Chapter 3

E–Government Management Practice:
Enterprise Resource Planning

John Douglas Thomson
RMIT University, Australia

ABSTRACT

E-government agencies in developed and developing countries are anticipating efficiency and effectiveness gains from the evolution of new e-business models. Such agencies are attempting to adopt and adapt the new technologies to public e-business in order to achieve the benefits being realised by entities in the private sector. The adoption of Enterprise Resource Planning (ERP) is one of these e-business models. The purpose of this chapter is to explore the adoption of ERP by the Australian Department of Defence through longitudinal action research. This development may be of interest to other public sectors wishing to avoid unnecessary expense and achieve an efficient and effective outcome in minimum time.

INTRODUCTION

Senior management in government is continuously seeking cost savings and improved effectiveness and efficiency. In this pursuit, large, medium and small governments around the world are considering Enterprise Resource Planning (ERP), and are looking for guidance as to how ERP can be

used with highest amenity, lowest cost and least change. They have variously considered ERP as a pervasive government wide tool for coordinating many activities such as e-procurement, HR, project management, finance, and budgeting. This adoption has been because downsizing and outsourcing pressures to reduce costs have been and will continue to be intense. While the adoption of ERP has been viewed as a means of reducing costs, in practice such implementation often increases

costs (Cordella and Simon, 1997. Cordella, 2006. Cordella, 2001). The ICT Development Index provides IT benchmarking information across nations indicating that 'large disparities remain among countries' (ITU, 09).

THE PURPOSE OF THIS CHAPTER

The purpose of this chapter is to examine how public e-procurement policy was translated into practice by the Australian Department of Defence and its implications for management. Contrary to senior management expectations, the implementation of this ERP pilot model did not require any expensive consultancies or any change management of existing structures, systems or processes. Its research, development and implementation was undertaken by two employees over a twelve month period. It is suggested the generic ERP model so developed may be of interest to other e-government agencies.

LITERATURE REVIEW

ERP data is often spread throughout different government functions such as accounting, project management, purchasing and procurement, and supply logistics. Wittmann & Cullen (2000) suggest that such data is a key value driver. In many government organizations it remains an untapped source of core government business data. It could be that this is because its value is not fully recognised by government managers, or that some or all of these functions have been outsourced to an external provider and so have become opaque to management. While outsourcing may seem an attractive option, outsourcing such a core function leads to dependency upon external, often rent seeking, ERP vendors. Such rent seeking can take the form of demands for system and software adoption and upgrades, specialist training for staff, ongoing license fees on a per user basis,

consultancy fees, special service fees and so on. Once committed to such ERP arrangements, it is difficult to break out of such contracts without suffering heavy penalties. But to remain in the arrangement is also very expensive (it becomes a most effective monopoly for the ERP vendor).

The benefits of ERP are that it enables masses of information, previously dispersed and fragmented, difficult and expensive to bring together manually in a timely way, to be brought together and interrogated in seconds (Wailgum, 2007). This contributes to improved e-government efficiency and effectiveness, and to a lowering of an e-government's transaction costs and environmental impacts. Because ERP can be used to collect, correlate, track and aggregate electronic transactions quickly and easily, it has the potential to become a valuable source of strategic and operational knowledge for management, with cost saving and performance management potential. For example, an ERP system enables various data from functions such as accounting, finance, logistics, e-procurement, and project management to be collected, collated, coordinated, and disseminated through active, layered, routine or special performance reports. ERP systems may be designed to record and provide data for measuring critical aspects of 'core' business operations across an organization, from strategy development, planning and execution. performance measurement and management. operations and control. An ERP system can continuously report to management the knowledge of which can be used to measure and hence evaluate organizational performance, processes and functions that were previously hidden, disparate or disjointed (Bouret, 2005). Through these means, ERP creates a single, central repository of timely, accurate data and assists in providing information so that more effective resource allocation decisions can be made by management (Business Software, 08).

ERP databases and systems are core business for any government, yet they are often outsourced to ERP vendors at considerable capital set up costs

Related Content

Business Process Reengineering and ERP: Weapons for the Global Organization
Marianne Bradford, Robert Gingrasand Jonathan Hornby (2008). *Enterprise Resource Planning for Global Economies: Managerial Issues and Challenges (pp. 108-125).*
www.irma-international.org/chapter/business-process-reengineering-erp/18432

Knowledge Management and Project Management in 3D: A Virtual World Extension
Steve Russell (2013). *Enterprise Resource Planning: Concepts, Methodologies, Tools, and Applications (pp. 1452-1467).*
www.irma-international.org/chapter/knowledge-management-project-management/77284

Looking to the Future of Enterprise-Wide Systems
Frédéric Adamand David Sammon (2004). *The Enterprise Resource Planning Decade: Lessons Learned and Issues for the Future (pp. 288-293).*
www.irma-international.org/chapter/looking-future-enterprise-wide-systems/30338

Customer Relationship Management (CRM) Implementation Intensity and Performance: A Study of Web-Hosting Companies
Bryan Soh Yuen Liew, T. Ramayahand Jasmine Yeap Ai Leen (2013). *Enterprise Resource Planning: Concepts, Methodologies, Tools, and Applications (pp. 233-244).*
www.irma-international.org/chapter/customer-relationship-management-crm-implementation/77221

On Predicting the Results of Applying Workflow Management in a Healthcare Context
Bob Chermin, Ingmar Frey, Hajo A. Reijersand Harm Smeets (2013). *Enterprise Resource Planning: Concepts, Methodologies, Tools, and Applications (pp. 1155-1169).*
www.irma-international.org/chapter/predicting-results-applying-workflow-management/77272