



## Chapter 2

# e-ERP: A Comprehensive Approach to e-Business

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*The chapter reports on the results of research carried out over the last two years on the state of e-business developments within ERP environments worldwide. Structured interviews were used to collect data in two stages. The first group of organisations was drawn from Australia and the results from this stage used to refine the data collection instrument. The second group consisted of relatively mature ERP based organisations from a range of industries around the world. The findings were analysed according to an established research framework from Business Process Change. This showed that while facilitators in aspects of e-business change management such as cultural readiness, knowledge and learning capabilities and relationship building were recognised by organisations, the extent to which they were incorporated as part of the implementation varied greatly. This suggests a rich field for future research study regarding the success of e-ERP projects.*

## INTRODUCTION

Numerous researchers have written about e-business and the impact this is likely to have on traditional modes of business operation. According to interviews conducted by Forrester Research with 40 senior IT and e-commerce executives, Electronic business will explode by 2002 because they expect 78% of their cus-

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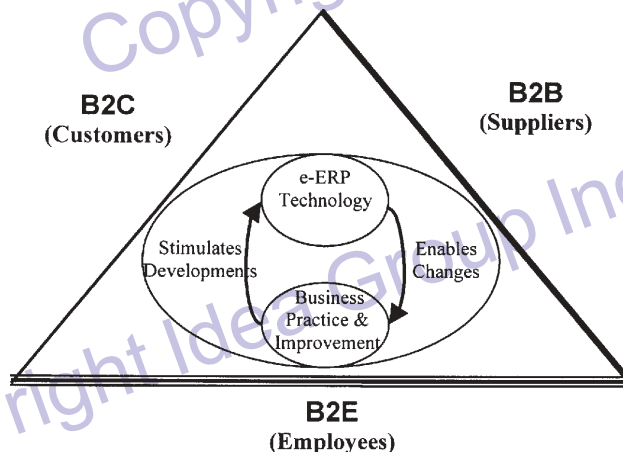
tomers and 65% of their trading partners to have global electronic connections with them, up from 40% and 43% respectively. Online revenue growth has quadrupled each year. In 1998, it totalled \$35 billion inter-company and \$15 billion retail, worldwide. In 2000, out of 256 million users, 53 million buyers will average \$4,090 each in e-commerce business (combined inter-company and retail). By 2003, online revenues will exceed \$1.3 trillion (Hesterbrink, 1999: p3).

As more and more established organisations realise the need to form alliances with their customers, partners and suppliers over the Internet, integration with ERP systems becomes a critical issue. This combination of technologies offers **established** companies the opportunity to build interactive relationships with its partners and suppliers, improve efficiency and extend its reach, all at a very low cost. For example, GE estimates to save \$500 million to \$700 million of its purchasing costs over three years and cut purchasing cycles by as much as 50% (Hesterbrink, 1999: p3). Eventually, the company expects to buy the majority of its purchases through its Web-based bidding system.

Although these technologies have distinctly different functions, integrated they offer a sound infrastructure for doing business on-line (Venkatraman and Henderson, 1998). Here e-business means “making the key business processes of an organisation available over the Internet” (Boey, 1999: p1). Although simple, this definition nevertheless incorporates some subtle but key points about e-business applications with an ERP system (e-ERP). The primary beneficiaries of this e-business infrastructure are customers, business partners and suppliers, and employees. Figure 1 illustrates how these concepts relate to the core business-to-business (B2B) models, (adapted from Ash and Rossouw, 1999).

The chapter reports on the findings from a multiple case study investigation of ERP enabled organisations that pioneered e-business projects. The key findings

*Figure 1: Developments in e-ERP and Business Practice for doing e-Business*



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