Erecting the Public Sector Information Exchange

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Efficient interagency information sharing is critical to the execution of functions in the transparent state, and yet agencies persistently fail to share information. In the United States, members of the Hurricane Katrina (29 August 2005) investigation committee wrote that the American government remains the largest purchaser of information technology (IT) in the world and yet is ‘woefully incapable of storing, moving and accessing information’ (US Congress, Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina, 2006, p. 1). In Australia, a Board of Inquiry determined that government agencies’ refusal to share data contributed to the death of Northern Territory infants through starvation (Bamblett et al., 2010). In Britain, several agencies’ failure to share information contributed to the death of several children at the hands of their guardians (The Bichard Inquiry, 2004). Why do government agencies fail to share information with each other and how can we incentivize public sector institutions to share information more effectively?

In response to this question, this chapter proposes a novel public sector information sharing framework that will increase state transparency. By facilitating effective information exchange among public sector agencies, this framework will support the transparent state to fulfill its functions within government and to satisfy citizen demands for government transparency. The chapter defines the public sector as a collection of institutions whose administrative staff maintains a monopoly over the legitimate process of producing, updating, and disseminating primordial data. Primordial data are primary data elements (such as a social security identifier) held on the entire population that link all datasets. The chapter proposes promoting public sector information sharing via three key ideas: (1) bureaucratic politics must be addressed;
(2) a Public Sector Information Exchange (PSIE) can be established to facilitate interagency data trade; and (3) bureaucratic language can be automated to facilitate information sharing transactions in a PSIE.

The chapter presents the theoretical foundations to build a PSIE prototype. A PSIE program can prompt the public sector to become an efficient broker of citizens’ data, save billions of taxpayer dollars wasted on ineffective computer integration projects, ensure agencies maintain information autonomy, incentivize all agencies to exchange data effectively, and computerize the bureaucratic language to facilitate data exchange. In short, a PSIE program will enable the transparent state to more efficiently fulfill its core functions.

Case selection: HSIN, RINIS, and deNovis

This chapter focuses on three public information sharing computer projects. The US Department of Homeland Security (DHS)’s unsuccessful Homeland Security Information System (HSIN) demonstrates the importance of addressing political dynamics: multiple agencies failed to share unclassified data about potential terrorists despite political pressure to do so. The successful Dutch Institute for the Routing of (Inter) National Information Streams (RINIS) project illustrates the potential of incentivized data exchange in the public sector, and the importance of clarifying data ownership. Using RINIS, agencies successfully exchanged data while preserving legal ownership of shared data elements. The partially successful deNovis system, designed to facilitate sharing of personal health billing and financial adjudication information, validates the possibility of computerizing a bureaucratic language. HSIN, RINIS, and deNovis vary in terms of domain (defense, social welfare, and health), geography (the United States and the Netherlands), and project ownership (public ownership, joint public–private ownership, and private ownership). Therefore, the HSIN, RINIS, and deNovis examples are intended to illustrate the chapter’s ideas, rather than to present comprehensive empirical case studies.

Defining data, information, transparency, and the transparent state

Data is a set of discrete objective facts that form a record (Newcomer and Sharon, 1991; Davenport and Prusak, 1998, pp. 2–3). Its properties of being lightweight, replicable, and easily transferable (Carr, 2003) have led to rapidly increasing digitization. All organizations depend on