

# Chapter 29

## Perceived Benefits and Barriers of ICT Adoption among SMEs

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### ABSTRACT

*Small and Medium Enterprises (SMEs) are a key economic sector in Malaysia. In 2005, there were 99.2% or 518,996 SMEs in the country. They contributed to 65.1% of employment and 47.3% of labor productivity. Due to the importance of SMEs, the Malaysian government formed National SME Development Council (NSDC) in 2004 to oversee the development of SMEs in the country. On the other hand, in order to leverage the power of ICT, particularly the Internet, Malaysian government formed National Information Technology Council (NITC) in 1994 to provide information and communication technology (ICT) assistance to Malaysian companies. This chapter examines perceived benefits and barriers of Internet-based ICT adoption among SMEs in Malaysia. Questionnaire was used to collect data from 406 managers/owners of SMEs in Malaysia. Analysis reveals the composite ICT benefits and barriers to ICT adoption. The chapter ends with a discussion and interpretation of the findings including key implications for research, practice and policy.*

### INTRODUCTION

The definition of SMEs in Malaysia was standardized nationwide in the second meeting of National SME Development Council (NSDC) in 9th June 2005. Table 1 and Table 2 illustrate the new definition of SMEs.

Under the new definition, Malaysian SMEs are categorized into three different sizes based on annual sales turnover and employee size and industry type. If any firm falls into two different size categories based on the two different criteria (i.e. employee size and annual sales turnover), the smaller size of SME category applies to the SME.

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*Table 1. SME definition in terms of annual sales turnover*

Size	Primary Agriculture	Manufacturing (including Agro-Based) & Manufacturing-Related Services	Services Sector (including ICT)
Micro	< RM 200 k	< RM 250 k	< RM 200 k
Small	RM 200 k - < RM1 m	RM 250 k - < RM 10 m	RM 200 k - < RM 1 m
Medium	RM 1 m - RM 5 m	RM 10 m - RM 25 m	RM 1 m - RM 5 m
SME	< RM 5 m	< RM 25 m	< RM 5 m

Source: National SME Development Council, 2005

*Table 2. SME definition in terms of full-time employees*

Size	Primary Agriculture	Manufacturing (including Agro-Based) & Manufacturing-Related Services	Services Sector (including ICT)
Micro	< 5 employees	< 5 employees	< 5 employees
Small	5-19 employees	5- 50 employees	5-19 employees
Medium	20-50 employees	51-150 employees	20-50 employees
SME	< 50 employees	< 150 employees	< 50 employees

Source: National SME Development Council, 2005; Ndubisi 2008

The Malaysian government's plan to increase SMEs' contribution to GDP, employment and productivity rate (The Star, 2007), has led to development and strengthening of necessary infrastructures to create an environment to support the growth of SMEs and entrepreneurs. Furthermore, the Malaysian government, agencies and financial institutions have channeled soft loans, grants and other incentives towards the sector's development and strengthening of its competitive position. In this regard, government expects to increase SMEs' GDP contribution modestly from 32% to 37% and its share of total exports from 19% to 22% by 2010 (The Star, 2007). Moreover, total employment is expected to increase from 5.6 million to 6.2 million.

Moreover, the government formed the National Information Technology Council (NITC) in 1994, to act as an ICT advisory body to drive the ICT development in the country. The agency defined the concept and scope of ICT in the Malaysian context as follows:

1. Physical possession and/or availability of information and communication equipment such as radios, televisions, telephones, computers, softwares and networks;
2. Financial means to afford and use ICT products and services; and
3. Basic skills or capabilities to use and the actual usage of ICT products and services.

In December 1996, NITC launched National IT Agenda (NITA), which provides an ICT framework to transform Malaysia into a knowledge-based society (K-Society). After achieving independence in 1957, Malaysia has moved from agricultural society to industrial society from 1960s-1980s. As government has set the target for Malaysia to be a developed country by 2020 (called Vision 2020), it envisioned ICT as an enabler of the transformation of Malaysia to a knowledge-based advanced industrial society. Hence, NITC took the lead to devise plans and formulate strategies to ensure a successful transformation of the nation.

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