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INFORMATION TECHNOLOGY IN SINGAPORE AND MALAYSIA: CURRENT TRENDS AND FUTURE DEVELOPMENTS

By

Dr. Sankaran Ramanathan

A. INTRODUCTION

Being neighbours and hence bonded in several ways, Malaysians and Singaporeans always like to make comparisons among themselves. It should therefore come as no surprise that this writer, being Malaysian in origin but currently working in Singapore, has chosen the above topic for his presentation at this workshop.

Before I begin the paper proper, I would like to thank the local organizer of this workshop, i.e. Board of Management of the Hoa Lac Hi-Tech Park Project, Ministry of Science, Technology and Environment, People's Democratic Republic of Vietnam, for hosting this important workshop. I would also like to record my thanks to the AMIC Secretary-General, Mr. Vijay Menon, who has approved my presence and participation here. Finally, I would like to record my deepest appreciation to our principal partner in the entire project, Prof. Dr. Jorg Becker, for his untiring efforts to ensure that the project is being conducted smoothly and efficiently.

This paper is divided into five parts. Part A is a brief introduction, followed by an overview of information technology in Malaysia in Part B. This is followed by an overview of information technology in Singapore in Part C. In Part D, I highlight the most significant similarities and differences between the situation relating to information technology in both countries. Finally, I make some predictions for the future in the concluding section, Part E.

A few clarifications are necessary in order to set the stage for the discussions that follow.

First, the term “information technology” as used within the context of this paper refers to the new information technologies that have sprung up in this decade of the nineties. This includes all the new technologies such as the Internet, the worldwide web, multimedia and satellite and computer technologies. While I realize that this is a broad definition, I shall try to focus the discussion on the Internet, as this is what the workshop theme is about.

Nevertheless, what I am stressing here is that the rapid speed of the development of information technology, coupled with convergence of the various technologies, makes it difficult to retain the erstwhile traditional distinctions between the various media. For example it is becoming increasingly difficult to retain the distinction between print and broadcast media. In fact, there may come a time when we may be listening to the television and watching the telephone!!!

Another clarification relates to the nature of the comparison between the two countries. Singapore is a small island of 648 square kilometers and a population of around 3.1 million people. Hence, it is one of the smallest nation states in the world. By contrast, Malaysia not only comprises a much bigger territory but is also divided into East and West Malaysia, which are separated by 500 miles of sea. Even the Multimedia Super Corridor (MSC), with its total area of 750 square kilometers, is bigger than Singapore. I shall return to this point in the fourth section of this paper.

Let me now turn to the overview of information technology in Malaysia.

B. INFORMATION TECHNOLOGY IN MALAYSIA

B.1 Introduction

When Malaysia’s former deputy prime minister Anwar Ibrahim was dismissed from his post and subsequently charged in court for corruption in 1997, his supporters resorted to the
Internet to tell their side of the story. Thus, pro-Anwar websites were created and disseminated messages to Internet users locally as well as abroad.

The government initially reacted by trying to block these websites and hence control access to them. However, this approach was soon found to be ineffective, hence the government resorted to creating pro-government websites, both locally as well as abroad. Thus, the Internet became yet another medium that both sides resorted to in trying to get the people’s attention.

This story shows that all groups, including political parties, have begun readily using the new communication technologies in Malaysia. In part, the rapid spread of new communication technologies is due to backing from the government, which has proposed projects such as the multimedia supercorridor (MSC) and the cyber city (Cyberjaya). In part, it is also the result of the push towards privatization that has occurred in Malaysia since the early eighties. In this section, I shall highlight these developments, describe the current state of development, and make some predictions for the future of information technology in Malaysia.

B.2 Background and Past Developments

The push towards privatization in Malaysia began with the heavy industries in the early 1980s. This included setting up and production of Malaysia’s first national car, Proton Saga, steel and petro-chemical industries. In the latter part of the 80s, privatization and corporatization spread to the other industries, including electronics and the mass media. Thus, for example, there was the emergence of private television stations, with Sistem Television Malaysia Berhad (or TV3) being the forerunner in 1985.

In 1990, Malaysian Institute of Microelectronic Systems (MIMOS), which was the first licensed Internet Service Provider (ISP), launched a network known as Joint Advanced Integrated Networking (JARING). In the ensuing years, this network was steadily expanded
through regional and international connections, while the number of subscribers grew from a mere 30 in 1992 to 23,000 in 1995.

Commenting on the development of JARING, its Vice-President Dr. Mohamed Awang-Lah stated that the company had gone through the pain and experience of Internet development and that “we are now in a position to make the Net a really useful tool for business as well as personal use. Certainly, the role of MIMOS is to promote IT, its importance, threats and opportunities.”

In November 1996, Telekom Malaysia was given the licence to operate the second ISP, known as TMNet. The ensuing competition between the two ISPs resulted in declining charges for Internet usage and a steady increase in the total number of subscribers, i.e. from 50,176 in 1996 to 100,103 in December 1997 and an estimated 300,000 at the end of 1999.

From this figure, 50 percent of the Internet business is in the Klang Valley, which is the IT hub of Malaysia and includes the capital Kuala Lumpur and the cybercity, Cyberjaya.

With regard to the MSC and the cyber city, the idea was mooted from 1995 onwards, and actively pursued in 1996 and the first half of 1997, after which the Asian financial crisis began to have its effects on Malaysia. Hence, plans for its implementation were delayed in the second half of 1997 and for much of 1998. It is only from March 1999 that the development of the cyber city and the MSC have been reactivated.

The MSC, described as an attempt to create a Silicon Valley of the Far East (InterMedia, 1999: 3) offers high-capacity telecoms links, physical infrastructure, new cyber laws and financial support on a site 15 km wide and 50 km long, stretching from Kuala Lumpur City Centre (KLCC) to the new Kuala Lumpur International Airport (KLIA) at Sepang, Selangor. In addition to Cyberjaya, the MSC also houses Putrajaya, the country’s new administrative
capital. It is also home to the Multimedia University and the research and development centre.

Seven flagship applications have been identified in the development of the MSC, as follows:

- **Electronic government.** The lead agency responsible for its development is the Malaysian Administrative Modernization and Planning Unit (MAMPU)
- **Multi-Purpose Card.** The lead agency responsible for its development is the Central Bank (Bank Negara)
- **Smart Schools.** The lead agency is the Ministry of Education.
- **Telemedicine.** The lead agency is the Ministry of Health.
- **Research and Design Cluster.** The lead agency is the Ministry of Science, Technology and Environment.
- **Worldwide Manufacturing Web.** The lead agency is the Ministry of International Trade and Industry
- **Borderless Marketing.** The lead agency is the Multimedia Development Corporation.

Having given this brief background, let me now discuss some recent developments, current trends and features about information technology in Malaysia.

### B.3 Recent Developments and the Current State of Information Technology

This section begins with a brief summary of recent developments relating to the Internet in Malaysia. I shall not go too deeply into this, as Dr. Rahmah Hashim will be discussing this aspect in detail in her paper.

It should be emphasized that the Internet in Malaysia is very much an urban phenomenon. Apart from the Klang Valley area, clusters of major subscribers are found in other cities, such
as Penang, Kuching, Kota Kinabalu and Johor Bahru. It is estimated that the number of users who live in the rural areas is less than 15 percent of the total number of approximately 300,000 users. This poses the question of whether the Internet is yet another communication medium that helps to deepen the rural-urban divide.

Another characteristic is that the majority of Internet subscribers in Malaysia are home-users and have computers in their houses, enabling the whole family to use Internet. A 1998 study by S.I. Wong shows that 60 percent of the estimated 250,000 users are individuals who have their own E-Mail/Internet accounts; and 40 percent are organizations (over 10,000) and these include schools, institutions of higher learning and government and non-government organizations.

With regard to age-group of the users, it can be stated that the number of middle-aged and older persons surfing the Net will be far smaller than the number of youths, i.e. those below the age of 30. Apart from this being a natural phenomenon which applies to any new communication technology, there is also an added attraction about surfing the Net that appeals to youth. Not only can they surf from the privacy of their homes, they can also do it in the cybercafes, which have mushroomed all over the major cities in Malaysia. It has been estimated that more than 90 percent of Malaysian users are young people below 30 years, and the majority are schoolchildren or college students.

At stated in the introduction, there has been a surge in Internet usage since September 1998, following the dismissal of Anwar Ibrahim. There has been an increase in the number of websites as well as anonymous letters in the Internet which have been critical of the government’s policies. Initially, there were attempts to block these letters and websites, and also to punish offenders whom the government accused of spreading false rumours on the Internet. However, now the authorities have realised that enlightening the people rather than taking a high-handed approach seems to be the more effective way. Hence, the government
has set up its own websites that are releasing more information to the people. It has also questioned the credibility of one of the pro-Anwar websites, known as Reformasi. Deputy Minister in the Prime Minister's Department, Datuk Ibrahim Ali has described the Reformasi website as “the biggest manufacturer of lies” (Star, 3 September, 1999). He said the website, which now has 1,800 articles, had been churning out slander against government leaders and parties.

With regard to the development of the MSC, it has been noted that

Two themes emerged from the Western media’s coverage of the MSC. In 1997, when the project was first being brought to the world’s attention, the descriptions were reminiscent of a science fiction writer describing a city of the future. The talk was of smart cities and cyber communities emerging from former rubber plantations. With the Asian economic crisis came a change of emphasis; could the MSC survive in these straightened circumstances? (SIMS, 1999: 4).

Before assessing the progress of the MSC, it should be noted that the development of IT in Malaysia is based on the concept of “leapfrogging.” It is postulated that developing countries have an advantage over developed countries, as they can implement new networks and infrastructures, while developed countries have to either upgrade existing systems or replace them, at much higher cost. Hence, developing countries can more easily make the transition from agrarian-based or semi-industrial economies to knowledge economies, i.e. economies based on knowledge and related services. A case in point is the installation of digitized networks for telecommunication services, whereby many developing countries have more easily switched to digitization.

As stated earlier, Malaysia seems to have overcome most of the negative effects of the Asian financial crisis and has gone ahead with its IT development plans. The most recent developments are:

- On July 8, 1999, Cyberjaya was formally opened by the Prime Minister, Dr. Mahathir Mohamad.
• Three other major facilities were also launched simultaneously, i.e. Multimedia University, Research and Development Centre and the Central Incubator House for the MSC.
• As of July 1999, a total of 228 firms have been granted MSC status.
• By September 2000, the first 2 million smart cards will be issued to residents of Kuala Lumpur and the Klang Valley. (VALIDA, 1999: 8-9)

From the above, it can be seen that four of the seven flagship applications have been launched, while the other three are being actively pursued.

B.4 Some Predictions for the Future
There is great scope for the expansion of IT in Malaysia. There are currently less than half-a-million Internet subscribers in Malaysia. Even if we were to take an average of four users per subscriber, this means that only about two million people in Malaysia currently have access to Internet and E-Mail facilities. This is less than 10 percent of the entire population of Malaysia, which is currently estimated to be 22 million. We can safely predict that not only will the number of subscribers increase, there will also be an increase in the number of ISPs and Internet-related services.

Currently, there is room for optimism with regard to government regulation of the media. In 1998, three bills known collectively as the cyber laws of Malaysia were passed by the Malaysian parliament. Generally, these laws provide for the orderly development and expansion of multimedia and information technology
The laws are:
• *Digital Signature Act*, which provides for and regulates the use of digital signatures,
• *Computer Crimes Act*, which provides for offences relating to the misuse of computers, and
• **Malaysian Communications and Multimedia Commission Act**, whereby this
  Commission has been established to supervise and regulate the communications
  and multimedia activities of Malaysia and to enforce the cyber laws.

Furthermore, following the ruling coalition's resounding victory in the state elections in
Sabah in March 1999, there are indications that the next general elections will be held soon,
possibly by this year. The current prediction is that it will be held in November. In any case,
it must be held before the middle of next year, when the term of the current Malaysian
Parliament expires. When this happens, we should witness a more liberal attitude towards the
media.

A third cause for optimism is that the Asian financial crisis seems to be over and economies
in Asian countries are moving out of recession. Malaysia has recorded positive growth in the
first half of this year and the indications are that this performance will be sustained for the rest
of the year.

Indications of the future directions for the development of IT in Malaysia were given when
Malaysia hosted the 30th Annual Conference of the International Institute for Communications
in Kuala Lumpur from 7th to 9th September. This prestigious event, which attracted more than
300 participants, was utilized by Malaysian IT organizations to showcase Malaysia at the
developing countries’ model for IT development.

Among the organizations sponsoring and participating in the IIC conference were MIMOS,
the Ministry of Communications and Multimedia, the newly-established Malaysian
Communications and Multimedia Commission and the Multimedia Development Corporation
(MDC). In the booklet distributed to participants, Prime Minister Dr. Mahathir Mohamad
noted that the MSC cannot succeed alone. He therefore called upon multinational companies
to create a synergy that would benefit all parties concerned by investing in the MSC. In the
same booklet, MDC’s executive chairman Tan Sri Dr. Othman Yeop Abdullah stated that the MDC’s mission is to create the best environment in the world for private-sector companies to pursue multimedia and to facilitate their investment in the MSC.

If these healthy signs continue, we can safely predict that Malaysia’s plans for the cyberecity and the multimedia supercorridor will be reinforced. Malaysia will then move closer to its 2020 Vision, i.e. to achieve developed country status by the year 2020.

C. INFORMATION TECHNOLOGY IN SINGAPORE

In this section, I present an overview of information technology in Singapore.

C.1 Development of Internet in Singapore

Most visitors to Singapore will associate Boat Quay with its wide range of restaurants offering a delicious variety of exotic food and an equally varied selection of drinks. As a tourist spot, Boat Quay offers visitors a scenic view of the Singapore River and a boat ride into the mouth of the river. Taken as night falls, this memorable excursion encompasses a panoramic view of downtown Singapore with its brightly-lit skyscrapers reaching into the night sky. Throughout the boat-ride, visitors can listen to a pre-recorded description of Singapore’s historical sites.

Nowadays, not only tourists but also youth flock to Boat Quay for a different reason, that is to patronize the cybercafes that have sprung up there. One such place is the Cybercafe operated by Pacific Internet, one of the three Internet Service Providers (ISPs) appointed by the government to operate, manage and provide Internet services to subscribers in Singapore.

The other two ISPs, Cyberway and Singnet, are also actively involved in ensuring that Singapore will become an intelligent island by the beginning of the next millennium. There is a healthy competition between the three ISPs, a competition which is closely monitored and
regulated by the National Computer Board (NCB). Cybercafes have also been established at Changi Airport Terminal Two, in the National Trade Union Congress (NTUC) Club, at the universities and at various private outlets throughout the island. The usual price for usage is $8 per hour and $4.50 per half-hour. For students, there is a discount so that they pay $6 per hour and $3 per half-hour.

Even hitherto sacrosanct and revered institutions such as the Government Gazette have been bowled over by the Internet phenomenon. This official government publication which contains government notices, tenders, changes in legislation and changes in government appointments (including promotions) was previously available only in printed form. From September 15, 1998, it has been posted on the Internet on its own Website (www.egov.com.sg). With this, the Ministry of Information and the Arts hopes that official government information will be more readily available. The website content will be updated on a weekly basis (Business Times, Sept. 8, 1998).

With regard to the Singapore government's policy vis-a-vis Internet, it has been observed that

While the government hopes to completely wire the city-state into an intelligent island by the year 2000, it will do so without compromising the country's national ideology and value system ("Asia and the Internet: Not Too Modern, Please," The Economist, March 16, 1996, p.42).

Singapore is also taking the lead to be the Internet hub for the Chinese language. The initiative was launched on September 12, 1998 and will be implemented by the National Chinese Internet Programme (NCIP), which is part of the Chinese Internet Steering Committee. According to the committee chairman Professor Wee Chow Hou, the committee would like to see Singapore as a major host of Chinese content in cyberspace, including electronic commerce. As part of this aim, the country is hosting the Chinese WebTop, also called HuaZongWang at http://chinese.s-one.net.sg, which is now available as a one-stop gateway to a vast array of Chinese websites in many areas, including finance, e-commerce,
news, government services, Chinese culture and comics. For example, news in Chinese from Reuters News Agency will be delivered via this website by the hour.

According to NCB chief executive Michael Yap, although the Chinese language is used by a quarter of mankind, it accounts for only one per cent of Internet content. Hence, the goal for this year and the next (1999 to 2000) in Singapore is to have a five-fold increase in Chinese Internet content, a three-fold increase in the number of publishers of Chinese Websites and a three-fold increase in the number of companies using the Chinese Internet (Business Times, Sept. 14, 1998). Thus, Singapore hopes to play an active role in the projected rapid growth of the Chinese Internet world.

As part of their efforts in promoting greater and wider usage of the Internet, companies involved in marketing these services strive to be user-friendly, particularly with regard to demands from clients. For example, Microsoft, in collaboration with other partners, is offering a "Design and Build" service as an E-Commerce application which it claims will enable clients to start their business on the Internet within one hour (Business Times, Sept. 21, 1998). According to a senior Microsoft executive, Mr. Chong Yoke Kim, clients would be able to conduct E-Commerce in most cases immediately after setting up their business on the Internet through the "Design and Build" service.

Youths and students are also being targeted by the ISPs as potential clients. For example, Pacific Internet provides Internet class for Mum and Dad in addition to offering what it claims to be the lowest student rate in town (at only $1.95 per subsequent hour of usage). These and other promotional offers will ensure that there will be cheaper rates for Internet users in Singapore. It is also anticipated that there will be greater and wider applications, including development of more sophisticated Websites. Singapore has occupied its rightful place as the regional hub of cyberspace in Asia.
C.2 Developments in Other IT-related Fields

The most recent development in an allied field, which will have positive implications for the development of IT in Singapore, is the launching of the country's first satellite. Named ST-1, this satellite was successfully launched in early September 1998 from Kourou in French Guiana. Jointly owned and operated by Singapore Telecom (SingTel) and Taiwan’s Chunghwa Telecoms, this US$250 million satellite will support a range of SingTel services, including telephone lines for Internet connections. It has become operational from November 1998.

More recently, too, some ethical and moral considerations about Internet usage have begun to surface. One of these relates to misuse of cybercafes, especially by youths. A second major consideration relates to whether gambling facilities should be offered via the Internet, as expressed by the chief executive of Singapore Pools, Mr. Han Tsi Fung at the launch of the organization’s website in early September 1998. Because online gambling is a controversial issue, Mr. Han noted that offering this service in Singapore would require serious thought.

Apart from socio-political issues, this also involves cross-border considerations, particularly with neighbouring Malaysia, which has a predominantly Muslim population. There is also the ethical concern that making gambling easily available over the Internet would encourage underaged youths to pick up the habit early. (Computerworld, Vol. 4 Issue No. 42, Sept. 4-10, 1998, p. 10).

There is also a fierce debate currently going on pertaining to self-regulation versus government regulation of the Internet. In September 1998, the National Internet Advisory Committee (NIAC) came out with a report calling for self-regulation on the Internet. Commenting on this, academician Dr. Ang Peng Hwa noted that it is not easy to have self-regulation, as this requires rules as well as some form of penalty (Straits Times, Sept. 29, 1998, p. 12).
For the industry to regulate itself, Dr. Ang argues that it must first see the value of meeting and setting up regulations. Further, regulation is associated with bureaucracy, with a rule-giver and with being anti-free market, words which are anathema to private sector organizations.

While Dr. Ang concedes that there is a lot of communication and transactions that take place on the Internet with implicit rules (e.g. politeness in letters, formality in writing, etc), he feels that it will be difficult for the industry to regulate itself. First, there is resistance from the key industry players, and this includes both government and non-government officials who often cannot agree among themselves. A second factor is the cost of self-regulation, including who will bear this cost. Most importantly, while it may be possible to set up a mechanism for self-regulation for the operations aspect of the Internet, how does one regulate its content?

It is the content purveyed by the Internet that has sparked off much of the debate, particularly the pornographic element. Previously, Singapore culture frowned upon display of any part of the breasts, and not even cleavage was allowed. “Now that we have cleavage, we do not go on to draw finer distinctions,” states Dr. Ang.

What about the role of parents in filtering what their children can access on the Net? The Singapore experience has not been encouraging. For example, Singapore Telecom spent millions to set up a filtering system called Family Access Network, but the sign-up rate has been less than 10 per cent of new subscribers. The low rate of sign-ups for this programme suggests that there is little interest from parents, argues Dr. Ang. He concludes that while government can play a role by backing and pushing for industry self-regulation, the challenges posed by the rapid growth of the Internet as yet remain unanswered.
Recent Developments in Multimedia Technology

In July 1998, the National Computer Board (NCB) launched a project called *Singapore ONE*, the aim of which is to provide a high-speed multimedia network with which all Singaporeans will live, work and play (*Business Times*, July 26, 1999). Established as the world’s first nationwide broadband network, *Singapore ONE* constitutes the country’s answer to Malaysia’s MSC. It is the core of the government’s goal of making Singapore into a multimedia hub and centre for Internet activity. The total investment by government and industry was Sing. $350 million.

One year after its launch a survey has revealed that most *SingaporeONE* users fit the stereotype of being technogeeks (male and IT savvy). Most subscribers use the service for Internet shopping, followed by Internet banking, digital signatures, Internet telephony and lastly, videoconferencing.

In August 1999, NCB chief executive revealed that the NCB has undertaken aggressive new ventures to boost usage of *SingaporeONE*. Among the initiatives he described were:

- Visit by an NCB delegation in June 1999 to several parts of the United States for meetings with US-based Internet firms,
- Planning for local/Asian content for TV shows, interviews, news, music and broad-band community content, and
- Increasing usage among schools in Singapore.

Another related development is that sales of personal computers (PCs) in Singapore has steadily increased. For the first half of 1999, PC sales of 212,000 units worth US$389.67 million were recorded, compared to 164,000 units worth US$347.59 million for the same period in 1998 (*Straits Times*, August 18, 1999). This was an increase of 29 per cent.
Comparatively, Malaysia saw PC sales of 204,000 units worth US$246.18 million for the first half of 1999, an increase of 11 per cent over the previous year’s figures.

A third development is the extension to cyberspace and new media of the Copyright Act (Straits Times, August 18, 1999). The amended copyright laws, passed by the Singapore Parliament on August 17, makes provision for suing people who copy computer programmes and pictures off the Internet indiscriminately. The amended act will also cover digitally-encoded texts, graphic multimedia productions and compilation of materials from different media.

From the above account, it can be seen that IT in Singapore will continue to grow in the next few years and into the 21st century, consonant with the government’s intention of making Singapore the hub of communications in this region.

D. SINGAPORE AND MALAYSIA: SOME COMPARISONS

Writing more than two years ago, BHUYIAN (1997) noted that Malaysia’s ambitions to transform itself into a Southeast Asian hi-tech powerhouse had clear implications for well-wired Singapore. In his paper, he addressed the following questions:

- Is Malaysia a real threat to Singapore’s hi-tech supremacy?
- What are the conducive policy issues Malaysia should consider to achieve its goals?
- What are the obstacles Malaysia would face to implement its plans?
- Is there any provision to protect cyberproperty?

He concluded that Malaysia’s information technology developments will not affect Singapore because Singapore keeps abreast of technology and preserves its cutting edge on competition and survival.
Has the situation changed in the intervening period, and if so, to what extent and in which directions? For one, there was no Asian financial crisis foreseen in early 1997, and this has considerably altered the equation for all of Asia, inclusive of Singapore and Malaysia. The most serious consequence has been the decline in the value of currencies of both countries vis-à-vis currencies of developed countries. The Singapore dollar fell from about 1.50 in early 1997 to about 1.70 currently, while the Malaysian ringgit’s fall was even more drastic, from about 2.55 to 3.80 currently. During this period, the ringgit’s value against the Singapore dollar has also fallen, from about 1.50 to about 2.25 currently. This has also had implications for multinational corporations operating in these countries, particularly those in the telecommunications/electronics sector. Many of the giants are moving their operations from Singapore to Malaysia, a move that is cause for optimism in Malaysia but is viewed with concern in Singapore.

Will SingaporeONE eclipse Malaysia’s MSC, or will it be the other way around? Only time can provide the answer. However, I feel that this should not be an issue of “us versus them”; both countries should and must learn from each other and learn to live with each other, for each country’s survival depends on the other’s well-being.

**D. CONCLUSION**

We now review BHUYIAN’s predictions that were made 2½ years ago, particularly in the light of what has happened since then, and also in the light of predictions about what will happen in the future.

An analysis of the leapfrogging process reveals that some pre-conditions are necessary in order that the process is successful, as follows:
• Political stability and political will. In the context of Malaysia and Singapore, this exists.

• Economic stability. It is acknowledged that Singapore is better off in this respect. Malaysia is still on the road to recovery.

• Finding and attracting a skilled and competent workforce. Both countries have to cope with this challenge.

• Ability to deal with competition, especially from neighbouring countries. In this context, it can be added that both countries must learn to live with each other, to be complementary and not competitive.

• Changing the mindset of the people. The leadership in both countries has worked hard to achieve this.

In conclusion, it must be reiterated that Malaysia and Singapore, being neighbours with longstanding ties and relationship should continue to coexist peacefully. Both countries have the potential to succeed in their respective plans for the development of information technology and the creation of knowledge societies at the beginning of the coming millenium.

As an epilogue, I would like to refer to a recent issue of Newsweek (August 30, 1999) which had a cover story on Malaysia, featuring an interview with Dr. Mahathir Mohamed. The interview was given by Dr. Mahathir to foreign journalists soon after he moved his office to the new administrative capital, Putrajaya. The article concludes with a statement from Dr. Mahathir that building Putrajaya despite the financial crisis confirms that one man can triumph over global markets, over the so-called free-market experts. “If we recover, it is not by accident, it is by design. To run a country, you have to know everything that is going on,” said Dr. Mahathir. I shall leave it to you to ponder about these words.
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