

## Chapter 8

# Investigating Impact of Inter–Organizational Factors in Measuring ERP Systems Success: Bruneian Perspectives

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### ABSTRACT

*The cardinal aim of this study is to assess the success of an Enterprise Resource Planning (ERP) system in investigating the role played by the top management and government support, external expertise, perceived benefits and the impact of business vision. This is a quantitative field study conducted on 150 business firms randomly selected from the Brunei Yellow Pages. In this study, 30% of the companies had practiced the ERP for more than one year. A statistical software package PSW-18 was used to analyse the data. The majority of the previous findings which include all contextual variables used were significant with an exception to the top management support which proved insignificant. Those results were compared with existing studies. The practical implications are discussed and a conclusion is drawn.*

### INTRODUCTION

The Enterprise Resource Planning (ERP) systems is an information systems (IS) that is used by multifunctional companies working in different regions (Umble *et al.*, 2003). The system is large, complex and difficult to implement (Gupta, 2000). In order to ensure its successful implementation, it requires careful planning and execution.

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An ERP system enjoys its popularity because of its apparent capacity to improve business efficacy and operational efficiency (Chou & Chang, 2008). ERP system is evolving and it integrates many advanced applications which include the supply chain management (SCM), customer relationship management (CRM) and electronic procurement (Aydin & Tunali, 2007). Furthermore, adopting an ERP systems as a primary platform to share and exchange of organization information and provide access through internet technology which is considered as a hall marks of leading edge organizations (Davenport, 2000).

The ERP system differs from other form of information technology (IT) implementation because it provides a real opportunity for modern organizations to integrate all their business functions and processes (Martin, 1998).

The widespread use of Information and Communication Technologies (ICT) for efficient and effective business functions has changed the working operations of businesses around the globe. Majority of the organizations are relying on the cutting-edge technologies that can cut down the costs and bring benefits to businesses. In this regard, business organizations are investing in the e-business option, in order to gain more benefits and to improve on how their businesses function. Enterprise Resource Planning (ERP) systems are information systems (IS) used by multifunctional companies working in different regions (Umble *et al.*, 2003). By implementing ERP, organizations will have better control over their business operations. According to Gupta (2000), the system is complex, large and difficult to implement. It requires careful planning and execution in order to ensure its successful implementation. Furthermore, the ERP system is different from other information technology implementation, therefore, they provide real opportunity for modern organizations to integrate their business processes and functions (Martin, 1998).

The ERP system is becoming popular worldwide and gaining competitive and strategic advantages. In fact, adopting ERP system as the primary platform for sharing and exchanging of organizational information and providing access to it through internet technology which is considered a hall marks of leading organizations (Davenport, 2000). ERP system enjoys its present popularity because of its apparent capacity to improve operational efficiency and business efficacy (Chou & Chang, 2008). Whereas, Aydin and Tunali, (2007) suggest that ERP system is evolving and integrating many advanced applications including supply chain management (SCM), customer relationship management (CRM) and e-Procurement.

In today's uncertain economic climate, organizations require suitable IT-enabled systems that provide significant reduction in operational costs and improvement in the efficiency of business processes. ERP is a very useful integrated software that streamlines business processes and corporates functions (Wee, 2000). Broadly speaking, the business ERP comes under the domain of organizational broad base supply chain management system (SCM). In addition, ERP can be defined as an information system that is designed to improve global management of operations in accounting, financing, production, logistic, human resources, sales and supplies (Chen, 2001). It deals with better integration of different departments' information needs (Gupta *et al.*, 1986). In multinational companies, transactions' data go through the entire information system of the logistics chain that includes information pertaining to suppliers and customer orders of goods or services from any place in the world (Sheu *et al.*, 2004).

ERP system facilitates the integration of information linking a set of suppliers, distributors and clients through geographic restrictions (Jacob & Whybark, 2000; Soh *et al.*, 2000; Hammer & Stanton, 1999; Davenport, 1998). Information about the supply and the demand of products and services is shared in real time and in an accurate and homogeneous manner (Chen & Popovich, 2003). The strategic purpose of implementing an ERP system varies across companies (Willcock & Sykes, 2000). It involves perceived advantages both tangible and intangible, of this ERP system which is difficult to define (Hsu and Chen, 2004). In international systems of the logistic chain, information that is managed with ERP system pro-

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