Chapter 3.1
Best Practice in Leveraging E-Business Technologies to Achieve Business Agility

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ABSTRACT

This chapter explains the best practice in implementing e-business Technologies to achieve business cost reduction and business agility. Many companies started to realize that gaining competitive advantage is no longer feasible by only managing their own organizations; it also requires getting involved in the management of all upstream supply organizations as well as the downstream network. E-business technologies present huge opportunities that are already being tapped by several companies and supply chains. Although the benefits of implementing e-business technologies are clear, enterprises struggle in integrating e-business technologies into supply-chain operations. The author illustrates the strategic and operational impact of e-business technologies on supply chains and explains the performance benefits and challenges firms should expect in implementing these technologies. Also, the author provides the best-practice framework in leveraging e-business applications to support process improvements in order to eliminate non-value-added activities and provide real-time visibility and velocity for the supply chain. Finally, this chapter presents the future trends of using e-business in transformation programs.

INTRODUCTION

Executives realized that producing high-quality products is not enough in today's competitive environment; the new challenge is to get products to customers when and where they need them, exactly the way they want them, with a competitive price and in a cost-effective manner. Many factors are making this challenge more complicated; globalization, increased complexity of supply chains (SCs) with outsourcing and the move to mass customization and build-to-order

(BTO) environments, the need for a shorter time to market to gain competitive advantage, and the shift from vertical to horizontal supply chains make an efficient integration with suppliers and customers more critical.

E-business technologies address the above challenges by enabling enterprises to collaborate with their internal and external suppliers and customers, providing visibility, automating the paper-driven business processes, and interconnecting inventory, logistics, and planning systems.

The way to survive the competition in today's business world is to stay ahead of competitors. Leveraging e-business technologies effectively is key to staying competitive and achieving business agility. Although the benefits of implementing e-business technologies are clear, enterprises struggle with integrating e-business technologies into supply-chain operations. Decision makers find themselves asking the most fundamental questions. How can we do it? What is the best practice? Does it apply to us? Does technology add value? If so, what is the best way to quantify it and then maximize it? Since many have failed in achieving value, how can we make sure that we will not be one of them and will be able to minimize the risk? What does senior management need to do to support transformation initiatives? This chapter gives powerful tools for answering these questions**.**

This chapter addresses the strategic and operational impact of e-business technologies on supply chains and explains the performance benefits and challenges firms should expect in implementing e-business technologies. Also, it provides the best-practice framework in leveraging e-business technologies to support process improvements in order to achieve cost reduction and velocity for the supply chain. This framework includes a practical and effective return-on-investment (ROI) model to calculate the benefits of e-business transformation programs.

The objectives of this chapter can be summarized as follows.

- Provide a good understanding of the challenges in today's business environment
- Identify the impact of e-business technologies on enterprise processes
- Highlight the benefits of implementing e-business technologies
- Provide guidelines and a framework for implementing e-business technologies successfully

The concepts in this chapter are presented in an easy-to-understand manner that is intended for any reader interested in learning about e-business technologies. Because e-business can be leveraged by several functions within the organization, this chapter has been written for the wide audience that is interested in learning how to leverage e-business techniques in improving processes and slashing waste. This chapter provides strategies for senior managers to use in planning for transformation programs, and also provides middle mangers with tools to effectively manage and implement the best practice. Graduate students can use this chapter to gain an excellent understanding of how e-business technologies work, and then use this knowledge to either extend the research in this field or implement the concepts learned from this chapter in the industry.

BACKGROUND

Valencia and Sabri (2005) stated that the widespread use of the Internet has turned the eyes of many companies to the numerous solutions that the Internet provides. E-business technologies have helped many companies in improving their overall processes and performances.

On the other hand, Handfield and Nichols (2002) mentioned that integrated supply-chain management (SCM) is now recognized as a strategy to achieve competitive advantage. When pressed to identify how to achieve this strategy, however, the path forward for executives is not