E-Inclusion for People with Disabilities in E-Government Services through Accessible Multimedia

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ABSTRACT

One of the main challenges of e-Government is the communication of these services to citizens. In the context of people with disabilities, communication channels should be equally accessible, in particular those based on innovative media such as e-Services. This paper illustrates Pasmao, an initiative for the diffusion of e-Government, using accessible media for people with disabilities. Pasmao is an accessible multimedia platform aimed to promote the use of information technology (IT), specifically, the digital signature within Leganés, a town near Madrid, Spain. The results of the evaluation of the experimental implementation of Pasmao reveal a new and promising way to promote e-Services among people with disabilities.

Keywords: Accessible Multimedia, Accessibility, Digital Sign, E-Government, People with Disabilities

INTRODUCTION

The social movement associated with the full participation of people with disabilities in our society is often referred as “the disability rights movement” or “the independent living movement” (DeGong, 1979). According to Batavia and Schriner (2001), in the disability rights movement the emphasis tends to be on the recognition of rights of people with disabilities that are fundamental in nature, and if deprived, would violate fundamental notions of fairness. Same authors state that when discussing the independent living movement, the focus is on removing environmental barriers that prevent people with disabilities from living independently in their communities.

Thus, the philosophy of the independent living movement emphasizes the rights of people with disabilities to determine their own
futures through choice and control (Smith et al., 1994). E-Government issues are included in independent living criteria. Electronic government (E-government) refers to government use of technology, particularly Web-based Internet applications to enhance the access and delivery of government information and service to citizens, business partners, employees, other agencies and government entities (Layne & Lee, 2001). Nearly every country in the world — ranging from the poorest to the richest — has developed a particular implementation of it, and an extensive literature on the subject continues growing (Ruth & Doh, 2007), and today many public services depend on information systems in internal processes and outputs deliveries (Almutairi, 2008). The European Commission (2006) i2010 eGovernment Action Plan committed signatories to develop e-government by 2010 such as:

- No citizen is left behind;
- Processes are efficient and effective;
- High-impact key services are available online;
- Key enablers are in place to assure convenient, safe, secure services; and
- Participation and democratic decision making are enhanced.

E-Government is suggested as a catalyst or tool for government administrative reform (Kraemer & King, 2006). As a result of this, many benefits of its use have been outlined: improved citizen involvement and contribution to government-related issues (Barnes & Vidgen, 2003), more transparent relationships (González, Gasco, & Llopis, 2007), improved operations (Brunschwig, 2006), better government-citizen communication (Tolbert & Mossberger, 2006), lower overall costs (Fahnbulleh, 2005) and the improvement of citizens perception of the public sector (Tolbert & Mossberger, 2006), among many other advantages.

Others argue the ideal of E-Government has not accomplished the promise of more effective and democratic public administration (e.g., Garson, 2004; Jaeger, 2005). Thus, researchers have identified many open issues which are hindering the adoption of E-government in many countries (see Sarikas and Weerakkody, 2007, for a comprehensive review).

For people with disabilities, e-government services can improve their ability to advocate for and access government services (Chan et al., 2006) being also a way to be more informed citizens and participate in democratic processes (Chan et al., 2006). Within the pending issues identified by researchers, one particular issue has emerged and is deemed as a crucial topic for the current work: accessibility. This factor has been pointed out in a number of recent studies (e.g., Fang, 2002; Jaeger & Thompson, 2003; Jaeger, 2004; Al-Omari & Al-Omari, 2006; Shy, 2007; Jaeger, 2008). The importance of accessibility in E-government services is considered one of the criteria for the quality of the services offered, and, due to this importance, accessibility has become a fundamental feature included as a criterion for evaluation of the services offered by Governments (e.g., Bertot & Jaeger, 2006; Esteves & Joseph, 2008). Particularly, initiatives coordinated by the European Union (EU) are being carried out to guarantee E-inclusion to people with disabilities. A broad report of the EU efforts can be found in Timmers (2008), or detailed separately for each member country of the EU in Strejcek and Theil (2002).

There are different studies dedicated to determining the digital gap in E-government which focus on the requirements of people with disabilities (e.g., Pieterson, Ebbers, & van Dijk, 2006; Dobransky & Hargatti, 2006; Choudrie, Brinkman, & Pathania, 2007). According to Jaeger and Thompson (2003), the implementation of E-government services should be based on the correct diffusion and communication of the services. In this environment, in the same way as it is necessary to be able to rely on accessible E-government services, it is also vital for communication channels to be accessible. In an attempt to achieve this goal, the following sections will focus on the most important aspects of accessibility, in particular, subtitling and audio description as tools for accessibility.
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