

# Chapter 3

## Connected Services Delivery Framework: Towards Interoperable Government

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### ABSTRACT

*Efficient public service delivery is a primary task of public administration within any governance model. The main theme of modern governance implies an integrated, effective, and citizen-centric practices of government and administration as a prerequisite for a long-term positive development of the economy. Electronic public service delivery via e-government portal has become a convenient means for the customers—citizens and businesses—to fulfil their requirements. However, the quality of service delivery is heavily based on the level of integration of the services between different partners in the back office. Service integration requires good governance among partners in agencies in various departments and sometimes at different government levels. This chapter provides an interoperability integration framework that connects closely coordinated services based on Service-Oriented Architecture, Enterprise Service Bus, and Web services. The proposed framework is presented as an attempt to align the organizational structures and processes of different government departments while reducing implementation and ownership costs. The framework is applied to a realistic case example of integrating three different public services, namely applying for a Tourism Agency License, applying for a Vocational License, and applying for No Criminal Record Certificate, in a highly interoperable manner and a high level of adaptability to existing government policies and priorities.*

### INTRODUCTION

Governments around the world are taking serious steps to improve collaboration and integration across their departments. Conventionally, governments have been planned and organised with

vertical structures, aligned to deliver a wide range of services to citizen such as health and education services, and to businesses such as investment facilities and legal regulations (Noreng, 1980). This structural separation provides efficiency, clear lines of accountability and concentration

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of specific range of related service (Hyde, 2008). However, vertical governmental structures are not well equipped to deal with many recent public delivery issues, especially those require cross portfolio such as social security programs, unemployment insurance, food assistance and healthcare (Stegarescu, 2006).

Responding to complex service delivery problems requires governments to modernise their ICT infrastructure, and leverage this infrastructure within the public sector in order to better share information, internally and externally, and to deliver integrated services. Moreover, global trends such as rising citizen expectations, budgetary constraints and global competition for investment, have driven governments to review their service delivery. Therefore, a necessity has arisen, as ICT for service delivery is being revisited to improve integration and connectedness. Accordingly, a form of services and processes integration in relation to service delivery has emerged, and is recently found not only in e-government agendas but also at national and sub-national modernization initiatives. This reform is referred to as “Integrated Public Governance” that it may be the successor to the New Public Management (Kenneth, 2009).

Connected service delivery is defined as the process of integrating public services to a convenient, seamless and single point of access portal, through which public services can be accessed, utilized and completed. The end user of this portal, refers to as Customer of Public Administration in many literature, could be a citizen, business or other public administrations who may seek to utilize a service (Klischewski, 2007).

This chapter investigates the connected public service delivery through the integration of back office processes. It provides an interoperability integration framework that connects closely coordinated services based on Service Oriented Architecture (SOA), in an attempt to align the organizational structures and processes of different government departments. This alignment will help to achieve better IT utilization and return on investment in e-government initiatives. As we

believe that this integration is not only necessary but also critical at this stage of e-government implantation in developing countries.

The chapter builds on insights and learning from best practices in large corporate integration projects, using SOA and ESB (Enterprise Service Bus) technologies, and applies this to e-government service integration and provision. The integration framework suggested in this chapter draws together proven techniques and integration frameworks from several proceeding architectures and design styles, with new universal open standards and integration technologies that have the potential to provide a technically achievable framework for modern e-government implementations.

In the scale and scope of e-government implementation, public services are not only implemented using a multitude of technologies and platforms, but are also by a wide range of people practices, application codes and interactions between stakeholders and the system. Therefore, a realistic case example of integrating three public services based on the suggested integration framework is presented in this chapter.

### **CONNECTED SERVICE DELIVERY: DEFINITION**

Connected service delivery in the context of this chapter is broadly defined as the provision of an integrated cluster of public services, joint up and connected in ways that suit customer requirements, sourced from a range of partner organisations and service providers. The services being connected may be separate service areas from within the government agency, or alternatively, the partners may include other government agencies, private business and voluntary sector.

This connected collaborative approach may be accomplished by merging structures, sharing budgets, combining in joint teams or sharing information between distinct departments, or developing a joint customer interface such as a website

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