



Chapter VI

E-Government: An Overview

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Abstract

Information technology has fundamentally altered many aspects of daily life, including interactions with the government. The role of the Internet continues to increase as more citizens use it to find pertinent information, purchase goods and services, and participate in virtual communities. By capitalizing on the Internet revolution, governments can create new channels of communication and new methods for participation via e-government. The changing environment, coupled with citizen and business demands, encourages government involvement in e-government initiatives and related uses of information technologies. Clearly, the role of information technology in the public sector has changed rapidly over the past decade. The computer systems that were once a luxury investment for wealthy states and local governments are now supporting almost every function of local government. In virtually all local governments across the nation, information-technology investments are becoming an increasingly important area of attention for elected officials and administrative leadership alike.

Technology-Enabled Government

The public sector has made incredible strides in technology over the past decade. The investments in IT have brought the many states, counties, and municipalities into standing with other leading private-sector companies across the nation. In virtually every governmental jurisdiction, information technology is playing a vital role in each department and function of the organization. In fact, while information technology only comprised between 1 and 3% of the general fund budget, on average, the technology investments support approximately 98% of the work conducted by governments. In order to assist the public sector in moving beyond the status quo and leveraging technology as a means of delivering more efficient and effective services, as well as to maintain and gain a competitive economic-development advantage, it is important to recognize the positive technological advancements that have made significant impact on service delivery over the past 6 years. By establishing this strong technological foundation, many governments are poised to reap the rewards associated with greater investment in technology.

The scope of technology in governments across the United States can be grouped into three basic categories: infrastructure, hardware, and applications. The first two categories have seen a plethora of growth as states, counties, and municipalities have installed various communication media to assist with connecting disparate locations. One common infrastructure and hardware solution across many states has been the installation of fiber between government facilities or around jurisdictions. Other governments have chosen to use wireless technologies to connect remote locations without physically laying fiber. As service becomes less location dependent, it is essential for government employees and off-site departments to have high-quality, secured access to records and databases. Fiber-ring and secured wireless initiatives have provided a critical first step to this effort.

Another major technological impact has been generated by the powerful communication medium of e-mail. Using e-mail technologies as collaborative tools, employees are able to generate significant cost savings by the reduction of travel time for communication purposes. E-mail and other electronic communications media, such as instant messaging, allow almost instantaneous communication across departments, jurisdictions, and states and have been credited with quicker problem resolution, increased data sharing, and easier information and personnel access. Furthermore, the use of e-mail has significantly improved citizen relationships by allowing another channel of communication.

The third important technology investment is a World Wide Web presence. By creating and maintaining an outstanding Web site, cities and counties have been on the cutting edge of citizen, visitor, and business engagement. In fact, many economic-development experts indicate that a high-quality Web presence is the most important tool in a local government's development efforts (Horrigan, 2003). The National Governor's Association and the National Conference of State Legislatures offer publications concerning the value of technology investments and impact on economic development. Furthermore, Web sites provide a unique and timely vehicle for communication with citizens and visitors alike. It is an essential feature in any local government.

A final critical technological impact has been garnered through the investment in geographical information systems (GISs). The use of GIS greatly enhanced the work of local governments. For example, GIS has improved internal government efforts by aiding in meter and pipe

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