Chapter VI

Interoperability on the Road to Enhance Government-to-Business

Giorgos Laskaridis, University of Athens, Greece

Penelope Markellou, University of Patras, Greece

Angeliki Panayiotaki, University of Patras, Greece

Athanasios Tsakalidis, University of Patras, Greece

Abstract

This chapter is initiated by the continuously growing governments' effort to transform their traditional profile to a digital one, worldwide, by adopting e-government models using the ICT and the Web. The chapter deals with interoperability, which appears as the mean for accomplishing the interlinking of information, systems, and applications, not only within governments, but also in their interaction with citizens, enterprises, and public sectors. The chapter highlights the critical issue of interoperability, investigating the way it can be incorporated into e-government domain in order to provide efficient and effective e-services. It also describes the issues, tasks, and steps that are connected with interoperability in the enterprise environment, introducing and analysing a generic interoperability platform (CCIGOV platform). Finally, it illustrates future trends in the field and, thus, suggests directions of future work/research.

Introduction

Over the last decade, we have witnessed the rapid evolution of the World Wide Web. This development allowed millions of people all over the world to access, share, interchange, and publish information. At the same time, public and private sector organisations are implementing operational and interactive Web-based applications that are accessible to any user with a computer, a Web browser, and a connection to the Internet. These potentials impact all dimensions of our daily life. New Web sites are launched constantly, providing electronic services (e-services), services addressed to different target groups of users (citizens and enterprises) through Internet.

E-government may ease the functionality of enterprises, aiming at facilitating the daily citizens' obligations. During this decade, many researchers study many different aspects of how e-government may decrease the need of bureaucracy. The researchers deal with interesting, yet difficult ventures to come up with common policies that are able to be applied worldwide. Many results, directions of how e-government may facilitate citizens and enterprise transactions within the public sector, conclude that an interoperability framework must be defined. Interoperability means the ability of ICT systems and of the business processes they support to exchange data and to enable the sharing of information and knowledge.

An interoperability framework can be defined as a set of standards and guidelines that describes the way in which organizations have agreed, or should agree, to interact with each other. An interoperability framework is, therefore, not a static document, and may have to be adapted over time as technologies, standards, and administrative requirements change (IDABC, 2004).

There is a growing awareness that the interoperability of national public ICT infrastructures is a precondition for a more service-oriented and competitive public sector. Ever since the adoption of the Interoperability Decision[1] of the European Council and the European Parliament in July 1999, the European Commission has focused on the pan-European dimension of e-government, and on the interoperability requirements for its implementation.

Interoperable systems working in a seamless and coherent way across the public sector hold the key to providing better services, tailored to the needs of the citizen and business and at a lower cost. Three aspects of interoperability need to be considered: organizational, semantic, and technical interoperability (Lueders, 2005).

Moreover, an essential requirement for the exchange of information is a single language that enables the description of the meaning and structure of the underlying data, that is, a mark-up language. In the context of current technologies and market developments, this mark-up language is XML. XML offers a common metalanguage and terminology to develop means for system and data integration and for gradual transfer to more consistent formats in information assets (Salminen, 2005).

Interoperability aspects presented in this chapter aim to lead the way of e-government helping private sector (enterprises, vendors, etc.), with e-business development being the ultimate scope. There are a lot of steps during the lifecycle of an enterprise or during the daily routine of an enterprise that demand interaction with the public sector. The level of physical interaction can be scaled and ranked; however, it cannot be minimised without the help of e-government.

20 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/interoperability-road-enhance-government-business/8712

Related Content

Swimming Upstream in Turbulent Waters: Auditing Agile Development
Priyadarsini Kannan Krishnamachariarand Manish Gupta (2018). *Global Business Expansion: Concepts, Methodologies, Tools, and Applications (pp. 1134-1159).*
www.irma-international.org/chapter/swimming-upstream-in-turbulent-waters/202263

Service Quality and Innovation in Air Transport
Ravi Lakshmanan (2024). *Innovative Technologies for Increasing Service Productivity (pp. 244-273).*
www.irma-international.org/chapter/service-quality-and-innovation-in-air-transport/341255

Talent Retention for Succession Planning in the Defence Forces
Neeta Baporikar (2021). *International Journal of Applied Management Sciences and Engineering (pp. 52-71).*
www.irma-international.org/article/talent-retention-for-succession-planning-in-the-defence-forces/284453

Software Estimation Framework for Mobile Application Projects
Shailesh Kumarand Anant R. Koppar (2019). *International Journal of Productivity Management and Assessment Technologies (pp. 26-40).*
www.irma-international.org/article/software-estimation-framework-for-mobile-application-projects/230350

Globalism, Culture, and Business Environment: A Middle Eastern Perspective
Diana Bankand Mohammad Ayub Khan (2012). *Cultural Variations and Business Performance: Contemporary Globalism (pp. 197-205).*
www.irma-international.org/chapter/globalism-culture-business-environment/63916