

edited by G. Garson © 2007, IGI Global

## **Chapter IV**

# Reconciling Information Privacy and Information Access in a Globalized Technology Society

George T. Duncan, Carnegie Mellon University, USA

Stephen F. Roehrig, Carnegie Mellon University, USA

# Abstract

Government agencies collect and disseminate data that bear on the most important issues of public interest. Advances in information technology, particularly the Internet, have created a globalized technology society and multiplied the tension between demands for ever more comprehensive databases and demands for the shelter of privacy. In reconciling information privacy and information access, agencies must address a host of difficult problems. These include providing access to information while protecting confidentiality, coping with health information databases, and ensuring consistency with international standards. The policies of agencies are determined by what is right for them to do, what works for them, and what they are required to do by law. They must interpret and respect the ethical imperatives of democratic accountability, constitutional empowerment, individual autonomy, and information justice. In managing confidentiality and data-access functions, agencies have two basic tools: techniques for disclosure limitation through restricted data and administrative procedures through restricted access.

Copyright © 2007, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

## Introduction

We continue to see advances in the technology of computing and communications allowing the capture of enormous amounts of data, storage in very large databases, complex analyses, and the dissemination of information products to individuals, governments, businesses, and other organizations. This technology has increased the tension between information privacy and information access, adding significant stress to those, like government statistical agencies, that broker between data providers and data users. With technology as its driver, the context of this dynamic is an ever-globalizing society exemplified by e-commerce across national boundaries, international outsourcing, and worldwide terrorism. This article will examine the implications of a globalized technology society for confidentiality and privacy, exploring technical, ethical, and policy issues.

A globalized technology society could raise the spectre of a world devoid of humanity, its sparse landscape dominated by robotic automatons. Or it could facilitate meaningful and productive human interaction across the globe. Perhaps less to the extremes, a globalized technology society might promote economic efficiency while testing privacy through new tools for data capture, storage, integration, and dissemination.

As far as privacy and confidentiality are concerned, a globalized technology society is one that processes information in ways radically different than the world has ever experienced—not that globalization itself is a new phenomenon. In fact, history suggests a remarkable series of stages of globalization, each made possible by quite different technological advances. Specifically, building on Thomas Friedman's (2005) formulation in *The World is Flat: A Brief History of the Twenty-First Century*, we put forward three stages:

- 1. **Globalization 1.0** (1400 A.D. to WWI) with changes in transportation technology allowing the great explorers like Vasco de Gama (1460-1524) and Christopher Columbus (1451-1506) and culminated in steamships and airplanes
- 2. **Globalization 2.0** (WWI to 2000) with changes in communication key, giving us telephones, fax, radio and TV, and e-mail
- 3. **Globalization 3.0** (2000 to now) with computing power key, allowing PCs (personal computers) to be linked by fiber optics and the initiation of GRID computing (an emerging global, distributed parallel processing infrastructure)

Each stage has had more impact on the way people can work with information. Globalization 1.0 allowed mail packets—now dubbed "snail mail" packets—to be sent around the world in months and then days. Globalization 2.0 made communication electronic and cut the global circuit to seconds. Globalization 3.0 not only makes communications links quicker, but also makes them more complex, increasing the density of the web of connections.

## The CSID Data Process

Taking a broader view of what happens with information, we can examine the CSID data process (Duncan, 2004).

Copyright © 2007, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/reconcilinginformation-privacy-information-access/26883

## **Related Content**

#### Designing and Implementing e-Government Projects for Democracy and Social Change in India: Actors, Behaviours, Influences, and Fields of Play

Shefali Virkar (2015). *Promoting Social Change and Democracy through Information Technology (pp. 193-224).* www.irma-international.org/chapter/designing-and-implementing-e-government-projects-for-

democracy-and-social-change-in-india/134259

#### Ways of Citizen Learning: Political Deliberation on the Internet

María-Ángela Petrizzo-Páezand Francisco-Javier Palm-Rojas (2010). *Systems Thinking and E-Participation: ICT in the Governance of Society (pp. 186-198).* www.irma-international.org/chapter/ways-citizen-learning/40462

#### The Örebro City Citizen-Oriented E-Government Strategy

Andreas Ask, Mathias Hatakkaand Åke Grönlund (2008). *International Journal of Electronic Government Research (pp. 69-88).* www.irma-international.org/article/örebro-city-citizen-oriented-government/2062

### Measuring Citizens' Adoption of Electronic Complaint Service (ECS) in Jordan: Validation of the Extended Technology Acceptance Model (TAM)

Mohammad Abdallah Ali Alryalat (2017). *International Journal of Electronic Government Research (pp. 47-65).* 

www.irma-international.org/article/measuring-citizens-adoption-of-electronic-complaint-service-ecsin-jordan/185648

### The Promise of Open Source Systems/Software in Developing Requisite E-Government Solutions for the Developing Countries: A Review of Literature

Adeyinka Tellaand Adetayo O. Tella (2014). *Technology Development and Platform Enhancements for Successful Global E-Government Design (pp. 139-155).* 

www.irma-international.org/chapter/the-promise-of-open-source-systemssoftware-in-developing-requisite-e-government-solutions-for-the-developing-countries/96693