Chapter VII
Enterprise Architecture in the Singapore Government

Tan Eng Pheng
Infocomm Development Authority of Singapore, Singapore

Gan Wei Boon
Infocomm Development Authority of Singapore, Singapore

ABSTRACT

The Singapore government enterprise architecture is a blueprint that will provide a holistic view of business functions, supporting data standards, and IT systems and services, regardless of the organisational structure and ownership of these functions and systems. The blueprint will also enable analysis of IT investments and their alignment to business functions, as well as facilitate collaboration among government agencies. When implemented, the Singapore government enterprise architecture will help bring about transformation in public sector by yielding optimised end-to-end business processes and system capabilities in alignment with government enterprise needs and missions.This chapter presents the considerations and approach taken to develop the Singapore government enterprise architecture. It examines the linkages of enterprise architecture with other initiatives such as the e-government action plans, policies, and processes related to IT governance, as well as summaries of lessons learned.

INTRODUCTION

The Singapore government enterprise architecture is a blueprint that will provide a holistic view of business functions, supporting data standards, and information technology (IT) systems and services, regardless of the organisational structure and ownership of these functions and systems. It comprises four elements and reference models for the business, information, solution, and technical architectures. Of the four elements, the technical architecture has been developed in 2002 while the other three are currently being developed.

The Singapore government enterprise architecture is to support e-government, and in particular, realise the outcomes of networked government where many agencies integrate across organisational boundaries to provide citizen-centric services.

SINGAPORE E-GOVERNMENT

E-government is about enabling our government to harness info-communications technology (ICT) to better serve our citizens and businesses, and to deliver public services with greater convenience, effectiveness, and efficiency. For the Singapore public service, our e-government journey started in 1980 with the launch of the Civil Service Computerisation Programme.

1980-1999: Civil Service Computerisation Programme (CSCP)

The Civil Service Computerisation Programme (CSCP) was conceived with a clear direction of turning the Singapore government into a world-class exploiter of IT. It marked the beginning of computerisation in the Singapore public sector that focused on improving internal operational efficiencies through the automation of traditional work functions and reducing paperwork. In the 20-year period, we evolved from using IT as a tool to improve productivity to leveraging the Internet to deliver 24×7 electronic services to our customers. By the late 1990s, the convergence of IT and telecommunications transformed the concept of service delivery. This required a paradigm shift in the way government services were delivered and the first e-government action plan was born.

2000-2003: E-Government Action Plan I (eGAP I)

The e-government action plan (eGAP) is the primary vehicle for a strategic transformation of the public sector in the delivery of public services by harnessing ICT technology. Launched in June 2000, the vision of the first eGAP was to be a leading e-government to better serve Singapore and Singaporeans in the new knowledge-based economy. The objective was to foster a shared vision of a leading e-government in the new millennium, develop a public sector that could contribute positively and work actively at propelling Singapore forward in the new economy, and provide a framework for informed, coordinated, and flexible ICT deployment. To move businesses, citizens, public officers, and the government toward the e-government vision, the first eGAP prescribed the broad directions of ICT deployment with five strategic thrusts and six programmes.

The five strategic thrusts of the first eGAP were:

1. Re-inventing government in the digital economy.
2. Delivering integrated electronic service delivery.
3. Being proactive and responsive.
4. Using infocomm technologies to build new capabilities and capacities.
5. Innovating with infocomm technologies.

The six programmes identified to drive the strategic thrusts in the first eGAP include:

1. Knowledge-based workplace.
2. Electronic services delivery.
3. Technology experimentation.
4. Operational efficiency improvement.
5. Adaptive and robust infocomm infrastructure.
6. Infocomm education.

The key focus of the first eGAP was transforming the way the public sector interacts with its customers. Primarily, all public services deemed feasible for electronic delivery were designated for this transformation. The public sector would