eGovernment & ICTs: An Examination of Spain’s Information Infrastructure

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Introduction:

Richard Heeks defines eGovernment as, “the use of information and communication technologies (ICTs) to improve the activities of public sector organizations”. eGovernment has two distinctive parts, the first, service transformation and administrative reform, and new forms of democratic participation and engagement, as the other. In other words, governments are developing systems based on ICTs to better inform their citizens and spark more democratic participation. The Internet has proven to be more than just a source of commerce and entertainment--it has also proven itself to be a new medium of communication, mobilization and interaction between citizens and their governments. The 21st century has moved the entire world closer together. Travel across the globe can happen within hours, and the Internet further shrinks the distance between cities, states, and countries. The proliferation of information on the Internet gives people more access to information, and allows them to organize and mobilize political movements. This paper will explore eGovernance in Spain and Europe. Spain will be examined within the context of its membership within the European Union and will be compared with eGovernance within other parts of Europe. This paper will also examine Spain’s development of a National Information Policy. The relationship between government and commercial interests will be discussed as well. This paper will examine practices and challenges presented in other parts of the globe, specifically in “developing” nations. Finally, several strategies will be offered to address the challenges discussed. First, an examination of the development of libraries within Spain is necessary. By contextualizing the development of libraries within in Spain, the development of ICTs and eGovernment is given a foundation.

History of Libraries in Spain:

According to Suzanne Hildenbrand, there are three generations of libraries in Spain, the first, created in the 1930s, the second, created in the 1970s, and the third, created in the 1980s. From 1947 until his death in 1975, Francisco Franco governed Spain. As a dictator, he did not advocate government transparency and the citizens’ right to know. From 1983 to 1993 the government invested $100 million in the INVERCAS program that primarily restored existing libraries and built a few new ones. Many information professionals believed that although the government improved the national library infrastructure, it did very little increase the quality of service to the general public. For example, although there was a lot of library renovation, the number of libraries that offered on-site Internet access was very small. Barrionuevo claims, “libraries are going through a crisis and the crisis is exacerbated by an accelerated technological and informative revolution.” Technology and its advancement coupled with the lack of experience and expertise with respect to its organization has lead to, “(an) imbalance in skill levels of people and in job-position demands.” Without an educated and qualified information professional workforce Spain will face many challenges bringing eGovernance (or any comprehensive technological development) to its people.

Spain’s Information Infrastructure:

Until 1982, there had not been a focus on a national information policy. An information infrastructure has only had 26 years to develop in Spain and has been influenced by commercial attitudes on information transparency, “…organizations, whether public or private, tend to be reluctant to divulge information.” For more than 30 years Spain was a society with a culture that limited and controlled information outlets. According to Cornella, “…it would appear that the Spanish authorities are not even clear about what information policy is.” It wasn’t until Spain joined the European Union that an information policy became an issue of national importance. The European Union promotes the idea that government information should be accessible and available to the public, except where it endangers the overall public wellbeing. In Spain, commercial business has begun to address issues of information policy that might be lacking at a national level. Telefónica™, a Spanish telecommunications company founded in 1924, has been at the helm of ICT development in Spain. In fact, until the European Union outlawed monopolies in 1996, Telefónica™ had a monopoly on telecommunications in Spain. Although Telefónica™ no longer has a monopoly, it was the only organization that drafted a national plan for a telecommunications policy. The policy was developed
to expand commercial interests and open new markets. Spain’s development of information policies were mostly influenced and developed by Telefónica™ for its commercial benefit, not because of a governmental concern to inform the citizenry.

Spanish Internet Users within European Union Context:
In “Diffusion and usage patterns of Internet services in European Union,” Jose Manuel Ortega Egea characterized Spain as a “backward country.” A “backward country” was defined as a country that had a high percentage of Non-Internet Users. Non-Internet Users were characterized as, “European citizens not currently using Internet technologies...(and are) characterized by a higher share of women (60%) unemployed people and people without finished formal studies (87%) and with basic education levels. Non-Internet Users are to a high extent composed of citizens located in rural areas.” According to Mr. Ortega-Egea’s study, 60.75% of Spain’s population is classified as Non-Internet Users. Compared with other European Union member states, Spain was rated in the lowest echelon of Internet Diffusion and proliferation among its citizenry. Most of the people who use the Internet in Spain are educated, white-collar males that reside in major Metropolitan areas between the ages of 30-39. The use of the Internet in Spain is highly determined by gender, occupation, education, age and location.

Part of the reason that Internet usage is so low is because there has been a lack of research within the Library and Information Studies (LIS) field. According to González-Teruel, “It is not surprising therefore that the number of works published on information needs and uses in Spain increased from just one at the beginning of the decade to 22 in 1999.” In order to create an information society, there must first be a respected and established academic discipline! Spain did not establish academic qualifications for BA and PhD programs in Library and Information Science until the 1990s. Spain has not had the time to develop a solid base of information professionals to augment the societal needs of information proliferation. There are not enough professionals to develop national information policies, nor educate the general population on how to use advanced information and communication technologies. Within the academic field, much of the research has been concentrated within academic settings and the usage patterns of students and faculty. Everyday people and everyday usage of ICTs have not been a main focus of academic works. An examination of published works of Spanish academics from 1990-2004, “…show that the study of information needs and uses in Spain still falls short of being a consolidated area, as evidenced by the low volume of publications and the means of disseminating the research, given the high proportion of conference papers as opposed to journal articles.”

Spain very much wants to be a part of the international dialogue on ICTs, eGovernment, and information policy, however; the absence of educated information professionals coupled with a government that has a tenuous relationship with an informed citizenry leads one to conclude that although Spain may be an economically “developed” nation, it has the information infrastructure of a “developing” nation. For example, Gandía examines the quality of information on websites created by Spanish city councils and argues that, “…the digital informative transparency of Spanish city councils is very poor, as demonstrated by the values reached by the indicators of the disclosure of financial information and, to a lesser degree the budgetary information…politicians consider the informational web presence as a secondary objective, perhaps thinking that the citizenship does not have enough interest or training to understand the economic information that the administration publishes.” Not only has the Spanish government failed to develop and implement an information infrastructure, it does not have the faith that it’s people would show an interest or be equipped to understand the information it provides. If the government continues to show a lack of faith in its citizenry, and continue to meagerly develop an information infrastructure, it will be a country that has a lot of economic power, but it will lack the power to inform itself. Spain will eventually fall by the wayside with respect to the “Digital Divide.” It must begin to develop programs that advocate the education of everyday Spanish citizens. Spain must realize that economic development and the deferment of information infrastructure creation along with information policy development will be costly in the future. Information literacy must be a part of its democracy.

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Digital Divide:
Spain has shown that a digital divide can exist in an economically powerful nation. In order to promote an informed society, people must develop the skills to obtain information. A digital divide is created when citizens do not have access to the education necessary to maneuver within a digital information infrastructure. Also, if a person does not have access to the Internet, s/he will be unable to use it. Awdhesh Singh posits, “…governments are trying to popularize the use of the Internet by offering various subsidies, providing incentives and by installing public Internet kiosks….however, telephones are a far more popular means for accessing information.”

Singh suggests that governments use more than just the Internet to reach out to its citizenry, “The one-sided reliance on the Internet for the implementation of E-Governance is driven by the consideration of bringing as many users as possible. However, this may not lead to better services…it may even jeopardize the improvement of service quality by shifting many burdens to the citizens.” This increases the gulf between those who have the know how to manipulate the Internet to obtain the desired information. If a person has a basic skill set to use the Internet, but does not have the digital savvy to search databases or web sites to get to the desired information s/he may be left in the proverbial dark. Ortega-Egea found that most Internet users in Spain were aged 30-39. People over 40 may be reluctant to begin using computers to obtain information. People aged 17-29 may not have had the skills training during compulsory education to navigate digital and Internet information resources. From an information perspective, Spain is very much like a developing nation.

Global Challenges:
Spain is not the only nation that experiences a digital divide. The United States has a digital divide with respect to race, class, and location, China experiences a digital divide with respect to gender, location, language, education, and class, and India experiences the digital divide as well with respect to gender, location, language, education, and class. According to Cynthia Padilla, “e-government is impossible without the infrastructure.” Infrastructure costs money. In order to build an infrastructure a nation must be willing to invest, and it must be willing to make a huge financial commitment. In fact, John Carlo Bertot suggests a 13-step process to build a manageable information infrastructure on a national level. Everything from government literacy to community-based partnerships were part of his proposed process and they didn’t come without a price. Not only does Spain have to consider how to develop its information infrastructure and information policies, it also has to consider the economic feasibility of such a grand project. The main issue with economic feasibility will be the professional training of individuals to support the information infrastructure. It also has to consider whether or not the information provided is accessible, reliable and useful. In order to become a fully developed nation, both economically and with respect to information, it would be helpful if Spain looked to developing nations to bolster its information infrastructure development.

Alternatives:
Singh states, “Since citizens mostly require simple information from government, it may not be worthwhile to access the Internet for having such trivial information. Such information can be provided via mobile phones or call centers. Thus, there is no single strategy to provide e-government services in all the countries. Each country has to develop a different strategy for adoption of e-governance based on its resources and level of e-readiness of its citizen.” Mobile phones, Interactive Voice Response Systems (IVRS), Government Call Centers and Public Information Kiosks, were some of the alternatives Singh suggested. Mobile phones could be used to send out mass messages to inform the public of public health concerns, or provide a way for citizens to file complaints. Mobile phones are much more accessible and are not a huge financial commitment as are laptops and PCs. IVRS’s allow people to obtain information without a lot of red tape. An IVRS works a lot like banking over the telephone here in the United States. A person can call his/her bank at any given time of the day and obtain practically all of his/her account information by listening to options and pressing buttons. Governments could find this method useful as well. The final option that Singh pointed out was Government Call Centers. As stated earlier, there is a digital divide in Spain with respect to the older demographic of 45 years and older. If Spain were to implement a Government Call Center, perhaps the older generation would be willing to entertain the idea of eGovernment if it involved picking up a phone instead of buying and learning how to use a computer. A Government Call Center would also create jobs.

Conclusions:
As Spain enters the 21st century, it must take a serious look into the development of its information infrastructure and information policies. The European Union will continue to advance information policies and infrastructures at a rate faster than Spain can keep up. First, it must develop an army of information professionals who are ready to investigate what Spain’s information needs are, what information needs are being met, and what information needs will need to be met in the future. Second, it also must make the skill development of information and communication technologies a part of compulsory education. By developing more public libraries and public services offered therein, Spain could very well shrink the digital divide exponentially. Lastly, Spain must develop strategies to improve eGovernance through surrogate channels to bolster citizen participation within the democratic process. Spain is extremely resourceful and has what it needs to be a leader in the global information society; however, the question remains, will it catch up before it’s too late?

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i http://www.egov4dev.org/success/definitions.shtml


iii Ibid.


v Ibid.

vi Ibid.

vii Ibid.

viii Ibid.


x Ibid.

xi Ibid.

xii Ibid.


xiv Ibid.

xv Ibid.


xvii Ibid.

xviii Ibid.

xix Ibid.


xxii Ibid.

xxiii Ibid.
