

E-GOVERNMENT ISSUES AND PRACTICES

Edward T. Chen, University of Massachusetts Lowell, edward_chen@uml.edu

ABSTRACT

The purpose of this paper is to describe important e-government issues and current practices. A brief definition of e-government and related issues such as budget and progress are discussed. Different e-government approaches are needed to match customer expectation. Although e-government is a recent fad, many insights can be drawn for future development and improvement.

Keywords: E-government, e-citizen, accessibility, privacy, security

INTRODUCTION

The term E-Government is quickly becoming one of the hottest topics among government officials. Because E-government is such a growing topic that affects everyone, it is important for the public to be informed. Many people use the Internet everyday for various things. People shop online, pay bills online, and do research online. Everyday some new site with a brand new idea comes out. Now you can even renew your driver's license, renew your license plates, search for unclaimed property, and even pay your taxes! The use of the government (local, state, and federal) online is called e-government. Many people do not fully understand what e-government is, what the government is doing to protect confidential information, and why the government must maintain such secure sites. Some questions that will be addressed in this paper are: What is E-Government? What progress has been made in E-government? What are the main problems holding back advances in E-government? What will E-Government become in the near future? The purpose of this research project is to define e-government, to show what the government is doing to ensure the privacy of all citizens, and to make suggestions for improving the security and privacy of e-government.

WHAT IS E-GOVERNMENT?

E-Government has been defined in many different ways. Because the topic is so vast, it is difficult to pinpoint one definition that covers it all. Gartner Group, a large consulting company, defines e-government as "the continuous optimization of service delivery, constituency participation, and governance by transforming internal and external relationships through technology, the Internet, and new media" (Seifert, 2001). Mark Forman, the new associate director for information technology and e-government in the Office of Management and Budget (OMB), puts it differently. He defines e-government "as the use of digital technologies to transform operations and improve effectiveness, efficiency, and service delivery" (New, 2001). The emphasis on the quality of service within the conception of e-government needs to be understood in terms of the view held by the country's political leadership, that information technology has an important role to play in meeting the challenges of economic development and customer satisfaction.

E-government is the use of the Internet to bring together citizens and business in a network of information, knowledge, and commerce. While some transactions involving money and

customer service, e-government is not the same thing as e-business. E-government has applications and policies that make it truly unique. E-government has three main components: (1) Government services and applications (2) Enterprise portal management (3) Back office infrastructure integration. The citizen applications of e-government are driver's license renewal, license plate renewal, unclaimed property searches, and online property tax payments. Businesses can use the tax and license filing forms, record searches, and legal filings. The government can use government sites for employee management, permits, and government-to-government relationship management. E-government is trying to get to a point to where it can have a more personal government for our children and their own (NIC, Inc., 2001).

The Birth of E-Government

With a definition of E-Government now in mind, we must look at what is being done to make E-Government a reality. Many agencies have found that the current paper systems simply cannot keep up with the high demand for government products and services. Most of these agencies have mounds of paper work waiting to be dealt with because there simply is not the manpower available to keep up with the redundant work. Many citizens have been fed up with long lines and delayed application processes. The public also complains of not being able to give valuable feedback and concerns to anyone regarding the service they received from these agencies. Both parties are frustrated with the inefficiency that is present in the way government is currently run. These issues have led to Government taking a stand to eliminate the waste and find a more efficient system. E-Government turns out to be the reasonable answer.

In hopes of getting E-Government started, former President Bill Clinton made an appearance on the Internet. He gave a challenge to the government and industry to get an E-Government site up and running on the Internet in no more than ninety days. Exactly ninety days after his appearance on the Internet, he addressed the public once again via the Internet. This appearance was to let Americans know that the first ever government website, www.firstgov.gov, had made a huge step towards E-Government. The web page FirstGov.gov gave access to twenty-seven million federal agency web pages from almost 20,000 different government websites (Preston, 2000).

Another key member in getting E-Government started was ex-Vice President Al Gore. In an interview Gore said "The Internet should be put to the service of community and citizen empowerment in a whole new way so every citizen can instantly tap new skills, new tools access to information about everything from health care to education and even access to capital to start or ramp up your own business. The power of government should not be locked away in Washington, but put at your services, no further away than your keyboard." Mr. Gore also stated that citizens should be able to use their personal home and worksite computers as an "Information Age Town Hall." Not only did the governmental workers want these tools, but also, people of high rank, such as congressional members, wanted to give the American public access to more government services, information and legal forms (ABCNEWS.com, 2001).

One of the first examples of E-government coming into effect was in California as a result of a huge earthquake in 1994. The Federal Emergency Management Agency (FEMA) found that their legacy paper system could not keep up with the more than half a million citizens filing for disaster relief. The need for a more efficient way to get victims their checks pushed FEMA to create National Emergency Management Information System (NEMIS). NEMIS provided a toll-

free number for victims where operators entered financial and property loss information into the NEMIS database. This symbolizes E-Government well because from the time the victim calls in, until the check is written, the information never touches paper (Dean, 2000).

Meeting the Deadlines

Many things have led to the creation of a paperless work environment. For instance, The Paper Elimination Act. Though the NEMIS system showed initiative in the E-Government arena, it wasn't until 1998 that the Government Paper Elimination Act (GPEA) got the E-Government ball rolling. The Act states that the agencies must make their most important processes and forms available online by October 2003. The Act also states that agencies must accept electronic signatures, share data with other agencies, and view all documents submitted via the Internet as if they had received the information on paper. So, governmental agencies would not only have to keep up with online forms, but also keep track of all paper that enters the offices (Silver, 2001).

However, even with this act in place many agencies did not take action until December 1999 when President Clinton put forth a memorandum on Electronic Government. The memorandum gave a deadline of December 2000 for agencies to put their top 500 forms used by citizens online (Dean, 2000). In accordance with this memorandum, most agencies did make their forms available online, however, in most cases, it is simply a printable form that must be filled out by hand and mailed in. In other cases, if it is possible to fill in the form online, an operator or clerk on the other end must print out the form and retype it into another system. Nevertheless, with the Y2K crisis gone and the December 2000 deadline met, agencies are now beginning to focus on, and fret about, the GPEA October 2003 deadline.

Although many agencies are unprepared to meet the GPEA deadline, it should be noted that there are several agencies that have progressed wonderfully in the direction of a functional and efficient E-Government. For example, through its web site, the U.S. Mint sold \$156 million in coins last year. This agency also handles its books electronically and takes no more than ten days to close them every month. Another good example is the Treasury Department, which has developed strategic short and long term, plans which integrate the GPEA (Dean, 2001). Whether prepared or unprepared for the deadline, all agencies must integrate the GPEA into their budget plans as well.

Small Successes

American citizens can do a variety of things via E-Government websites provided by their state. As of September 2001, six hundred ninety-one local governments that have populations ranging from 10,000 to around 1.5 million have been active in some form of E-Government. These populations are for forty-eight states that currently participate in E-Government online procedures. Six hundred two are local government agencies and only eighty-nine are county governments (Moulder, 2001). The states are custom selecting what forms they believe will be beneficial to the residents of that particular state. They can pay a water bill, apply for a loan or even pay their taxes.

An example of a state providing information and forms electronically is Hartford, Connecticut. Their website has been broken down into four different categories. The categories are: 1.

Residential, which includes items such as election polling information, municipal service information and online surveys of the local government. 2. Business, including Chamber of Commerce information and personal property filings. 3. Educational, such as public school information and calendars. 4. Community, including dates of parades and festivals (Moulder, 2001).

Another example of online access for a town is Tampa, Florida. Townspeople living in Tampa have the option of beginning or terminating utility services online, and paying parking tickets to the courthouse. Businesses have access to receiving lists of persons bidding on certain projects, and these businesses can also obtain a list of all current RFP's and also go to the construction site to get detailed information on permits and inspections.

Advances in E-Government technology have also made government agencies more accessible to the nearly twenty percent of all Americans that have disabilities. These Americans now have the opportunity to find all that they need online instead of waiting in long lines at governmental buildings. Section 508 of the Rehabilitation Act of 1998 requires federal and state government agencies to provide disabled citizens with access to the Internet and governmental information. For people with disabilities such as impaired vision, the industry has come up with magnifiers for the computer screens that make the text larger for someone who struggles to read due to vision impairments. Having disabled citizens being able to now participate in government functions is arguably one of the best advantages of having an electronic government (Williams, 2001).

E-GOVERNMENT BUDGET

President George W. Bush addressed the need for an E-Government budget in April 2001. Bush's 2002 budget included a \$100 million E-Government fund. The fund, which is to be controlled by the White House Office of Management and Budget, would focus heavily on developing the digital-signature technology and broadly adopting the E-procurement. Another important aspect of the fund is that it is a central fund. This cross-agency initiative is meant to help agencies interact with each other and become standardized (Gilbert, 2001). This increase in the E-Government budget is a step forward but will it be enough?

There are those that believe the \$100 million included in President Bush's budget will not be enough. Senator Joseph Lieberman, a democrat from Connecticut, and Senator Conrad Burns, a Republican from Montana, are among those that think more money will be needed to reach the goals that have been set forth. Because of this belief, in May of this year, Sen. Lieberman and Sen. Burns created the bill known as the E-Government Act of 2001 (S. 803). The bill would authorize a \$600 million fund over three years to advance the E-Government efforts (Harris, 2001). This bill calls for an online directory of federal websites and indexes of resources, an online national library, a place for federal courts to post opinions, the support of interagency projects and to find innovative uses of information technology. Legislation would appoint a federal chief information officer to oversee the entire e-government process and to promote and implement the large project.

The bill proposed by Senator Joseph Lieberman and Senator Conrad Burns has developed many supporters and many critics. Among the strong supporters of this bill is the American Library

Association (Roger and Oder, 2001). Although the passing of this bill would be a huge step down the road to a successful E-Government, it has been put on hold due to the events of September 11.

INTERNATIONAL GOVERNMENT

With all of the attention E-Government is receiving here in the U.S. it is easy to overlook the advances in E-Government taking place all over the world. With international communication being so widespread today, it is possible that governments of different countries will one day conduct business with each other totally electronically. With several countries across the globe striving to get their own E-Governments running more efficiently, it seems as if it is a worldwide race. All of these countries want to develop a more cost and time efficient government as soon as possible.

According to the second annual global E-Government study labeled “Rhetoric vs. Reality – Closing the Gap” by Accenture, Canada is on top of twenty-one other countries in the race to an efficient E-Government. Singapore and the United States followed closely behind. Accenture categorized the three top countries as “innovative leaders”. To ensure that their visions were realized, Canada, Singapore and the United States all set timetables and targets. Canada surpassed the United States and Singapore in the study because they have successfully adopted a cross-agency approach to E-Government (Doucet, 2001).

With Canada leading the E-Government race, the American competitive spirit asks the question: How can the United States improve and take the lead? The answer seems to lie in first preparing emotionally for vast changes. Once the workers in individual agencies have accepted that their jobs will never be the same, the process of strategizing and planning can begin. The process of moving from a traditional government to an E-government will not be easy, but it is certainly possible.

There is much work to be done by many agencies to meet the GPEA deadline. GPEA covers about six thousand forms and processes that are not yet available electronically. Basically, if a process can be altered to save time and money, it falls under this Act. According to Daniels, over half (55%) of governmental agencies say that they will not meet the October 2003 deadline. Too many agencies are spending hundreds of millions of dollars maintaining outdated computer systems. Too many agencies are saddled with computer systems that cannot talk to one another. And too many agencies haven’t had the vision to break out of the old way of doing things” (Dean, 2001).

MOVING FORWARD

It is obvious that most agencies have accepted the change and are now trying to implement their ideas. Paul Wohlleben, a partner of the Global Government Group, and Grant Thornton, the chair of Information Technology Association of America (ITAA)’s 2000 CIO Survey task group say, “There is a clear understanding among the CIOs that in order for E-Government to become a reality, a solid foundation must be built.” According to the survey, CIOs are developing enablers that will help build the foundation necessary to move forward. These CIOs are also working hard to meet the accessibility requirements.

States are definitely moving forward in meeting requirements and in some cases even going beyond that. The Year 2000 Digital State Survey² indicated that 90% of all states have either implemented a statewide IT architecture or currently have one under development. An example of a state moving forward to total E-Government is New Mexico, winner of the eGov 2001 Pioneer Award. This state has launched the first fully interactive child support web site. Through the web site parents can direct deposit child support payments to their bank, make automatic withdrawals from their bank accounts, monitor account balances, provide information changes, apply for services, communicate with CSE officials electronically, and review recent actions taken on their case. New Mexico's Child Support Enforcement web site is an inspiration to other cities and programs to get on the move toward a functional E-Government (Policy & Practice of Public Human Services, 2001).

The Public Opinion

With all of the advances that are being made concerning E-Government, it is important to take time and consider how the citizens feel about the progressions. According to a recent poll done by Hart-Teeter, a polling company, most respondents (36%) said that the most important reason to pursue E-Government was to "create a government that is more accountable to its citizens." Surprisingly, many fewer respondents (only 13%) ranked "more convenient government services" as the most important reason to pursue E-Government. Also, results from the poll showed that respondents are more interested in receiving information such as medical information from the National Institute of Health than they are in being able to renew their driver's license online. Another interesting discovery of the poll is that more than 65% of citizen respondents preferred deliberation and caution to speed of delivery. However, when government leaders were asked the same question, an almost two to one margin thought "government should expand more quickly into electronic services (Dukart, 2001). These results and the results of similar polls and surveys can be useful tools in matching the citizens wants and needs with what the government should strive to provide.

Overcoming Problems

While the future of E-Government is looking bright, of course there is always "the other side" of every story. Will E-government work? This was the question of many people when the initial interest of digital communication was introduced. Where would the money come from? Who will be in charge of the regulations and the budget, etc.? These were only a few of the questions running through the minds of many people in governmental offices around the nation. Perhaps the number one question on everyone's mind is will the American people actually take advantage of this system online? This definitely could be the toughest challenge that the government will have to overcome. If E-Government is successful, it could be one of the greatest tools ever for governmental offices.

CONCLUSION

With the knowledge of what is available and what the people want, it is now possible to look toward the future. The key to a truly interactive E-Government that has cross-agency capability seems to be in the creation of "digital guides." Customers (citizens) will input what they need and then the digital guides, or wizards, will cross agency barriers as well as federal, state and

local government lines in order to get the customer the information, services, forms and outcomes that they seek. There will be a main E-Government portal from which the public can, for example, move from getting information about which type of corporation would be best for their interest, to filling out the required federal and state forms, and then to paying fees and getting results. Although this process may sound simple it will involve many hours of planning, work, and cooperation to get it up and running. Much of the progress will be made when agencies are ready and willing to give up some of their authority and traditional ways in order to work with the software engineers in developing the digital guides that will walk customers through the entire process of achieving their permit, or corporate status, etc. Only by working together can the agencies and the computer engineers create a program that is capable of serving the public at the highest level of efficiency. The biggest barriers to implementation of solutions-based services will be political and personal, not technical (Hoenig, 2001).

REFERENCES

- ABCNEWS.com, The E-Government for the People, ABCNEWS.com, Retrieved June 5, 2001 from the World Wide Web:
http://www.abcnews.go.com/sections/DailyNews/gore_egovernment000605.html
- Dean, Joshua. (2000), E-government Evolves, Government Executive, (32), 3-18.
- Dean, Joshua. (2001), Fear of Paperlessness, Government Executive, (33), 72-74.
- Doucet, Kristin. (2001), Canada Ranks First in E-government Services, CMA Management, (75), 8-11.
- Dukart, James R. (2001), E-government Expectations Vary Among Public, Signal, (55), 4-5.
- E-Government and Access to Government Information
 ALA Washington Office 2001
<http://www.ala.org/washoff/governmentinfo.html>
- Gilbert, Alorie. (2001). President Bush Backs E-government, Digital Signatures, InformationWeek, (833), 24.
- Harris, Shane. (2001). Raising the E-gov stakes, Government Executive, (33), 14.
- Hoenig, Christopher. (2001). Beyond E-Government, Government Executive, (33): 14, 49-59.
- Journal of Government Financial Management, (2001). Surveys of Federal and State CIOs Show E-government a Challenge, Priority, The Journal of Government Financial Management, (50): 2, 8-11.
- Moulder, Evelina. (2001). E-government...If You Build It, Will They Come? Public Management, (83):8, 10-14.

*Other references are available upon request to the author.