

# Chapter 16

## Building Business Value in E-Commerce Enabled Organizations: An Empirical Study

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### ABSTRACT

*This research attempts to identify critical e-commerce success factors essential for building business value within e-commerce enabled organizations. It is important to identify the critical success factors that organizations must pursue in order to facilitate a successful transformation from traditional brick-and-mortar organizations to click-and-brick business models. Diffusion theory is used to demonstrate how these success factors create business value within an organization. The research model is fully grounded in information technology business value and productivity literature (e.g., Kauffman & Kriebel (1988), Mahmood, Gemoets, Hall, & Lopez (2008) Mahmood & Mann (1993), and Zhu (2004)). The manuscript utilizes an existing sample set consisting of a population of more than 550 company executives who are successfully implementing e-commerce strategies. The research examines constructs found in the literature and focuses on two importance dimensions of creating business value through e-commerce strategies: IT alignment to organizational strategies (ITOrS) and the quality and effectiveness of existing online systems (OnSQE). Critical success factors for e-commerce business success were found to include ITOrS (IT alignment to organizational strategies), IOrSA (Quality and effectiveness of online systems,*

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*OnSE (Online systems efficiency), and OnSQE (Online systems quality and effectiveness). The research produces empirical evidence that strategic decision making concerning implementation of e-commerce technologies and alignment with top management strategic planning is critical to the success of creating business value for e-commerce enabled organizations. The manuscript concludes with limitations of the research and implications for future research studies.*

## **INTRODUCTION**

In today's economic environment it is vital that organizations invest in resources that will build value throughout the entire organization. Implementation of e-commerce strategies have become a popular way of increasing business value. Social networking through popular mediums such as Facebook and MySpace, advanced mobile communication devices, and widespread accessibility has redefined e-commerce and has resulted in an explosion of increased opportunities for e-commerce enabled organizations.

Many traditional brick-and-mortar companies have invested and continue to invest heavily in e-commerce technologies due to a huge increase in online opportunities. e-Marketer (June, 2008) reports:

In 2007, 133.1 million individuals, nearly four-fifths of US Internet users, shopped online. By 2012, the total will be closer to 158.2 million, or 82.5% of Internet users. From 2007 to 2012, the number of new online shoppers in the US is expected to grow at a 3.5% average annual rate. Also in 2007, 110.7 million individuals, nearly two-thirds of US Internet users, made at least one online purchase. By 2012 the number of online buyers is expected to be 141 million, or 73.5% of Internet users. From 2007 to 2012, the number of new online buyers in the US will grow at a 5% average annual rate. (p.1)

Forrester Research (2007) estimates that online sales will reach \$204 billion this year and \$335 billion by 2012. E-commerce currently accounts for 6 percent of all retail sales in the United States. Although forecasts for retailers are currently dis-

mal it is believed that e-commerce retailers will fare better than their brick-and-mortar counterparts (e-Marketer, 2008).

The information technology (IT) productivity and business value literature report performance and productivity gains for organizations that evolve to click-and-brick structures. There are many well known examples of click-and-brick organizations including Best Buy, Wal-Mart, Target, Walgreens, Sears, Cisco Systems, Dell Computers, and Boeing Corporation. These are excellent examples of large click-and-brick organizations that have achieved a significant economic benefit by using e-commerce technologies. Cisco, the single largest user of e-commerce in the world, attributes 90% of its 2000 sales to online sales. Also, 82% of its customer inquiries are handled online (McIlvaine, 2000) and 83% of questions concerning support are answered through. Cisco's web based self service tools ("Customer Care," 2001) handle 82% of customer inquiries and 83% of technical support requests online. Dell, ranked 49<sup>th</sup> in the Top 50 Internet properties logged 9.2 million first time visitors with sales of more than \$1 million dollars in PC sales online, everyday. Dell Computer reported over 250% return on invested capital from its logistics and order fulfillment systems (Dell.com, November 2000).

The importance of the present research stems from the fact that there is very little empirical evidence in the IT productivity and business value literature regarding the critical success factors from e-commerce business initiatives, especially for large click-and-brick companies (Brynjolfsson and Kahim, 2000).

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