Government in the Information Age

What are the roles governments have to play in societies approaching the Information Age? An institute established recently in Washington, D.C., is devoted to these issues and displays trend-setting applications of information technology. "VM" wanted to learn more about it.

Ms. Caldow, you are the director of the Institute for Electronic Government in Washington D.C. which was established earlier this year. Is my assumption correct that your company intends the IEG to be a center for administrative informatics, devoting itself to the role and importance of information and information technology in politics, government and administration today?

That's correct. IBM has invested in the Institute for Electronic Government as a resource for government leaders worldwide to manage the complexities of issues facing them in this dawning Information Age. In our experience at the Institute, the new government leader needs four strategic competencies:

1. Exploit technology as the basis for new economic competitiveness. The Information Age holds the very real potential for a worldwide redistribution of wealth. Western notions of "developing" and "developed" countries will be dramatically redefined in an age of digital marketplaces and knowledge-based (versus heavy industry) economic models. Geographical boundaries will blur with predictions of perhaps millions of interconnecting private and public networks with a continuous flow of information and commerce.
2. Redesign internal government operations for improved efficiency leveraged with information technology. Every industry, including government, faces pressure to reengineer stovepipe, functional activities into lower cost, seamless processes across internal and external organizational boundaries, including supply chains and distribution channels. There will be zero tolerance for the inefficiencies of redundant databases, incompatible systems, poorly designed, and time-consuming operational processes.
3. Make it easier for citizens to conduct business with government. Few governments can afford the traditional over-the-counter, labor intensive method of delivering government services and transacting business with citizens. And, at the same time, citizens worldwide are demanding to renew driver licenses, register vehicles, and pay fines outside normal office hours and at places convenient to them (home, work, public places). Mass customization will become the norm rather than the exception.
4. Preserve the confidence of citizens in government. How will governments engage their citizenry in the process of governance when the very nature of government becomes more virtual?

Is it correct, then, to see the Institute for Electronic Government as the "tip of an iceberg" in which ideas about administrative informatics from all over the world flow together, ideas which, on their part, stem from IBM branches around the world, from research laboratories of your company, but also from academic research and from practice in governments and administrations?

Yes. We have carefully developed a virtual network of academics from leading schools of government, practitioners to share their experiences with others, members from the media, other government-related institutions, and information technology research labs to build the thought leadership and technology leadership from which government executives can learn to build their strategies and successfully implement them. IBM has worldwide reach. And, as a result of this global focus, the Institute is in a very good position as a clearinghouse of information and best practices around the world.

Could you briefly comment on the capacity of the Institute (e.g. personell, budget)?

The core staff at the Institute is relatively small - six people. However, we have created an organic model whereby we access resources and deploy them through our extensive network of collaborative relationships. For example, if a governor comes to the Institute for help in developing strategy, we can quickly deploy a consulting capability that includes both core Institute staff as well as external experts in policy, strategy, legislative and regulatory reform and, of course, technology infrastructure and application solutions. Each government entity has different needs. Therefore, we customize resources across our large networked organization depending upon the set of challenges presented.

Given such a commitment, your company apparantly values the significance of knowledge about information technology for politics, government and administration highly. What are some of the main reasons for this significance, in your view?

Higher and higher government level leaders are now becoming personally involved in information technology policy and strategy decision making. In the first three months since our physical facility opened, over 2500 government leaders from 45 different countries have visited the Institute. Information technology decision making is no longer something that is delegated solely to the information technology professional. The urgency and importance of Information Age issues as they relate to government and governance demands an understanding of the potential and capabilities of technology. However, our research has found that a very small percentage of government leaders (less than seven percent in North America, for example) have enough basic understanding of the issues and technologies in order to lead effectively in the Information Age. This knowledge gap is tremendously significant. In Shanghai, for example, mandatory information technology education for government leaders and managers has been put into place - on Saturdays! Knowledge will make the difference in a government's ability to compete effectively in the emerging new economic model and its delivery of government services to citizens.

How do you expect the major roles of governments to change in the information age?

Within just the next four years, there will be over one billion "netizens" or citizens of the Net (Internet). The profile of the some forty million netizens today indicate these netizens are better educated, more affluent, eighty percent are under the age of thirty-five, they affiliate with ideas instead of with political parties, they are dissatisfied with current political practices and are finding their own collective political voice. Netizens use the Internet as their principal form of information and communication. They do not read newspapers nor are the TV viewers. When you consider the typical Sunday newspaper around the world has more information in it than a 17th century citizen encountered in a whole lifetime, it is not surprising that a very different means of information retrieval is necessary in the Information

Age. Using the Internet, netizens tap a wide network of information and customize their own form of a "daily newspaper" from many sources and perspectives. This is part of the intellectual and social revolution that is as much a part of the Information Age as technology itself. And, netizens are already exercising political influence. Some governments today poll their citizens on issues before taking that issue to a vote. Elected government leaders who recognize this political phenomenon are looking at ways to leverage communities of interest around issues through the Internet. Governance and the democratic process will become very flat with direct access by citizens. The possibilities are endless and imaginative - the nature of diplomacy, political action committees, lobbying, campaigning, constituency communications, and even voting will all change. This is a most exciting time for governments worldwide as we approach a new century and more globalization.

What are the main areas of activity of the Institute for Electronic Government, what are - in other words - its "products"?

Change is happening so fast, there is very little resource for public policy makers as they manage the complexities facing them. The Institute offers education, exposure to leading-edge research, workshops, seminars, studio tours, and individual consulting.

Aside from technology competencies, understanding the issues and developing right strategy is only the first step. Execution of those strategies is dependent upon the competency of leaders to skillfully orchestrate multiple, complex agendas:

- Policy agenda. Virtually every pulic policy is affected by the Information Age such as security, privacy, intellectual capital, ethics, taxation, workforce development and universal access.

- Legislative and regulatory agenda. What legal and regulatory reforms are critical to creating an environment conducive to electronic commerce?

- Financing agenda. Governments will need to find innovative approaches to financing high bandwidth network infrastructures connecting businesses, educational institutions, and citizens as well as technological retooling of their own operations.

- Political agenda. Managing public opinion, cross-party support, cross-government support (legislative and executive branches), and buy-in from government workers will determine the pace of progress in implementing Information Age strategy.

You mentioned the "studio tour". Could you name a few stations that stand out?

Main Street is another feature of the Institute designed to complement the strategy and policy exploration by government leaders. As you know from your own visit recently, Main Street is like a movie set of anytown, anywhere in the world. Visitors stroll down the street and enter a citizen's living room, a police station, a library, courtroom, school, post office and government offices. Inside each display area are real applications in use by real government from around the world which either IBM has developed in partnership with governments or with business partners. Main Street addresses how the internal operations of government and delivery of services to citizens can be redesigned in an electronic model. Main Street is an "intranet" or Internet-enabled. This networked village demonstrates to the non-technical

government leader how technology can transform government operations for better efficiencies and better service to citizens. The most important aspect is that technology is displayed in context instead of what you might expect from a computer trade show where only hardware is featured. We concentrate on the solutions.

You said that research is one of the activities of the Institute. Could you sketch some characteristic project examples, please?

We recently completed two major research projects in conjunction with the Kennedy School of Government at Harvard University and the Maxwell School of Government at Syracuse University. These are the tow top rated schools of government in the United States. Projects have included a major survey of governors, mayors, elected officials and information technology managers in North America to understand information technology leadership issues and a research effort exploring the role of cities or other subnational government entities in the 21st century. Again, these projects focus on in-depth examination of issues from a leadership perspective.

How does the transfer of knowledge work which is, as you mentioned above, another field of activity of the Institute?

Transfer of knowledge takes place through the various venues the Institute offers as we discussed a few minutes ago. For example, our workshops are called "workshops" because participants take an active role in their own learning experiences through case studies and peer-to-peer sessions. Our educational programs and of course research reports help to transfer the intellectual capital we are building from around the world.

As a member of politics, government, or public management in Austria, Germany or Switzerland - in which way could I utilize the knowledge and expertise of the Institute for myself, practically?

Our website is probably the first line of communication with our worldwide constituencies. We are in the process of totally redesigning our presence in the Net. The most progressive websites are moving from static information based homepages to fully interactive sites using leading edge technologies such as Domino and Java. Soon we will have all our research reports available online, a virtual tour of Main Street and an online community where the conversation and exchange of ideas will be real-time and dynamic. We will conduct research projects online, polling and surveying on the Internet. And, if a leader is planning a trip to the United States, on the new site they will be able to request a personal tour of the facility or request a customized day with experts who can help with particular issues. Our goal is to have the structure in place before the end of the year. Right now, only basic information is presented on our existing homepage, although users can correspond directly with us through email.

You have established the Institute for Electronic Government in Washington, D.C., probably the most powerful government and administration center in the world; the Institute is supposed to operate worldwide, however. Is the assumption behind this concept that internationalization and globalization have an influence on politics, government and

administration, too? On the other hand, there can be severe differences in history, culture, or law systems between the various countries - considering this, to which extent is it possible to find worldwide solutions or to transfer solutions from one country to another?

Heinrich, you are exactly right. The issues around the world from different governments - from local to state or provincial to national levels - must be understood within their various social, political, economic, and cultural frameworks. There is no "one-size fits all" approach. However, there are some basic common threads that run among governments regardless of the context. For example, for governments looking at redesigning basic government functions such as tax administration, public safety, education, many solutions are portable across government jurisdictions.

What are the technical means to access the Institute by both, conventional as well as electronical means?

Government leaders may reach us through our website, through a local IBM representative, by phone, email, mail, or fax. We are also increasingly using our videoconferencing capability. I frequently present to conferences around the world through videoconferencing. Aside from videoconferencing as a very effective and affordable alternative today, is sure beats jet lag! And, it demonstrates the central theme that physical location matters less in the Information Age.

About one-third of our visitors contact us directly and the remaining arrange visits through their IBM representatives. In addition, a number of embassies here in Washington contact us when government decision makers from their countries plan to be in Washington, D.C. to include a stop at the Institute on their travel agenda. We usually need a four to six week planning period especially if there is a request for specific briefings. However, we generally have tours scheduled on a daily basis, so it is easy to add a few visitors to an already-scheduled tour. Visiting groups range in size from a few individuals to groups of forty. Washington happens to host many conferences and sometimes a whole conference will visit the Institute for an evening reception, for example. Our capacity is 180 people at any one time.

Could you say a few words about the price policy for calling on the Institute's services?

There is no charge for basic visits to the Institute which includes an overview of issues and a tour of the facility. Visits range from a simple two-hour visit or may involve a whole delegation of decision makers who spend up to a week with us. Many times we will combine different groups together. For example, not long ago we had a group from Kazachstan, Shanghai and Bulgaria on the same day. There is an amazing exchange of strategy and practice during those sessions. More focused requests for specific consulting assistance is priced individually. Our workshops and educational courses usually involve a fee which covers our cost of producing the event.

In course of time, the Institute will accumulate knowledge which, among others, will allow comparative conclusions on the status of administrative informatics in the various parts of the world. Do you have some evidence already today as to which world regions or countries are

particularly advanced with respect to a) the quality of their public administrations, and b) the utilization of the potential of information technology within the public sector?

Certainly there are some governments further ahead than others in developing and implementing information technology strategy and policy. Although the Industrial Revolution took about one hundred years to unfold, the Information Revolution will largely mature in just over the next ten years. However, at the current and projected rate of technological change the luxury of a decade-long window of opportunity for the next generation of leaders to come of age simply isn't there. We see a growing sense of urgency and awareness by governments to move rapidly in response. I think both the emerging democracies of Eastern Europe and developing countries in Asia and other parts of the world are paying particular attention to the opportunities the Information Age presents. Many of these countries missed the Industrial Age and have vowed not to miss the Information Age. As a result, some of those countries have taken an aggressive posture to exploit the economic development opportunities associated with electronic commerce. Some are looking to develop a high-tech industry presence within their jurisdictions. In just the next four years, the information technology industry worldwide is expected to approach one trillion (US dollars). It is the fastest growing industry in the world. Other governments are focusing on attracting knowledge workers to reside within their boundaries or competing with world-class education of both their young people and life-long learning for adults to transition from industrialization to knowledge-based industries.

Ms. Caldow, thank you so much for this interview, and all the best for a successful development of the Institute for Electronic Government so that politics, governments and public administrations around the world can benefit from its expertise in their efforts to cope with the challenges of the information society!

Thank you for the opportunity to share some thinking with your readers. As we've discussed here, the challenges are daunting. And, elected and career government leaders competent in technology issues are a scarce commodity worldwide. Leadership across the spectrum of world governments - from fledgling domocracies, to socialist and centralized governments, to those which reaped the benefits of being first in industrialization will be tested by the historic dimensions of the Information Age. Tomorrow's leader is needed today. I invite you all to take advantage of the resource that the Institute offers and I'll look forward to seeing you in Washington, D.C.

The interview questions of "VM" were answered by Janet Caldow, Director of the Institute for Electronic Government, IBM Corporation, in Washington, D.C.
Address: Ms. Janet Caldow, Director of the Institute for Electronic Government (IEG), IBM Corporation, 1301 K. Street NW 4th Floor, USA - Washington D.C. 20005; Telephone: (202) 218-3940/3944; Telefax: (202) 218-3950;Internet: http://www.ieg.ibm.com