓			
Promotion of the website in other formats	✓			
Interaction with the citizen		✓		
E-mail reply speed			✓	
Users' satisfaction		✓		
<i>Transactions</i>	Satisfactory	Partially satisfactory	Deficient	Unknown
Fulfilling online declarations/forms			✓	
Online payments			✓	
Total:	18	7	3	2

At the fourth step, available services are increasingly integrated, overlapping formal limits between public institutions. The concrete organisation's identity delivering the service becomes irrelevant for beneficiaries since the information is organised according to their needs. Outcomes from the analysis on the OCS' performance allows concluding that this office is at the moment just at the beginning of the e-government phase of *transaction/interaction*. On one hand, this may be happening due to the technological issues and website operativeness; on the other one, this may be happening due to the period of socio-cultural transition, which Portugal is just facing at this moment.

Table 2 (in previous page) shows the outcomes from an analysis on the OCS's website based on a framework by the *Strategic Group of the Information Society / Núcleo Estratégico da Sociedade de Informação (NESI)* adapted from Oliveira, Santos and Amaral (2003). According to this diagnosis, a website results in "excellence" if achieving "satisfactory" levels for all criteria; it becomes "good" in case of satisfying at least 15 criteria and not being considered "deficient" at any one; "acceptable" if it scores less than 7 "deficients"; and, finally, it has "to be reviewed" when being considered "deficient" at more than 7 criteria. Final result confirms the previous analysis, as the performance of the website is concluded to be "satisfactory", even though it may be improved. Contents in Table 2 reflect the researcher's viewpoint of the OCS's website, at acceptable or upper performance levels, even when exhibiting punctual weak valuations regarding the question about "e-mail reply speed" and –as previously stated– at the transactional dimension.

3. CONCLUSION:

The analysis on the OCS case study brings together marketing, public services, e-commerce and e-government literature concepts. The discussion on the case outcomes highlighted that the citizens' needs are much better answered and satisfied within the OCS' structure rather than within the traditional organisation of the PCC.

Discussion on the OCS's website features results into it seems to be informative and including some relational performance. However, some important omissions have been detected in this website, namely related to issues concerning its *transactional performance* and the *availability of virtual services*. It would be interesting to develop further research regarding citizens' view on e-government services features.

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