

## Chapter IX

# The Critical Success Factors and Integrated Model for Implementing E-Business in Taiwan's SMEs

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### ABSTRACT

*To date, identifying barriers and critical success factors (CSFs) and integrating business model in implementing e-business for SMEs, have not been systematically investigated. Few existing studies have derived their CSFs and business models from large companies' perspectives, and have not considered the needs of integration for smaller businesses. This chapter is aimed to bridge this gap. Existing studies on CSFs and e-business models were reviewed and their limitations were identified. By integrating insights drawn from these studies, as well as adding some new factors, the author proposed a set of 18 CSFs which is believed to be more useful for SMEs. The importance of the proposed CSFs was theoretically discussed and justified. In addition, a case study was conducted to evaluate the extent of success of this proposition. The overall results from the case study assessment were positive, thus reflecting the appropriateness of the proposed CSFs and integrated models. The set of CSFs and integrated models can act as a list of items and an easy to follow model for SMEs to address when adopting e-business. This helps to ensure that the essential issues and factors are covered during implementation. For academics, it provides a common language for them to discuss, and study the factors crucial for the success of e-business in SMEs. This study is probably the first to provide an integrative perspective of CSFs and integrated model for implementing e-business in the SME sector. It gives valuable information, which hopefully will help this business sector to accomplish e-business visions.*

## INTRODUCTION

Indisputably implementing and maintaining e-business for those large organizations is just another routine operation for their IT departments to ensure the business activities are performing efficiently. Nevertheless, small and medium-sized enterprises (SMEs) have far less resources and budgets to invest in IT enabled operations or the e-business vision.

According to the figure reported by the IDC Taiwan in 2003, there are 1,060,000 SMEs in Taiwan and just fewer than 40% of them have involved in e-business activities (having financial transactions through the Internet). This signifies that at least 636,000 SMEs have not engaged in e-business operations. However it does not mean that these SMEs have not considered the implementation of e-business operations. Most SMEs have recognised the need to change their current business processes to achieve the capability to engage in Web based e-business activities. However, lacks of resources and budgets have prevented them from pursuing or continuing the e-business activities.

The key question this study tries to answer is what is the real factor that affects in implementing e-business operations in SMEs? This chapter starts with surveying the e-business literature and identifying possible hurdles of transforming SMEs into e-capable (electronic capable) business operations. It is followed by categorising those factors or hurdles into two recognition phases. In addition to the hurdles, numbers of CSFs for SMEs to conduct e-business operations are identified and discussed. Through the literature study and investigation of various e-business transformation models, the authors have identified the components required for SMEs to transform into e-business operations successfully. A case study was introduced to verify the hurdles as well as the CSFs. This chapter concludes with the proposition of an integrated e-business model to amalgamate all required components and provide e-business implement steps for SMEs.

## LITERATURE REVIEW

The use of the Internet does not automatically mean placing a barrier between the firm and its customers and/or its suppliers. Revolve around inter-firm relationships. Many firms have invested in these relationships, sometimes over generations, and these relationships are key assets of the firm. The challenge is to leverage off these assets to a new level of competitiveness not to undermine them.

O'Keeffe (2001) outlines what the Internet can or cannot do by exposing seven myths. These are presented in Table 1, the myths and realities of e-commerce and discussed below.

The Internet is not about dis-intermediation but companies who do not add value or who have not invested in relationship or reputation assets are certainly under threat by the Internet infrastructure. The Internet infrastructure allows firms to manage the boundaries within the firm and between the firm and other players in the network to a new level of effectiveness and efficiency.

The e-commerce platform is not simply about adoption with current inefficiencies, but about re-engineering the total system. There are further

*Table 1. The myths and realities of e-commerce (O'Keeffe, 2001)*

The myths	The realities
1. The Internet destroys relationships	Manage relationships as intangible assets
2. The Internet disintermediates	Value is more transparent
3. Simply reduce transaction costs	Focus on process costs
4. The Internet is about public information	Private information flows can be enhanced
5. A single hardware purchase	A dynamic relationship with a solutions provider
6. High risk and high investment costs	Amortised costs and low risk trial adoption
7. The Internet levels the playing field	The Internet leverages investments in reputation and relationship assets

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