Chapter 7
The Role of Information System within Enterprise Architecture and their Impact on Business Performance

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ABSTRACT

This chapter introduces the role of Information Systems (IS) within enterprise architecture and their impact on business performance, thus explaining the theoretical and practical concepts of Information Technology (IT), technical alignment, IS capabilities, IS effectiveness, enterprise architecture, and business performance; the implementation of IT strategy; and the importance of IS within enterprise architecture and their impact on business performance; and the application of IS within enterprise architecture and their impact on business performance. The focus on the role of IS within enterprise architectures and their impact on business performance by utilizing IT based on the practical application of IT, technical alignment, IS capabilities, and IS effectiveness is to connect people, processes, and technology for the purpose of maximizing corporate IT, technical alignment, IS capabilities, and IS effectiveness. Applying IS within enterprise architecture will greatly enhance business performance and reach business goals in digital age.

INTRODUCTION

Regarding historical accounting data, organizational performance involves the current and past business outcomes (Ong & Chen, 2013). IT is an integral part to support, sustain, and grow a business (Mohamed & Singh, 2012). With the rapid development of IT, the innovative IT strategy has become an important topic of research in the era of electronic business (Yeh, Lee, & Pai, 2012). IT applications can be used in formalizing knowledge, and distributing it in modern organizations (Okumus, 2013). IT should be managed to assist core business in achieving organizational mission and vision (Sharma & Baoku, 2013). Organizations realize the importance of align-

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ing IS with organizational processes, goals, and strategies (Campbell, Kay, & Avison, 2005). Organizations use IT to influence productivity growth through improved customer service, thus increasing efficiency in terms of response time and personalized services concerning customer needs (Rodriguez, Fernandez, & Torres, 2011). IT capabilities mainly focus on better internal efficiency and reduced cost, thus contributing to transforming key business processes and practices into IT capabilities that functionally integrate the value chain and eliminate the non-value added processes (Bilgihan, Okumus, Nusair, & Kwun, 2011). Kess and Haapasalo (2002) stated that utilizing software process regarding IT requires knowledge processes within knowledge management environment.

Kasemsap (2014a) stated that the organizations should reliably create and develop the suitable organizational contexts to promote knowledge management to increase business performance by applying software processes. Organizations need to manage an innovative and supportive atmosphere to promote knowledge creation and knowledge sharing to gain better business performance regarding business process orientation (Kasemsap, 2014a). Kasemsap (2014b) suggested that organizations aiming to increase job satisfaction and reach business goals should focus on creating organizational culture, organizational learning, and knowledge management. Organizational learning, knowledge management, and knowledge-sharing behavior have the positive impact on organizational innovation in modern organizations (Kasemsap, 2014c). The technological organizations should exploit organizational innovation in order to increase organizational performance (Kasemsap, 2014d). Kasemsap (2013) explained that organizations should recognize the importance of knowledge management and need to put more efforts in establishing and supporting knowledge creation and knowledge sharing components to practically improve employee performance in digital age.

Business strategy and IT strategy remain as critical determinants of an organizational success in the foreseeable future (Brown, 2006). IT is universal because modern IT crosses organizational activities, and has become aligned with business activities (Ko & Fink, 2010). The use of technology has caused critical dependency on IT, thus involving a complex mix of political, organizational, technical and cultural concerns (Sethibe, Campbell, & McDonald, 2007). Xue, Ray, and Sambamurthy (2012) identified the positive effect of IT on organizational innovation. IT has a mixed record regarding organizational performance and user satisfaction, thus playing an important role in modern organizations (Peslak, 2012). Kleis, Chwelos, Ramirez, and Cockburn (2012) found the positive relationship between IT and intangible output, and stated that the use of IT in both organizational innovation and knowledge creation processes is the most critical factor in an organization's long-term success. The link between IT and organizational performance is important for IS researchers and practitioners (Stoel & Muhanna, 2009).

Business-IT alignment is a dynamic state in which a business organization is able to efficiently utilize IT to reach business objectives toward better business performance. Business-IT alignment is a critical success factor in large IT projects such as the implementation of enterprise resource planning (ERP) (Chakraborty & Sharma, 2007). This chapter introduces the role of IS within business architecture and their impact on business performance, thus explaining the theoretical and practical concepts of IT, technical alignment, IS capabilities, IS effectiveness, enterprise architecture, and business performance; the implementation of IT strategy; and the importance of IS within enterprise architecture and their impact on business performance; and the application of IS within enterprise architecture and their impact on business performance.