

# Chapter IV

## Information and Communication Technology and Economic Development in Malaysia

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### ABSTRACT

*Since the early 1990s, the government has emphasised the ICT sector as a new engine of growth and development. The Multimedia Super Corridor (MSC), which was developed in 1996, was regarded as a main vehicle and catalyst for ICT-sector development. Since there were many new institutions established by the government, it somehow had complicated and decreased efficiency in expanding the industry. ICT-related courses at public and private institutions were not developed well enough to meet the market demand. Consequently, the human factor, which was a major component for ICT development, was not fully utilised in research and development, therefore reliance on foreign technology remained a critical issue. These have slowed the progress of ICT development. This chapter will discuss the ICT-sector development policy in a broad view and try to analyse critically to what extent the development of the ICT sector has contributed to economic development in Malaysia.*

### INTRODUCTION

In 1991, the Malaysian government launched Vision 2020, with one of its main goals for Malaysia to become a fully developed nation by the year 2020. En route to achieving this goal, the informa-

tion and communication technologies had been identified as one of the key sectors to realize this goal. This sector has been regarded and emphasized as a new sector of future economic growth and development. The sector had been included in the *Sixth Malaysia Plan* (6MP) for development

within 5 years from 1991 to 1995. However, a bold policy and the necessary infrastructure and environment for the development of ICT was developed during the *Seventh Malaysia Plan* (7MP, development period from 1996-2000). Under the *Ninth Malaysia Plan* (9MP, development period from 2006-2010), the government has almost doubled its allocation for the ICT sector to RM13 billion compared to RM7.8 billion in the *Eighth Malaysia Plan* (8MP, development period from 2001-2005)(Table 1). Part of the allocation, about RM3.7 billion (in 8MP, the amount was RM2.4 billion), will be used to boost ICT capacity in government agencies and bridge the digital divide between urban and rural agencies.

To strengthen ICT development, in 1996 the government had initiated and established the Multimedia Super Corridor (MSC) managed by the Multimedia Development Corporation (MDC). Since then, the MSC has grown into a thriving dynamic ICT hub, hosting more than 900 multinational foreign-owned and homegrown Malaysian companies focused on multimedia and communications products, solutions, services, and research and development (R&D). The government has planned for the second phase of MSC and four new cybercities, which will be developed under 9MP. The number of MSC-status companies is projected to grow from 1,421 as of 2004 to some 4,000 by 2010, and these are expected to create some 100,000 new jobs and generate about 1,400 new intellectual properties.

In order to support the country's ICT development plan and fulfill Vision 2020, the education system is in the process of being transformed to create a new generation of more creative and innovative Malaysians who are adept with new technologies and able to access and manage the information explosion. ICT-enabled smart schools act as a catalyst within this process. The first phase of implementation began in 1999 with 90 schools. Also, to foster the ICT industry in the short term, tertiary education, particularly computer science and engineering faculties, has been restructured

by not only focusing on hardware matters but also focusing on software development. This is to ensure human capital for the ICT industry in various specialities adequate to meet the demand.

In fact, the ICT sector has been a main industry and a main component of economic growth since the early 1970s. The introduction of export-oriented industries with emphasis on electrical and electronics (E&E) industries and supported by the heavy inflow of foreign direct investment (FDI) in the sector has expanded it. The expansion of the foreign-owned E&E industries has spilled over into the domestic economy, whereby many local support industries and IT-related firms have been developed. Consequently, the demand on labour for both skilled and unskilled workers has increased very significantly. The ICT industry's export performance has been increasing steadily over the years from RM35.3 billion in 1998 to about RM61 billion in 2005 (about 50% of the total manufacturing goods). Major export destinations were the traditional markets such as the USA, Japan, Singapore, and Hong Kong. On the other hand, domestic spending on ICT material reached RM36 billion in 2004. To enhance trade in the ICT sector, e-commerce trading has been promoted and developed.

With respect to the ICT industry, there are many issues that have emerged and worry policy makers. Too much emphasis on the ICT sector, particularly by the government and by the market, has created and increased unemployment for ICT graduates either at the first degree or certificate level, including diploma holders. This has somehow retarded the smooth development and progress of the ICT sector. The economic crisis from 1997 to 1999 has also slowed the ICT industry's development. Many companies that are ICT related, foreign as well as local, have closed operations and moved to China in particular. This is a cost to the economy. The government has revised and further liberalized the investment incentives for the ICT industry to reattract old firms and attract new ones to be established in

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