Chapter FOUR
CHALLENGES IN ELECTRONIC COMMERCE

4.1 Introduction

We have found in the previous chapter that the adoption of electronic commerce in Malaysia amongst SMEs in particular has been very slow, and has yet to gather full momentum. In this chapter we shall explore some of the common problems and barriers faced by SMEs in Malaysia when it comes to Electronic Commerce adoption.

SMEs in Malaysia are not alone in being slow at adopting electronic commerce into their businesses. Experiences in neighboring countries seem to indicate that SMEs elsewhere are facing similar problems when it comes to incorporating Electronic Commerce into their business. Singapore, which has 92,000 SMEs employing 53% of the workforce, faces a major challenge in building up critical mass of Electronic Commerce users. A recent survey commissioned by the
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Singapore National Commission Board (2000) found that only nine percent of companies are buying and selling over the Internet while 63% say they don't need to engage in e-commerce.

A recent study by the Australian Electronic Business Network (2000) found that the prime reason for the lukewarm interest in Electronic Commerce is that it is not a widely recognized concept, and its significance is not fully understood. Many SMEs are concerned that any foray into e-commerce will consume scarce funds and management time.

The report also states that SMEs have little trained personnel and outsourcing it is an unwelcome diversion from their core activities. Many small businesses have inadequate capital and erratic cash flow and will not invest in e-commerce unless by necessity and promises return an investment.

A custom market research organization, Research International (2000) reported that security, cultural resistance, and limited Internet penetration remains the three main barriers to Electronic Commerce in Malaysia.

A study conducted by the National Productivity Council in the NPC Report (2000) found from a survey on 209 companies of different sizes and industry that the main problem faced in implementing ICT in their organization was high cost of maintenance, the lack of suitable software, insufficient training, keeping pace
with technological changes, the lack of qualified IT staff, high capital outlay, high IT staff turnover and resistance to change, amongst others.

In the study by the National Productivity Corporation and University Malaya (1999), factors hindering the usage of electronic commerce applications were identified as follows:

- Insufficient security to prevent hacking and viruses (30.3% of 590 respondents from companies of differing sizes and industries)
- Sales and marketing requires human interactions (28%)
- Insufficient security for online credit payment (26%)
- Cost of setting up electronic commerce is high (25.7%)
- Need of additional staff to manage Electronic Commerce applications (23.2%)

In the rest of this chapter, we shall explore several main reasons why e-commerce is slow to take off in Malaysia amongst SMEs, namely:

1. Lack of knowledge in Information Technology
2. Low appreciation level of the benefits of electronic commerce.
3. Electronic commerce is not a priority
5. Fear of fast changing technology.
6. Cultural Inertia
7. Low peer participation in the industry
8. Security and legal issues
9. Lack of knowledge in electronic commerce strategy
10. Lack of infrastructure/broadband access.

4.2 Challenges in Electronic Commerce

4.2.1 Lack of knowledge in Information Technology

The most fundamental problem in the case of electronic commerce adoption is that most of the local SMEs do not understand IT. This inadvertently leads to technology phobia, due to the limited knowledge of the technologies involved in electronic commerce. The Electronic Commerce Masterplan for Malaysia (1999) found that SMEs acknowledge there is currently a lack of skilled resources to seize the opportunities and overcome the barriers to Electronic Commerce.

Many SMEs started out as family business and many still run their business this way, which is less easy to translate into e-business as compared to multinational companies, which are managed professionally. In Malaysia, most SME operators venture into industries as alternative careers. The lack of educational and career opportunities saw them starting of as apprentices and then skilled workers before becoming entrepreneurs. There will be a change of guard as the second generation, who are generally more educated, take over, which will perhaps put SMEs on a firmer footing in terms of Electronic Commerce.
Furthermore, according to the SME Association (2000) up to 60% of SME users and proprietors outside the Klang Valley do not understand English. Most of these SMEs are owned by Chinese educated entrepreneurs. But as most SMEs expand they will hire English educated managers who may become more proficient in computers. The language barrier still remains a big obstacle for the SME. This is the group needed to speed up the rate of adoption of ICT where the rate of investment in ICT is still worrying low.

Electronic commerce needs to be demystified for the SME sector. The multitude of technology must be clarified in a simple, easy to understand campaign. The simplest and easiest to install electronic commerce technologies should be promoted first such as electronic mail and access to online business intelligence services. SMEs should be able to consult multidisciplinary supplier independent centers, either publicly or privately supported which explain and help implement Electronic Commerce technologies.

4.2.2 Low appreciation level of the benefits of electronic commerce.

Results from early adoption of Electronic Commerce capabilities have not always live up to expectations possibly due to low customer usage or the lack of integration into the SMEs business models. From the previous chapter, SMEs clearly have only superficial knowledge of the emerging global business communications and information technology despite the extensive media
coverage and government efforts allocated to the Internet and the Information Superhighway.

The Electronic Commerce Masterplan (1999) found that SMEs perceive a high degree of significance on electronic commerce benefits offered to their companies. Electronic commerce is seen as a significant enabler to reach the international market more quickly and to improve information flow at both the company and inter company levels. However, the reduction in operating costs is not perceived to have significant benefits from electronic commerce applications due to the current high bandwidth costs that may drive up operating costs more significantly.

Even though some SMEs have websites, they are inadvertently lost among the millions in cyberspace. SMEs are concerned about how potential customers can find their site through the maze of alternative websites. In this context the importance of brand management cannot be underestimated. In the Internet, you might be a click away from competition, but customers are more likely to click on a WebPages that carries a brand they recognize.

Therefore the Internet allows SMEs to implement, through sufficient resources and a lot of planning, new and possibly cheaper strategies to build brand names sadly, currently many SMEs believe that electronic commerce may increase the complexity of their business systems rather than facilitate positive change, as they refuse to look at the long term prospects of electronic commerce.
4.2.3 Electronic commerce is not a priority

Whilst the SME are aware of increased use of technology for business, they are predominantly concerned with more fundamental issue such as staying in business 'this week', trying to carve a profit, coping with regulatory and taxation matters and thwarting competition. The level of appreciation of SMEs today concerning ICT and Electronic Commerce is still low.

4.2.4 Lack of financial and human resource.

Whilst local SMEs have been criticized for not hopping on the ICT bandwagon, it has been pointed out that such solutions are way beyond their financial reach. Most SMEs cannot afford the RM 10,000 to RM 30,000 price tag of systems without government grants so they cant afford the system however much they appreciate the benefits. Neither can they afford the recurring costs of ownership such as annual license and ownership fees.

Even when the initial startup costs are manageable for smaller companies, the costs in adding electronic commerce capabilities as the company grows in size and volume could be prohibitive to most SMEs. Expenses such as databases and webservers might be a large percentage of revenues.
Most SMEs in Malaysia lack the manpower and funds to see through system implementation, which typically takes 6 months to a year. Most do not have sales and marketing staff, who knows how to handle orders received electronically, process the order and manage the shipping to the customers. SMEs usually lack the skill, understanding or resources to investigate and search out the many alternatives for electronic commerce. No in house expertise for system integration.

There is widespread acknowledgement that there is a growing skill shortage in Malaysia at all levels, particularly in technical fields. The perception that the required technical skills to design, build and maintain a website are hard to find, which in turn reflects the limited internal resources of these businesses.

4.2.5 Fear of fast changing technology

SMEs are worried that the existing IT infrastructure is still volatile and not mature due the constant changes and improvements being made. They are afraid that current technology may be superceded.

4.2.6 Cultural Inertia

The way businesses are conducted in Asia makes it more difficult to implement B2B electronic commerce than in the United States or in Europe. This is because
the relationship aspect between Asian businesses figures more prominently in a business transaction than the transaction itself.

There are difficulties in changing any fundamental and entrenched business attitudes. Clearly there is inertia associated with change especially for entrenched business attitudes. This inertia is exacerbated when there is a limited level of dedicated workforce to implement the change process itself.

To make matters worst, many SMEs are in industries and businesses that are well established, with low growth rates therefore they are comfortable with their established distribution channels and supplier arrangements, and are most reluctant to make the change to electronic commerce.

4.2.7 Low peer participation in the industry

SMEs predominantly focus on economic survival, and unless major trading partners insist on electronic communications, there is no or limited motivation to introduce technology for its own sake. As such, there is yet the critical mass of electronic trading partners to provide the necessary motivation to SMEs to embrace e commerce. Other challenges include coaxing business partners to participate in Electronic Commerce, the effects of electronic process on business partners. Government must also embrace Electronic Commerce technologies to stimulate SME participation.
One factor that is often cited as a limiting factor to the use of Electronic Commerce is the low usage of electronic commerce by the firm's main customer. Until a sufficient number of main local suppliers participate in online commerce activities, there is little incentive for the individual SMEs to become engaged in electronic commerce themselves. This is a Catch 22 situation, whereby if everyone adopts a wait and see approach, electronic commerce will never get off the ground.

To overcome this barrier, firms may want to, in the short term, seek access to international markets directly and use electronic commerce to sell their products and services to foreign customers.

4.2.8 Security and legal issues

Security issues seem to be the main barrier to the implementation of electronic commerce. Organizations are reluctant to use Electronic Commerce as they suspect and fear that electronic transactions are insecure such as credit card fraud, hackers, viruses and other loopholes that could be abused.

The PriceWaterhouseCoopers APEC SME Electronic Commerce Survey (1999) found that Security and legal issues are an important inhibitor to the growth of e-commerce, where it is particularly apparent in lower GNP economies. Measures to reduce legal barriers for electronic commerce is seen as important to the
development of electronic commerce in reducing uncertainties and build trust and confidence.

Several global studies have shown that lack of trust is an important barrier to the growth of Electronic Commerce. Credit ratings are a crucial prerequisite for Electronic Commerce. Online credit ratings provide a good picture of the trustworthiness of trading partners, which in turn creates an environment of trust that is essential for the growth of Electronic Commerce. Since credit ratings inspire confidence, SMEs that are credit rated can obtain better credit terms from prospective suppliers. According to Dun & Bradstreet (2001), the lack of authentic information about the trustworthiness of trading partners is a significant impediment in the growth of Electronic Commerce. SMEs will therefore benefit greatly from adopting credit ratings extensively.

For SMEs trading sensitive information with business partners, a stable electronic trading relationship is crucial. The lack of standards for conducting global electronic trades affects SMEs who are involved in international trades where there is still a lack of harmonization on issues such as taxation, consumer protection and dispute resolution.
4.2.9 Lack of knowledge in electronic commerce strategy

Successful SME e-commerce models are emerging from the practical implementation of electronic commerce in the marketplace. Some of these models imply fundamental shifts in business strategies, operations and technologies. According to PWC APEC SME Electronic Commerce Survey (1999), many SMEs have limited access about the business models and technologies that are the basis of e-commerce success. Firms have a difficulty demonstrating a positive ROI to justify their investment in e-commerce.

Nevertheless, E-business models for SMEs must be adapted to their competitive strength and not just replicate the approaches of bigger players. If a small enterprise tries to compete with a large multinational company by making large investments in powerful equipment for its website, its productive capacity will never allow it to recover its costs.

Putting up a website which opens windows to the global market is not a substitute for an export strategy such as impact of transport, insurance, tariffs on product competitiveness, regulations and standards that have to be reckoned with etc.

The inability of SMEs to understand the strategic role of a website in the operation of their business. Most businesses consider it as a most rudimentary for of advertising. Its potential role in positioning and branding the company and its use in its marketing mix are not well understood.
The lack of knowledge and advice on the ways to match the needs of SMEs with technical solutions at hand may result in choosing the wrong technical platform for their businesses. This could prove disastrous as the SMEs might find themselves ‘locked in’ to a solution that will put them at a disadvantage.

4.2.10 Lack of infrastructure/broadband access.

Costs of dial up access for Malaysian consumers is amongst the lowest in the world, it is still not as affordable in Malaysia compared to some other more developed APEC countries calculated on a per capita basis.

Furthermore, businesses and Government agencies are still levied with high and unaffordable access fees, which in turn prompts their relocation of hosting services to the USA and other parts of the world. Prices for the three main types of links, namely 1) shorthaul, broadband links, 2) inter-city links and 3) international circuits, are higher in Malaysia than most other countries.

The effect of these differences in the prices of infrastructure services is to render the cost of operating an Internet business to be more expensive in Malaysia than in other countries.
SMEs need access to communications services at favorable rates when compared to larger organizations that are secure, efficient and reliable. A more concerted effort is required to co-ordinate and standardizes the electronic commerce implementation of Government's and their agencies as the effect SMEs.

One of the factors hindering B2B development is the lack of broadband access among local companies. Broadband connectivity is still not popular amongst SMEs because the lack the knowledge to utilize the Internet to conduct their businesses, and high broadband charges. If they don't see that broadband Internet is going to help their businesses they are going to stick to dial up connection. They don't realize that there is much more to the Internet than setting up WebPages. Only when they want to do business will they embrace broadband. Communication over slow dial up liens and the base charges are not good enough for e-commerce.

In an article from the Internet site Cyberatlas (2002), according to Neilsen/Netratings, the number WebPages viewed by users that switched from narrowband like dial up to broadband such as ISDN, LAN, cable modems and DSL skyrocketed by 130% in the US in 2001. The number of pages accessed per person jumped 55% and the number of sessions increased 25%. New broadband users spent 23% more time surfing. Faster speeds improve the online experience and induce changes in online habits.
4.3 Conclusion

As in many other countries in the Asia Pacific Region, Electronic Commerce has made little impact on the economy of Malaysia. As an example, estimates made by Cutler and Company shows that the value of Electronic Commerce transactions being conducted over the Internet is RM 50 per annum out of a Gross Domestic Product of approximately RM 372 billion.

The burst of the technology bubble in 2000 has also been a cause of concern to industries in Malaysia. They are now extremely cautious when it comes to ICT having seen what has happened to the once high flying dotcom companies. Many industries in Malaysia are adopting a wait and see approach when it comes to investments in ICT. This has been especially so after the dotcom meltdown in 2000. This has severely affected the confidence of the SMEs in Electronic Commerce.

Most SMEs have a lack of urgency whilst adopting a wait and see attitude. Many multinational software vendors have claimed that Malaysian SMEs are reluctant to adopt design and collaboration tools and B2B Electronic Commerce in their businesses. Most SMEs believe that in the field of their businesses that are convinced that they will still be around in another 5 years from now without having to embrace such systems, despite what the doomsayers are saying.
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Many SMEs in Malaysia are concerned that they will merely become one amongst a million others in cyberspace. They believe that if they stay local and focussing only on the domestic market, they will have a larger physical presence with their customers.

The government, associated bodies and the private sector itself must all play a role in breaking down the barriers that are slowing the pace of Electronic Commerce adoption.