

Chapter 19

Transforming Public– Private Networks: An XBRL–Based Infrastructure for Transforming Business–to– Government Information Exchange

Niels de Winne

*Delft University of Technology, The
Netherlands*

Nitesh Bharosa

*Delft University of Technology, The
Netherlands*

Marijn Janssen

*Delft University of Technology, The
Netherlands*

Remco van Wijk

*Delft University of Technology, The
Netherlands*

Joris Hulstijn

*Delft University of Technology,
The Netherlands*

ABSTRACT

Companies are required by law to report all kinds of information to various public agencies. Since most public agencies are autonomous and define their information demands independent of each other, companies have to report information to various agencies in different ways. Accordingly, governments are initiating programs that aim to transform business-to government information exchange to reduce the administrative burden for companies and improve the accountability at the same time. Yet little research is available on the type of transformations needed and the role of the infrastructure. Drawing on a case study, this paper investigates the interplay between technical infrastructure and transformation. In this case study an information brokerage infrastructure based on the Extensible Business Reporting Language (XBRL) was developed providing a one stop shop for companies and public agencies. The case study shows that the infrastructure should be flexible enough to accommodate changes over time but stable enough to attract a large user-base. The increase in efficiency and effectiveness of information exchange processes requires extensive transformation from both public and private parties.

DOI: 10.4018/978-1-4666-2458-0.ch019

INTRODUCTION

The exchange of information between private companies and public sector organizations becomes more and more important (Gil-Garcia, Chengalur-Smith, & Duchessi, 2007). Companies exchange a plethora of information with government agencies like the statistical agency, tax office, chambers of commerce and various inspection services. In many countries such as Australia, the United Kingdom and the Netherlands, politicians have agreed that business-to-government information exchange should take place electronically and should be standardized in order to reduce the administration burden. In addition the information quality can be improved by capturing information at the source resulting in an improved accountability of companies to governments.

It is a general belief that technology holds the capacity for strengthening efficiency, providing tools for security, and furthermore being an instrument for streamlining of e-Government procedures (Irani, Elliman, & Jackson, 2007). Technology has been put forward as “a catalyst for social, economic and political change” (Fountain, 2001, p. 45). Technologies are carriers of e-Government reform aims to change the government and how they interact with their constituents, in this case businesses and citizens. The introduction of public-private information exchange are often initiated as a technology project for developing an infrastructure and the need for transformation is only recognized after some time. Infrastructures support many users and are the shared responsibility of several organizational entities (Janssen, Chun, & Gil-Garcia, 2009). Infrastructures have no central authority, are governed by networks and contain both emerging and purposefully designed parts (Janssen, Chun, & Gil-Garcia, 2009). Infrastructure are not static entities, but dynamic and evolving as technological innovations are introduced or the social practice is changed (Ciborra, 2000). Hanseth et al. (1996) depict these infrastructures as information infrastructure to

emphasis a more holistic, socio-technical and evolutionary perspective to the growth in the combined social and technical complexity at the center of an empirical scrutiny. Key characteristics of such infrastructures are openness, the need for standards and facilitating a diversity of stakeholders. In a similar vein, Janssen et al. (2009) call these ‘next generation of digital government structures’ to emphasize the contribution to e-government and characteristics such as emerging, evolution, self-organizing, coordination and connectivity and use by many different users. Successful infrastructures are considered to hold considerable benefits for businesses and governments in that cross-organizational information sharing is enabled, reducing costs of already existing interactions and enabling new ones (Hanseth & Lyytinen, 2010). Opportunity costs and political and social problems influence the development of such infrastructures (Hanseth & Lyytinen, 2010). The complexity and dynamic relations between infrastructural components results that developments frequently do not have the anticipated effects which leads to unintended consequences when adopted by users (Hanseth et al., 1996).

Private organizations exchange information with public organizations to comply with legal requirements. Reporting may serve purposes such as tax, statistics and industry regulation. The amount of reporting has significantly grown over the recent years particularly as a result of more stringent industry regulations like Sarbanes-Oxley Act (Sarbanes-Oxley, 2002) and Basel II (BASEL_II, 2004). A typical company often ends up reporting the same information multiple times to different government agencies in different formats which results in significant administrative costs for companies. The Extensible Business Reporting Language (XBRL) is hailed as providing a foundation for the exchange of reports and data (Debreceeny, Felden, Ochocki, Piechocki, & Piechocki, 2009). XBRL was originally developed as a XML-based standard for external financial reporting. Nowadays it can also be used

9 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/transforming-public-private-networks/73049

Related Content

A Comparative Analysis of E-Government in Latin America: Applied Findings from United Nations E-Government Readiness Reports

Gregory Curtin and Christopher Walker (2007). *Latin America Online: Cases, Successes and Pitfalls* (pp. 158-188).

www.irma-international.org/chapter/comparative-analysis-government-latin-america/25503

Cloud Computing in eGovernment: Proposing a Conceptual Stage Model

Eleni Dermentzi, Efthimios Tambouris and Konstantinos Tarabanis (2016). *International Journal of Electronic Government Research* (pp. 50-68).

www.irma-international.org/article/cloud-computing-in-egovernment/155187

E-Governance and Development: Service Delivery to Empower the Poor

Raul Zambrano (2008). *International Journal of Electronic Government Research* (pp. 1-11).

www.irma-international.org/article/governance-development-service-delivery-empower/2047

Public Administrators' Acceptance of the Practice of Digital Democracy: A Model Explaining the Utilization of Online Policy Forums in South Korea

Kim Chan-Gon and Marc Holzer (2006). *International Journal of Electronic Government Research* (pp. 22-48).

www.irma-international.org/article/public-administrators-acceptance-practice-digital/2014

A Systematic Literature Review for Understanding the Antecedents of the Digital Open Government Matrix

Abdulrahman Saqer Alenizi (2020). *International Journal of Electronic Government Research* (pp. 1-17).

www.irma-international.org/article/a-systematic-literature-review-for-understanding-the-antecedents-of-the-digital-open-government-matrix/260953