

## Internationalizing Digital Government Research

For most of us, the idea of “government” is linked to a particular place. We associate government with a town hall, state house, or capital city and with the laws and policies that apply to the people and organizations located within a specific piece of political geography. Your local government provides fire protection, your state issues professional licenses, the national government defines what it means to be a citizen of your country. At the same time, we recognize that governmental jurisdictions and programs often overlap within a single country. Think about taxation structures, emergency services, transportation networks, and schools as just a few examples.

This pattern of overlapping governmental policies and activities increasingly goes beyond national borders. For example, any global business that collects personal information from customers must comply with the privacy laws of multiple countries. If you live and work in one country but are a citizen of another, all sorts of special international tax agreements apply to your income. The RFID chip or bar code in your passport will soon be checked by immigration officials all over the world. Government managers negotiating contracts with private sector companies are often not only outsourcing work but also “off shoring” it, along with associated accountability, to people and subcontractors subject to different laws in other countries. International law enforcement, intellectual property rights, and global trade and finance all operate simultaneously under the rules, practices, and cultures of different nations. Broad socio-demographic trends like migration of jobs and workers, global health concerns such as avian influenza and AIDS, and the environmental impacts of human activity are all concerns for governments on every continent. And all these international activities involve the collection, use, and management of information.

Decades ago, scientists at the Tavistock Institute in London coined the term “socio-technical system” to describe work processes that have equally important human and technical dimensions. Today, that idea has come to be applied in a much broader way to all kinds of systems. In the examples above, human, organizational, and institutional—in other words, social—considerations exist in a mutually influential relationship with networks, software, computers, and other devices—the technical element. Together, they make up the processes and artifacts of our world. The global phenomenon of “e-government” or “digital government”—a term coined by the US National Science Foundation (NSF)—embodies these concepts of complex and dynamic socio-technical systems that are only partly subject to prediction and control.

One response to the international importance of the e-government phenomenon is the emergence of a global network of professional digital government societies, established in 2006 in North America and Europe, with an Asian society to be launched in 2007. Across these organizations, digital government is seen as the use of information and technology to support and improve public policies and government operations, engage citizens, and provide comprehensive and timely government services. Accordingly, digital government research attempts to illuminate and explain this phenomenon by focusing on the intersection of computer and information sciences, social and behavioral sciences, and government challenges and needs.

**INTERNATIONAL DIGITAL GOVERNMENT SOCIETIES** Digital Government Society of North America European eGovernment Society

Today, digital government research is going on all over the world, but so far it has been confined mostly to work that can be done within the geographic and political context of a single country. However, given the growing influence and interaction of truly global economic, social, and political forces, the questions, risks, and opportunities embedded in digital government research are also expanding to international dimensions.

These investigations typically fall into five categories:

- **Benchmarking** studies, the best-known type, rate or rank different countries on observable characteristics of their digital or e-government programs. The United Nations (UN) Global E-government Readiness Reports are a well-known example in which all nations are ranked on selected indicators of their readiness to engage in certain aspects of e-government. These include Internet penetration and the availability of transactional and interactive services. Social inclusion factors cover topics such as provision for online consultation with citizens and availability of services in multiple languages.
- In **best practice** studies investigators evaluate existing approaches or develop new models that appear to be exemplary and worthy of, and feasible for, adoption in multiple countries. These are sometimes tied to award programs to give them visibility. The Organisation for Economic Cooperation and Development (OECD) sponsors studies of this kind using a peer review method and a common analytical framework by which countries can evaluate their e-government policies. This approach aims at international comparability of

findings, and accumulates results into a larger body of knowledge and supporting empirical data. Another example is the European Commission's eGovernment Good Practice Framework that provides a knowledge database of good practices, expert advice, and support for transferring effective solutions to common problems.

- **Comparative** studies seek universal theories and transferable practices by studying a defined topic in a variety of cultural settings, using consistent designs and methods, with explicit points of comparison and evaluation. Some comparative studies are conducted simultaneously in multiple countries, others test or apply a framework developed in one country to others. Studies of this kind have explored important topics such as freedom of expression, personal privacy protection, and methods of collaboration across the public and private sectors for delivering services to citizens.
- **Transnational** studies look at an issue or problem that requires interaction among two or more countries. These are very challenging, because they generally require two or more research sponsors in different countries to jointly approve and fund the work. Consequently, most studies of this kind are currently being carried out under the umbrella of the supranational European Union. There, studies have focused on pan-European topics and services such as personal identity and support for a single employment marketplace. In the Western Hemisphere, studies of the information aspects of drug interdiction in the Caribbean, as well as border crossings and trade shipments between the US and Canada, are other examples of this category of research.
- **Global** studies usually focus on major trends and themes associated with cross-cutting developments in technology, governance, societal needs, or government and political reform. While they seldom consider the entire globe, these studies reach further into different regions of the world to increase our understanding of widespread, if not universal, issues. The UN Millennium Project is an example where studies reported on key development goals for eradicating poverty, promoting education, improving public health, and building basic infrastructure. Focusing on the developed countries, an international team sponsored by another European project, eGovRTD2020 is developing a future research agenda for e-government. Of thirteen research themes produced in that study, nine have international dimensions. These include the need for cross-border governance and government's role in the emerging virtual world.

The Center for Technology in Government (CTG) has been involved in international digital government research since the mid-1990s when we joined a Quebec-US-Belgian partnership to study and compare 15 new service delivery collaborations among public, private, and nonprofit organizations in North America and Western Europe. Since then, we have participated in bi-lateral workshops, prepared a variety of international case studies, and collaborated on an effort to understand the global future of e-government. Our most ambitious international work is being carried out under a four-year grant from NSF that includes a reconnaissance study of current research, support for four international working groups, and an annual residential institute for doctoral students. To date, this work has most often involved partners in Europe, but we are now beginning to forge working partnerships in China and Latin America, as well as with global organizations like the UN.

These varied experiences are beginning to produce a set of methodologies for pursuing comparative and transnational digital government research that address difficult challenges related to the design, execution, language, culture, and context of any research effort that crosses national boundaries. Moreover, we are beginning to accumulate baseline findings about how trust, leadership, risk management, and communication and coordination play out in different cultures. The dynamics of organizational relationships, information and resource flows, and business processes—and ways to model them in universally useful ways—are high on our future international agenda.

All of these opportunities bring with them the rare chance to think globally and locally at the same time. While our research in the US is well-established, our links to partners in other parts of world inevitably add rich new dimensions and broader context to our work. In return, our research methods and results often have value to researchers who are tackling similar questions in other places. Most importantly, these ventures are helping to build a set of long-lasting mutually beneficial relationships that are laying the foundation for what we hope will be a sustainable international digital government community.

Sharon S. Dawes, Director, Center for Technology in Government

**INTERNATIONAL RESEARCH SPONSORS AND RESOURCES** European Commission—eGovernment Good Practice Framework Organisation for Economic Co-operation and Development (OECD)—e-Government Project, Country Reviews United Nations—Global E-government Readiness Report 2005: From E-government to E-inclusion UN Millennium Project—Task Force Report on Innovation: Applying Knowledge in Development US National Science Foundation— Computer Science and Engineering Directorate, Division of Information and Intelligent Systems, Office of International Science and Engineering