Electronic Governance in Portugal: A Silent Pioneer

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ABSTRACT

This paper sums up the Portuguese experience on launching and implementing a number of successful EGOV policies at different levels. Such a success was based on a holistic understanding of EGOV, in the confluence of technology, administrative reform and innovation processes, and enforced through a number of well-defined, consistent policies carried out over time. The role of national agencies, independent from local political instances and private interests, in the implementation of an effective EGOV strategy is also stressed.

CCS Concepts

• **Social and professional topics~Governmental regulations.**

Keywords

Electronic Governance; Electronic Government; Benchmarking; Portugal.

1. INTRODUCTION

The combined emergence of cloud computing, ever-smarter mobile devices, and collaboration tools is changing citizen's expectations with respect to public service delivery [14]. For governments this comes as both an opportunity to deliver better services at a lower cost, and a challenge. New expectations require every government to be ready to deliver and receive information in digital form, and manage services anytime, anywhere and through any sort of device. This has to be done safely, securely, and resorting to fewer resources. To build for the future, every government needs to come up with strategies that embrace the opportunity to innovate more with less, and to enable entrepreneurs to be part of the picture, designing innovative solutions and better leveraging government data to globally improve the quality of services provided [11].

In 2011 Portugal suffered one of its biggest financial crises [9]. This entailed the need to rationalize and optimize resources, both financial and human. However, and despite of such a context, the national effort in EGOV was not reduced and the public investment was even reinforced.

Actually, the move to a digital administration encompassing progressively larger activity sectors and administrative domains, benefits in this country of a wide public consensus among either

political parties, the relevant agencies and civil society in general. This was indeed a sign of hope in the middle of the crisis and its gloomy years. In fact, and quoting a former Prime Minister of the United Kingdom: "There is no 'new economy'. There is one economy, all of it being transformed by information technology. What is happening is no dot.com fad which will come and go – it is a profound economic revolution"[5].

Portugal has, in this domain, a considerable portfolio of success stories, illustrative of relevant projects and good practices that allows the country to be in one of the top positions in international rankings, as well as to be considered as a reference in terms of EGOV innovation [16]. This relies on pursuing consistent public policies in the EGOV field, despite the fact that it is not obvious to identify a single, national strategy document to set such a goal.

Priorities and global aims may have changed along the years, as well as the official message that conveys them, but the consistency of the policies proved resilient to change of governments and political actors. It was a long path, and there is not an ending point looming in the horizon, but, so far, it can be classified as quite satisfactory, as attested for example by most international rankings such as the United Nations EGOV Index [18].

In this context, this paper sums up part of the story in which a small country, with very limited resources, was able to become a pioneer in a number of EGOV dimensions. We believe this may be relevant to a wider discussion on what may drive the adoption of EGOV policies and bring change to citizens' everyday relationship with the public administration.

The rest of the paper is structured as follows. Section 2 discusses the rational underlying the term EGOV which informs the Portuguese experience. Such an experience is surveyed in Section 3. Finally, Section 4 concludes, pointing out a number of challenges to foster a further debate.

2. ELECTRONIC GOVERNANCE, INNOVATION AND CHANGE

If the statement "e-government is government"[6] became almost a commonplace in the EGOV discourse, the truth is that it contains an essential message: information and communication technologies (ICT) are only an operational component of a larger construction aiming at a global goal. ICT helps in operationalizing the basic functions associated with governance, including the provision of infrastructure and public services, and the formulation and implementation of public policies, in an effective, efficient and participatory manner. But this is only part of the picture.

In fact, it is now very clear that "governance processes and the institutional dynamics are essential in explaining the differences in developing countries"[1].

In the same sense the Global Thematic Consultation on Governance and the Post-2015 Development Framework, one of the eleven thematic consultations conducted by the United

Nations, identifies nine substantive elements of governance for the post-2015 global development agenda: 1) coherence of policies and strong institutions, 2) institutional efficiency and responsiveness, 3) participation and inclusion, 4) public scrutinize and transparency, 5) anticorruption 6) not discriminating governance gender, 7) private sector and provision of public service, 8) peace and security and 9) access to justice. In a very precise way, the support of these elements is a basic challenge to EGOV processes and to the technologies that enable them.

Although there are several definitions of EGOV, the basic message is that it must be understood as the execution of administrative tasks and processes supported by information and communication technologies, contributing for a more effective, efficient administration, oriented toward the citizens and with lower operating costs [4]. The focus is always on (electronic) *governance*, which includes the formulation and evaluation of policies, rather than on e-government, which emphasizes their implementation and the provision of public services. Indeed, governance emphasizes the organizational and procedural aspects in a more holistic view.

Broader definitions of EGOV include all matters related to the administrative and democratic processes, dividing them into e-government and e-democracy. The first is related to simplification and increase of efficiency, development and reorganization of administrative processes. The second with the development and implementation of mechanisms and opportunities for greater and more effective participation of citizens in the democratic process. Other definitions also focus on the digital interactions between citizens and government, between government and government agencies, and finally, between government and the business community.

For the World Bank, the definition of EGOV focuses on "the use of information and communication technologies by government agencies that have the power to transform the relations of citizens, businesses and other government sectors." According to the European Union, "EGOV is understood as the use of information and communication technologies in public administrations combined with organizational change and new skills to improve public services, democratic processes and increase support for public policy" [7]. Thus, gradually, the definition of EGOV evolved from a straight use of technology, to a multidisciplinary understanding of governance, and an integrative, holistic view of administrative processes.

The evolution of EGOV [13] to cover a progressively larger area, can be summarized as follows:

- Emphasis on technology: Increased quality and efficiency of internal operations to governmental function.
- Emphasis on organizational aspects: Providing better public services, more efficient and less costly, through different channels, including digital.
- Emphasis on support to governance reform: Understanding itself as an active agent and facilitator of ongoing governance reforms at the administrative and institutional level.
- Emphasis on the impact on the socio-economic environment: Fostering an active involvement of citizens, businesses and communities of civil society in decision-making and the formulation / validation of policies.
- Emphasis on sectoral diversity of the general government sector: Supporting policies and development objectives at different levels and sectors of the administration and the efficient interaction between them.

In general, we can say that innovation driven by technology (as evident, for example, in the communication infrastructure, the reuse of public data, the provision of services on mobile platforms, etc.), goes hand in hand with the emergence of new paradigms of governance. Extremely important synergies can be established between these two dimensions.

In fact, from the outset, EGOV has been associated with an enormous potential which justifies its adoption and expansion, and the corresponding reduction in other forms of interaction between citizens and the administration. The assessment of such impact focus on the ability to realize this potential, particularly on

- Improving the quality of services;
- Increasing public confidence in the administration;
- Increasing democratic participation;
- Leading to process dematerialization, with an additional environmental impact

This could be illustrated with a number of success stories all over the world. First of all, the Estonian case [3] – a small country with only 1.3 million inhabitants, but whose government has set a EGOV global policy to redesign the entire information infrastructure to ensure openness, privacy, security under the motto "future-proof". Not only people can vote online in legislative elections, but they can even obtain a refund of taxes two days after the registration of the respective statements. Of course, this type of service is not only the result of government agencies developing additional websites, but of an integrated and inclusive policy with strong political sponsorship. Similar cases can be identified in South Korea [2] and Singapore [17]. But also in the United States of America, initiatives such as the Digital Government Strategy proved that ensuring a EGOV National Plan is a valid bet to better serve citizens. For example, through the "25-Point Implementation Plan to Reform Federal Information Technology Management" [15] it was possible for the North American Federal Government to make significant progress in structural areas such as the adoption of "soft" technologies (e.g. generalization of the use of cloud computing), or the spreading of effectively shared services, under the motto "innovating with less to deliver digital services better".

Back to the Portuguese case, we would like to observe that all that has been achieved over time in this domain, comes from a broad, holistic definition of EGOV, much aligned with the definitions recalled above. Actually, such is the perspective adopted by the Portuguese *Agency for Administrative Modernization, I.P.* (AMA), an organization supervised by the Secretary of State's Office for Administrative Modernization, which in Portugal assumes regulatory functions in this area. Its organic law (DL 43/2012 of 23 February) [8] is very clear with respect to the scope of its responsibilities: "(...) To identify, develop and evaluate programs, projects and actions of modernization and administrative and regulatory simplification, and to promote, coordinate, manage and evaluate the utility distribution system, within the framework of the policies defined by the Government."

3. EGV IN PORTUGAL: A BRIEF SURVEY

The progressive introduction of ICT in public administration is often perceived as an opportunity to reform an administrative machine which is regarded as complex, inefficient, time consuming, difficult to access, compartmentalized into hierarchical services and organized by endogenous principles rather than according to the real demand. The progressive estrangement and distrust of citizens towards the way they were

governed, the blurring geometries of government functions (sometimes perceived as overly minimalist, sometimes as so excessive that it might decrease their own performance and entail too heavy costs), the lack of transparency and democratic scrutiny of decisions and public policies, act in modern societies as triggers for such administrative reforms.

Portugal was no exception. In the early 1990's, ICT was consensually perceived to have the potential to balance this situation out, increasing accessibility and efficiency, reducing context costs by cutting red tapes, dematerializing documents and processes, speeding up procedures and facilitating multi-level interaction. Technology is, in this sense, confidence-inducing, provided, of course, it comes accompanied by and integrated into an effective organizational change shape. Over time, changes introduced gradually, but in a consistent way, revealed the potential to simplify procedures, increase transparency and public scrutiny of the administration (at different levels and sectors), and engage citizens as active agents of processes that directly affect them. Luckily, this potential was not overlooked within a complex social context neither during or after the difficult years of the post-2008 recession.

The combination of emerging technologies in increasingly shorter cycles, modifies societies and people's daily lives, but also changes the ways citizens think about the State, interact with the administration, perceive the governmental functions, and relate them with their own expectations. This perception and the way it is addressed by the administration entails a long term process of combined technological and administrative change.

In Portugal the first step in this path was taken in 1991 with the launching of INFOCID[1], a mission group in charge of promoting, through ICT, the proximity with citizens and business. The main focus was put on the support to business and its agents. The group worked for the expansion of a nation-wide network of multimedia kiosks which played an important role in promoting the involvement of regional and municipal structures. With the generalization of the Internet a web portal was launched in 1995 with information automatically updated from the contents of the municipal kiosks.

Around the turn of the century a transversal project – the *Direct Public Service* – was created to issue different types of certificates, and simplify the act of requiring and paying administrative services. This was the seed for the most emblematic project designed within the modernization effort of Portuguese old and bureaucratic administration: The *Citizen Shop* network[2]. The concept was inspired on a Brazilian experience: to gather in a single space the interfaces with all relevant service suppliers, public and (some) private. The network had a tremendous impact on the citizens' daily life and somehow contributed to the development of a new, more open and confident attitude towards public services, which predisposed the civil society to adhere to more ambitious EGOV initiatives.

Over time a specific agency devoted to administrative modernization emerged out of the previous working groups and the entity coordinating the *Citizen Shops*. AMA, the *Agency for Administrative Modernization*, already mentioned above, was created with remarkable autonomy, directly reporting to the Prime Minister's office, in 2007.

Two main lines were pursued from then on, both promoted and strongly supported by AMA:

- *The axis of administrative simplification*. The landmark initiative was the *Simplex* programme, launched in 2006, to provide a simpler environment to frame the creation and operation of new business opportunities, and simplify a vast amount of legal and normative procedures. A version of *Simplex* for the municipal level was launched in 2008. The programme is still active, after a reform in 2014.
- *The axis of citizens' proximity*, not only through the *Citizen Shops* network, but also through the diversification of channels and platforms to connect to people in a permanent, direct basis. The programme called "*Aproximar*[3]" (the Portuguese verb for "getting closer") expanded the points of citizen interface by the introduction of a very large network of simple multi-contact points, with assisted digital interaction, installed in several community spaces, from post-office buildings to small village groceries. At the same time, a reorganization and optimization of the back-office systems in the public administration was undertaken.

The integrated *Citizen Card* launched in 2007 played an important role on citizen identification and authentication, namely through the promotion of digital signatures. This was more recently complemented by a simpler authentication mechanism using mobile phones – the *Digital Mobile Key*[4], which avoids resorting to special reading devices, therefore ensuring a more widespread use of digital authentication.

The new public expectations required from all governing bodies at local, regional and national levels, to be prepared to provide and receive information on digital form, and offer increasingly complex services, anytime, anywhere, and on any device or digital channel. On the other hand, it was clear that such could be a huge opportunity to boost the efficiency of Public Administration, with impact on operating costs and management effectiveness.

The need to focus EGOV on citizens, businesses and social actors, as well as to reconfigure their interactions "with himself", entailed the need for deep reforms on the way the State operates, with direct impact on the operating processes in a number of areas in the Public Administration, as well as on establishing a multiplicity of forms of interaction between the citizens, businesses and social agents. Quoting from a recent survey [12], we would say that "a state with simple processes, uncomplicated and less bureaucratic, either to citizens, businesses and social actors, or himself, expends certainly less time and resources in their internal operation, releasing efficiency opportunities and facilitating refocus focus on what is central."

If the role played by ICT was central along this process, it is not its unique factor. Actually, the existence of an advanced technological infrastructure or the provision of innovative applications is not enough to reform the Administration. There is much more to be taken into account, in addition to technology per se.

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[1] https://infoeuropa.eurocid.pt/registo/000035247/

[2] https://www.portaldocidadao.pt/web/agencia-para-a-modernizacao-administrativa/lojas-e-espacos-do-cidadao

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[3] http://www.portugal.gov.pt/pt/o-governo/arquivo-historico/governos-constitucionais/gc20/os-temas/20140925-aproximar/aproximar.aspx

[4] https://cmd.autenticacao.gov.pt/Ama.Authentication.Frontend/default.aspx

Since the early 90s, such a awareness made possible to advance in this area without major problems or hesitations, and globally putting the country in line with the main international actors in this domain. Figure 1 represents some of the milestones of the EGOV programme in Portugal.
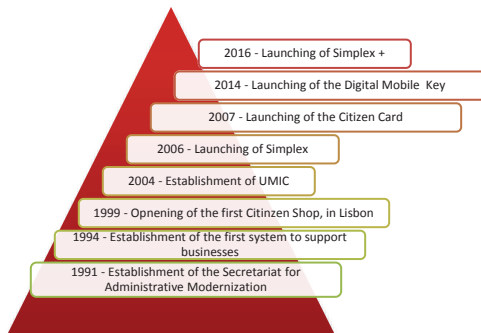

Figure 1- Main EGOV Milestones in Portugal

Although there was not from the outset a single, strategic, let alone normative, document to convey a clear national strategy for this area, the main lines of action have sparked an increasing consensus among the political forces along the various legislatures. It is not surprising, therefore, that a certain continuity of different initiatives can be perceived when analyzing the EGOV policies put forward by governments with varying political orientation. Such was the case, for example, of *Simplex+*, launched in 2014, understood basically as a smooth continuation of the original *Simplex* programme.

3.1 EGOV in Portugal: the state of the practice

It is consensual to acknowledge the advanced state of implementation of EGOV in Portugal. In addition to a more active civil society, clearly more aware of the implications of an active citizenship, the truth is that a persistent set of measures, carefully programmed and introduced over time, in a consistent way, put Portugal at a stage where EGOV policies are essentially reflex or operational. On the other hand, citizens, with higher literacy rates and digital presence, became more and more aware of their rights and with high expectations with respect to what the State may offer. This paved the way for designing EGOV policies increasingly more focused on citizens and the social dynamics.

Policies oriented to citizens oblige governments and their agencies to build an administrative public sector more efficient, simpler and closer to the citizens. Studies of various agencies, from the European Commission to UNDESA, show that Portugal is better today than it was one or two decades ago. However, limited budgets and increasing demands makes this reality a major challenge for the future. Essentially, the possibility of a recession scenario, a cyclic threaten in the global, "financialized" economy, entails the need for innovation, able to manage the future, and think about it with intelligence and strategy, following a multidisciplinary approach to act on several fronts.

Thus, the Portuguese programme for administrative modernization goes through a clear commitment to the EU Digital Agenda, and the definition of a national plan for the information and knowledge society. Three action lines were set for this: 1) citizen-centric services, 2) administrative simplification, and 3) the construction of an integrated and interconnected public administration. Detailing,

- Services focused on citizen (citizen-centric), with the aim of improving the interfaces with users, create different channels to interact with citizens, equipped with integrated utilities. At this level there were several initiatives such as the *Citizen Shops* mentioned above, but also the *Citizen Area Map*, a friendly citizen portal, based on the search engine FAST, and searchable through life events;
- Administrative simplification, in order to identify redundancies, simplify laws, regulations and processes, throughout the general government sector. In this matter initiatives such as *Zero Licensing* which allows for digital certification and the licensing of economic activities, replacing the need for prior reporting by strengthening a posteriori control, were created, entailing the dematerialization of various procedures. Another example is the *Entrepreneur's Desk* – an electronic single portal integrating several economic activities and services. This is an excellent example of coordination between central and local government. Still another example is the enforcing of the *Single Integration Principle* (popularized as the *Only-Once* principle), formalized in 2014, which aims to eliminate the need for citizens to submit the same information several times to different State departments or agencies.
- Integrated and interconnected public administration services and agencies, with the objective of defining standards and guidelines to promote interoperability, and developing strategic policies. Some of the efforts are visible in initiatives such as the *Interoperability Platform*, which is a reference framework for the provision of cross electronic services focused on the needs of citizens and businesses, operating under the *only-once* principle. Further illustrations could also be mentioned, namely the *dados.org* initiative, a database catalog for the Administrative Public Sector, and of course, the *Citizen Card* itself, probably the most effective catalyst of the development of the whole EGOV strategy in Portugal.

The recognition of Portugal as an important reference in several areas of EGOV is attested by various international indexes, as well as several distinctions received. Those include the award of UNPAN (United Nations Public Administration), the presence in top positions in the UNU EGOV benchmarking, which rewards good practices of public authorities, and the European Commission's Innovation Award, awarded to the *Zero Licensing* initiative.

A few numbers from EUROSTAT, and information gathered from JoinUP in 2014 [10] may help to contextualize the Portuguese case. The context, in terms of access and use of the digital infrastructures is as expected. Actually, about 80% of the Portuguese population has Internet access from home, about 97% of companies have internet connection, and about 80% of the Portuguese people use the Internet at least once a week. In terms of broadband connection, about 70% of individuals have broadband connection at home, as well as about 95% of companies. 2014 was the year that online shopping more rose in Portugal, reaching 45% of the population. Interestingly, between 2010 and 2014, as an obvious effect of the post-2008 recession, online shopping by businesses fell from about 20% to the current 14%.

In terms of EGOV indicators, the percentage of individuals who use the Internet to access and interact with the public administrative sector stands at 45%, while only 38% do so for

information. About 27% of individuals use the internet to download official documents, and about 30% use it to send documents to public entities.

Certainly more significant than these figures, are the results achieved in two international benchmarks: the EGOV Benchmarking of the European Union and the E-Government Development Index of the United Nations.

4. CONCLUDING: EXPECTATIONS AND CHALLENGES

Despite the reasonably successful story outlined in the previous section, a lot remains to be done. Indeed, building for the future in what EGOV is concerned entails a number of challenges:

- to think beyond programmatic lines;
- to keep up with the pace of change in technology to securely architect governmental systems for interoperability and openness from conception;
- to promote the use of common standards and more rapidly share the lessons learned by early adopters;
- to produce better content and data, and present it through multiple channels in program and device-agnostic5 ways;
- to cooperate on a coordinated approach to ensure privacy and security.

The above imperatives are not new, but many solutions are. The Portuguese experience, with all its achievements and problems, shows the decisive role played by national agencies, independent from local political instances and private interests, in the implementation of a governance strategy supported by digital platforms and ICT, at a national, regional or local level, as well as different sectoral levels. Of course such a strategy had to assume a number of roles in a pro-active way.

The current challenge, at this level is for herself to be understood as a facilitator in a number of domains. For example, a) to increase the effectiveness and, most of all, the efficiency of the public administration; b) to make available better public services through electronic channels, c) to promote the administrative and institutional reforms in an open governance perspective, d) to engage in an informed and effective way the citizens in political decision making processes, e) to increase the efficiency, equity, transparency, scrutiny and responsibility of public institutions and governments, f) to support the sectoral political and institutional goals, such as health, economy and education, g) to promote innovation and development of new services in public entities and interaction with the socio-economical agents, and, finally, h) to promote the efficiency of the cross-boarders services, and promote citizens' mobility.

Most likely there is no other area where the innovation binomial technology-processes can be referred with such a property. An extensive analysis carried on by the first author on the occasion of the installation in Portugal on the new United Nations University Operational Unit on Policy-driven Electronic Governance, UNU-EGOV, identified a number of challenges for the future of EGOV development in Portugal. They may have, however, a larger significance in different national contexts. We therefore enumerate them here to close the paper, as a contribution for a wider discussion on the successful implementation of consistent EGOV policies. Thus,

- to adopt and promote a multidisciplinary practice in designing and assessing EGOV policies and tools;
- to foster a strong interconnection between academic research and political practices, in order to identify concrete gaps and problems and work toward their solution;
- to promote the development (of tools, technologies and practices) always driven by innovation, avoiding an excessively single-sided perspective;
- to promote, in a progressively more complex world, trustworthy and interoperable EGOV solutions, as adopted in current safety-critical systems;
- to develop synergies with the private sector and citizens' associations;
- to be backed up by specific training programmes targeting different levels of the administrative staff.

The Portuguese experience provides evidence of how effectively EGOV can be introduced in several domains of the Public Administration. Technology plays a major, but not unique role in the support to, and as a catalyst for, any process of administrative reform. This seems to be particularly true with respect to the effectiveness of public services, and the efficiency with which they are delivered.

Actually, technology changes at an amazing velocity, a fact that simply cannot be ignored. Young entrepreneurs (e.g. from university start-ups) and researchers are probably the right agents for leading real innovation processes in this area.

5. ACKNOWLEDGMENTS

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