

Electronic Government and Integrated Library Systems



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INTRODUCTION

Twenty First Century Government is enabled by technology—policy is inspired by it, business change is delivered by it, customer and corporate services are dependent on it, and democratic engagement is exploring it. Technology alone does not transform government, but government cannot transform to meet modern citizens' expectations without it (Cabinet Office, 2005, p. 3).

According to the E-Government Readiness Ranking Report (United Nations, 2005), in 2005 the United States was the world leader followed by Denmark, Sweden, and the United Kingdom; and in 2004 the Republic of Korea, Singapore, Estonia, Malta, and Chile were also among the top 25 “e-ready” countries. The Ranking Report further emphasizes that 55 countries, out of 179, which maintained a government Web site, encouraged citizens to participate in discussing key issues of importance, and that most developing country governments around the world are promoting citizen awareness about policies, programs, approaches, and strategies on their Web sites—thus making an effort to engage multi-stakeholders in participatory decision-making.

Indeed, one of the significant innovations in information technology (IT) in the digital age has been the creation and ongoing development of the Internet—Internet technology has changed rules about *how* information is managed, collected, and disseminated in commercial, government, and private domains. Internet technology also increases communication flexibility while reducing cost by permitting the exchange of large amounts of data instantaneously regardless of geographic distance (McNeal, Tolbert, Mossberger, & Dotterweich, 2003). In Hirsch's (2006) words, “The Internet has finally achieved the convergence dream of the 1970s and everything that can be canned in digital form is traveling the Net” (p.3).

BACKGROUND

For hundreds of years, American government agencies have collected and provided data and information (such as statutes and regulations, court decisions, votes by Congress, and the records of hearings) for both citizens and government. In fact, American Federal Government has adapted

progressive computer and telecommunication technologies both operationally and in policy to harness computing power to improve government performance and enhance citizen access to government and other information services and resources since the development of Internet technology—from the initial steps to establish the Internet in the late 1960s (originally ARPANET) to the establishment of the National Information Infrastructure (NII) and National Performance Review (NPR) initiatives in 1993 (Aldrich, Bertot, & McClure, 2000).

In the early 1990s, city governments began to use e-mail, listserv, and the World Wide Web (WWW or Web) to deliver information and services; and by the end of the 1990s, Web-based services were already an integral and significant part of Electronic Government (e-government) (Ho, 2002). E-government, simply defined as utilizing the Internet and Web for delivering government information and services to citizens, refers to the use by government agencies of IT (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government (AOEMA, 2006). In essence, e-government could enable citizens to interact and receive services from the federal, state, or local government “24 hours a day,” “7 days a week”; it has taken promising steps to deploy e-government services, but much remains to be done, both in implementing e-government services and in developing new technologies and concepts (AOEMA, 2006). All the government activities essentially arise from a mixture of motives intertwined, principally in the interests of *efficiency*, *information access and provision*, and *democracy* (Hirst & Norton, 1999).

And in the electronic information age, the traditional roles of the Federal Depository Library Program (FDLP) libraries in selecting, acquiring, organizing, and providing access to and services for government information are more important than ever (Jacobs, Jacobs, & Yeo, 2005).

ELECTRONIC GOVERNMENT

Key Dimensions

E-government incorporates four key dimensions that reflect the functions of government itself, but the last dimension

is oftentimes slighted because it is mostly invisible to the public (Dawes, 2002): (1) *e-service* (the electronic delivery of government information, programs, and services often over the Internet); (2) *e-democracy* (the use of electronic communications to increase citizen participation in the public decision-making process); (3) *e-commerce* (the electronic exchange of money for goods and services, such as citizens paying taxes and utility bills, and renewing vehicle registration); and (4) *e-management* (the use of IT to improve the management of government from streamlining business processes to maintaining electronic records to improving the flow and integration of information). According to Dawes (2002), New York City is clearly in the first tier of jurisdictions in its development of e-government (NYC.gov). Also the city's Web site has been recognized nationally for its design and usability; especially after "September 11" (that is, "the 2001 terrorist attack on America"), the website has been used with great resourcefulness and flexibility to provide New Yorkers with the best information available.

Objectives/Innovations

Using information and communication technologies (ICTs), e-government promotes more *efficient* and *effective* government, but it is not a shortcut to economic development, budget savings, or efficient government. E-government is a *process* (thus called "e-volution") and often a struggle that presents costs and risks, both financial and political (AOEMA, 2006). However, e-government is not simply the process of moving existing government functions to an electronic platform but calls for "re-thinking" the way government functions are carried out today to improve some processes, involving four objectives/innovations (AOEMA, 2006) (see Table 1).

In addition to the above objectives/innovations, the Department of Labor (DOL), for instance, ensures that federal employees with disabilities are able to use IT to do their jobs, and that members of the public with disabilities who interact with DOL will be able to use IT to access information on equal footing with people who do not have disabilities, in reference to Sections 504 and 508 of the Rehabilitation Act of 1973 (as amended) and published standards (DOL, n.d.).

Security and Privacy

Through the Internet and Web revolution, more effective, convenient, and flexible e-government services are happening, yet *security* and *privacy* are the two critical issues in e-government. Building secure e-government systems requires a careful balancing between providing convenient access and appropriately monitoring permission and, in reality, technology-based solutions are still at their infancy and the existing alternatives consist essentially of enforcing privacy by law or self-regulation of operational practices ("Security and privacy," 2002).

Successfully implementing e-government does require a level of trust on the part of all transacting parties, and e-government security and privacy protection activities address the protection of the government assets involved in e-government. For example, DOL (n.d.) has developed a comprehensive cyber security program in accordance with the Federal Legislation and Policies, which include the Federal Information Security Management Act of 2002 and Privacy Act of 1974. Accomplishments by DOL include: (1) developing system security plans for major applications, general support systems, and financial systems; (2) developing an enhanced computer security awareness training

Table 1. E-government objectives/innovations

Government To Citizen (G2C):
<ul style="list-style-type: none"> • Providing one-stop, online access to information and services to individuals (citizens should be able to find what they need quickly and easily) • Disintermediation of civil service staff—delivering services directly to citizens
Government To Business (G2B):
<ul style="list-style-type: none"> • Reduced burdens on business by providing one-stop access to information to facilitate business development • Skilled, IT-literate, and flexible citizens for the labor market
Government To Employee (G2E):
<ul style="list-style-type: none"> • The ability to easily gather information from the field • Access to important applications and content
Government To Government (G2G):
<ul style="list-style-type: none"> • Reducing the fractured nature of individual department and agencies, and moving towards "joined-up" government • Changing the culture of the civil service from reactive to proactive

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