

An Empirical Evidence of SMEs Perception towards the Internet as a Business Tools: A Case Study in Kuching

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ABSTRACT

The main objective of the paper is to investigate the factors that influence the perception of the SMEs in Kuching towards the Internet as a business tools. This study was conducted in Kuching city where 50 questionnaires were distributed to identified SMEs currently operated in Kuching. The analysis of all the three identified factors (funds availability, knowledge of the Internet and Internet security factors) shows a significant relationship towards their perception.

Keyword: Internet, SME, Business

1.0 INTRODUCTION

In general there is no exact definition of small and medium enterprise (SME). However, the definition of SME usually based on fixed quantitative criteria such as number of employees, amount of capital, amount of assets owned and recently including the sales turnover of enterprise (Hashim & Wafa, 2002). In Malaysia, the Small and Medium Industries Development Corporation (SMIDEC) defines SMEs as manufacturing companies or companies providing manufacturing related services with annual sales turnover not exceeding RM25 million and full-time employees not more than 150. Other definition is SME is enterprise with net assets or shareholders funds of not more than RM2.5 million¹ and has 75 or less full time employees². For the purpose of this study, the latter definition is adopted.

Previously, internet is regarded as effective medium of communication for individual usage and for business purposes as well. However, in recent years, internet also offers business an opportunity to perform business transactions. Internet eliminates the boundary of geographical factor, time factor and cost factor for the businesses to reach and interact with customers, business partners and suppliers (Teo, 2002). Businesses may communicate with supplier that resides in other countries or even they are separated by the ocean.

Internet connection nowadays is affordable even to small businesses (Tan, 1999). As for initial cost, the business only need to acquire a personal computer, an internal or external modem and an internet account

with local internet service provider. Thus, SMEs may have an equal competitiveness with bigger firms (Kalakota and Whinston, 1997)

In Malaysia, an e-commerce survey done by MATRADE in April 1999 to businesses registered with them, showed that 68.9% have email facility, 65.8% have internet connection, 38.5 % have websites application and only 24.3% have online product catalogues³.

2.0 OBJECTIVES

The objectives of the study are to determine whether the three identified influential factors; funds availability, knowledge of the internet and internet security are significant towards the SMEs perception in adopting the internet as a business tools. The paper will also try to determine the most dominant factor perceived by the SMEs that most influence them.

3.0 PROBLEM STATEMENT

Internet benefits businesses not only as effective medium of communication but also may adopt as medium to conduct business transactions. Malaysian government have launched numerous opportunity and incentives to help Malaysian SME in adopting internet as their main business tools. However, Kotelnikov (2000) contended that, the SMEs in Malaysia are still not aware of the benefit of doing business through the internet because they are extremely busy with their routine problems and have little time with other activities. On the other hand, Sandra (2000) found that most of SMEs are not sure how the internet able to help their business. In spite of that, a study by 2000 Computer Virus Prevalance Survey by ICSA Lab, computer viruses are the biggest threat faced by online related businesses activities with an estimated cost of RM6.1trillion in worldwide companies damages (Madhavan, 2001). For this reason, this paper will investigate whether the identified variables are significant in influencing the SMEs in Kuching in adopting internet as business tools.

4.0 LITERATURE REVIEW

¹ According to Bank Negara Malaysia lending guidelines, extracted from Industrial Coordination Act 1975 (amendment 1986) and from the Promotion and Investment Act 1986

² according to Ministry of International Trade and Industry (MITI) of Malaysia

³ extracted from speech by MATRADE officer in a launching ceremony, available at <http://www.miti.gov.my/ucapan131a.htm> (date of access 30/08/2003)

There are numerous past literatures that studied the benefit and potential of adopting internet as business tools. The commercial functions that performed via internet are marketing, information gathering, customer services and electronic transactions (Soh et al, 1997)

In recent years, broadband technology offers high speed of internet connection that escalating internet users. Attaran & VanLaar (1999) said that there are many internet users carry out their daily activities over the internet. This shows that there is a huge market over the internet while promoting products to internet user will assist business to sell their product. Furthermore, nowadays consumer will do research on their choices of goods over the internet before purchase them in the shop⁴.

Internet is may provide mass and variety of information to its users. The information may also more easily shared among employees in an organisation, if the business is wired by internet. Email and messaging is reliable and almost in real time.

Adopting internet as business tools will also enhance the customers service and lead to customers satisfaction (Drennan & McColl-Kennedy, 2003). For example, web based finder or online directory would allow customer to locate product or services that is near to their resident. Furthermore, displaying contact number and email address would offer an easier medium for customer to contact businesses.

Payment to supplier or receiving payment from clients is easier by via electronic transactions and could be done over the internet. The facility regarded newest phenomenon for Malaysian businesses.

Despite many potential benefits that internet offers, many businesses especially the small businesses reluctant to adopt internet as business tools due to lack of capital, lack of skill worker to use the internet, and bad perception on view of security of the internet to perform their business functions.

Lack of Funds

The cost of having connected to the internet for business purposes includes the initial cost and the maintenance cost. Normally, SME in Asia including Malaysia are family owned. Therefore, these SMEs are adopting simple management structure and adopting internet is perceived as a complex management structure.

Given that it is family business, the main sources of the business are loan from relatives or capital raised by themselves. Consequently, this family need to borrow from bank in order to raise their sources in

order to acquire hardware and software for internet facility. This will increase the business risk and probably the business will face difficulty in convincing the bank to give them loan. Marron (2003) said that these businesses are too occupied with their daily business transactions. Therefore, the businesses are lack of time and money to come up with good and convincing proposal in getting the loan.

The fast and rapid changes of information technology (IT) probably create problems to businesses if the business tries to keep up with the technology changes (et al, 1997; Easley N & Tang M T, 1996). The changes will be costly for the business, as they need to acquire new hardware and software to keep up with the trend. Furthermore, businesses not only need to keep up with technology, but also must be equipped with sufficient security measure such as firewall and updated anti-virus. These are necessary in order to avoid losses to virus attacks and computer theft. On the other hand, businesses need to employed skilled worker or retrain the existing worker so that they would use the new technology efficiently and effectively. Consequently, more funds are needed to support.

Furthermore, Awang (2001) contended that, 87% of the SMEs are slow in adopting the online business due to the "wait and see" attitude with two valid reasons; unsure of getting people to visit their site and uncertain of the return on investment (ROI) by doing so.. Marron (2003), disclosed that the lack of resources, time constraints and lack of fund contribute to the SMEs failure reasons to adopt the internet as a business tools.

Knowledge of Internet

Adopting internet not only to acquire necessary equipments and using the internet facility but business must also have strategies in adopting the internet. As describe by McKeown & Phillip (2003) information technology must be utilised to support business but not vice versa. Croteau and Bergeron (2001) adequate deployment of information technology would support strategic level activities, hence will affect organizational performance.

Lack of skilled human resources in SME is one of factor deterring business from adopting the internet as their business tool (Marron, 2003). SMEs generally have low number of employees and most of them are multi-tasking. Consequently, SMEs would be lack of skilled human resources in keeping up with the technology. Further, the employees must know how information technology functions in their business and services (Loh, Chah & Menkhoff, 2001) in order to use the technology effectively.

Security

Trust is the key success of any business organisation (Guly, 1998; Mand, 1998). Many of business still do

⁴ Extracted from article **Survey: A perfect market**; published in Economist May 15, 2004

not trust that internet is a secure medium of conduction business transaction (Labuschagna & Eloff, 2000). The more people use internet for their daily activities, the anxiety over security will be increased (Corbitt et al, 2003).

The mistrust on conducting commercial functions over the internet mainly as a result of hackers and viruses threat. Hackers will steal important data of businesses and may put on heavy losses to the business and these losses not merely financial losses, but also included reputation and loss of customers trust on top of financial loss.

Furthermore, security awareness and implementation is increasing in view of Malaysian businesses but unfortunately the security technology adoption in Malaysia is still in early development (Yusuf, 2001).

5.0 RESEARCH HYPOTHESES

For this research, three hypotheses were establish to test whether there are significant relationship between the three identified variables with the perception of SMEs adoption of the Internet as their business tool.

- Hypotheses 1: Lack of Funding in relation to the internet implementation cost is significant towards the perception of the SMEs in Kuching towards the Internet as a business tools
- Hypotheses 2: Knowledge of the Internet is significant towards the perception of the SMEs in Kuching towards the Internet as a business tools
- Hypotheses 3: Security is significant towards the perception of the SMEs in

Kuching towards the Internet as a business tools

6.0 METHODOLOGY

According to Ministry of Industrial Development (2002), there are around 175 SMEs operated in Kuching. However, due to the time constraints, only 50 SMEs operating in difference nature of businesses were selected to be the respondents of this study.

A set of close ended questionnaire was actually sent to the manager or person who holds the highest management power in the Company. The questionnaire was divided into 3 Parts: Part A asking about the company background, Part B asking about the company and the Internet and Part C asking about the company’s perception on towards the Internet as a business tools. The questions were based on the three identified factors, lack of capital, knowledge of Internet and security. Likert scale types of questions were used to seek respondents opinions ranging from agree to disagree.

The data then was run using the Pearson Chi Square testing in Statistical Package for Social Sciences (SPSS) to determine the significance relationship between the identified dependent and independent variables.

7.0 FINDINGS AND DISCUSSION

All the 50 questionnaires were completely answered by the respondents and the results for Part A are presented in the following table:

Table 1: Descriptive Statistics of Part A

| Item | Frequency | Percentage (%) |
|---|-----------|----------------|
| Year of Establishment | | |
| 1960-1970 | 1 | 2 |
| 1970-1980 | 10 | 20 |
| 1980-1990 | 15 | 30 |
| 1990-2000 | 24 | 48 |
| Types of Businesses | | |
| Furniture & Fixture Parts | 6 | 12 |
| Manufacturing of Plastic Products | 5 | 10 |
| Electronic Products & Components | 4 | 8 |
| Manufacturing of Cement & Concrete Products | 4 | 8 |
| Manufacturing of Architectural Metal Products | 10 | 20 |
| Engineering & Construction | 4 | 8 |
| Manufacturing of Steel Roofing Products | 3 | 6 |
| Manufacturing of Metal Parts | 4 | 8 |
| Glass Art Works & Design | 4 | 8 |
| Food Related Industries | 6 | 12 |
| Number of Full Time Employees | | |
| 1-20 | 18 | 36 |
| 21-40 | 12 | 24 |
| 41-60 | 10 | 20 |
| 61-75 | 10 | 20 |

| Company Paid Up Capital | | |
|--------------------------------|----|----|
| <RM 1million | 16 | 32 |
| RM 1.0million- RM 1.5 million | 12 | 24 |
| RM 1.6million- RM 2.0 million | 6 | 12 |
| RM 2.1million- RM 2.5 million | 16 | 32 |

From the table we can see that 48% of the company established between the years 1990-2000. Majority of the respondents (88%) involve in manufacturing industries from various business operational background. When looking at the number of employees, it seems that they employ quite a small number of full time employees. Only 40% are able to

employ more than 40-75 full time employees and these companies fall into the categories of holding more than RM1.6 million paid up capital.

However, the results for Part B are presented in the following table:

Table 2: Descriptive Statistic of Part B

| Item | Frequency | Percentage |
|---|------------------|-------------------|
| The Internet Is Necessary Tools For Businesses | | |
| Yes | 49 | 98 |
| No | 1 | 2 |
| Number of SMEs actually use the Internet as a Business Tools | | |
| Yes | 47 | 94 |
| No | 3 | 2 |
| Average Number of times Accessing the Internet | | |
| Everyday | 37 | 74 |
| 2-3 days per week | 6 | 12 |
| Once a week | 3 | 6 |
| Less often | 1 | 2 |
| Not applicable | 3 | 6 |
| Average hours logged On To The internet | | |
| < 1 hour | 16 | 32 |
| 1-6 hours | 23 | 46 |
| 6-9 hours | 6 | 12 |
| >9 hours | 2 | 4 |
| Not applicable | 3 | 6 |
| The Internet Uses: sending Promotional Notices to Customers | | |
| Yes | 14 | 28 |
| No | 33 | 66 |
| Not applicable | 3 | 6 |
| The Internet Uses: Interact With Customers & Suppliers | | |
| Yes | 33 | 66 |
| No | 14 | 28 |
| Not applicable | 3 | 6 |
| The Internet Uses: Searching Related Information to Company business | | |
| Yes | 39 | 78 |
| No | 8 | 16 |
| Not applicable | 3 | 6 |
| Company Website | | |
| Yes | 25 | 50 |
| No | 22 | 44 |
| Not applicable | 3 | 6 |

The above table reveals that 98% of the SMEs agree that the internet plays a necessary tools for business but only 94% of them actually use the Internet as one of their business tools. The study also expose that 74% of the SMEs do access the internet everyday but majority of them (46%) spending only between 1 to 6 hours per week.

The table also illustrates that majority of the SMEs (78%) utilising the Internet searching for information related to their company and 66% of the SMEs actually use the internet as one of communication tools with their customers and suppliers. Conversely only 14% use the Internet as a mean of sending promotional notices to customers and only 50% of the

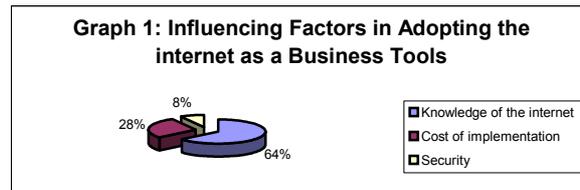
respondents possess their very own company's web site.

Findings in Part C is presented in Table 3 reveals that all the three hypotheses are significant towards the SMEs perception towards the Internet as their business tools.

Table 3: Summary of Hypotheses Result

| | <i>Pearson Chi Square</i> | <i>Degree of Freedom</i> | Significance Level | Result |
|--|---------------------------|--------------------------|--------------------|-------------|
| Cost of implementation | | | | |
| Cost in Subscribing the Internet | 25.399 | 12 | 0.013 | Significant |
| Cost in investing IT infrastructure | 21.589 | 16 | 0.057 | Significant |
| Cost in employing IT literates | 13.763 | 12 | 0.032 | Significant |
| Cost in designing and hosting a website | 22.26 | 12 | 0.035 | Significant |
| Knowledge of Using the Internet | | | | |
| Knowledge in using the Internet is crucial | 13.396 | 12 | 0.034 | Significant |
| Knowledge in searching related information | 6.993 | 12 | 0.031 | Significant |
| English as the main language medium and its importance in using the Internet | 14.714 | 12 | 0.021 | Significant |
| Security | | | | |
| Hackers threat | 17.324 | 12 | 0.0134 | Significant |
| Viruses threat | 18.554 | 12 | 0.0741 | Significant |

In addition, the respondents were also asked the most influential factor affecting their perception on implementing the Internet as their business tools.



The result reveals that knowledge of the internet appears to be the most influencing factors to them (64%), followed by cost of implementation (28%) and the least concern security factors representing only 8% of the respondents.

Surprisingly, even though 56% of the SMEs hold the capital of less than RM1.5 million, of which much can be associated with the cost of implementation of the technology, respondents are more concern about the knowledge of using the internet itself more than the others. The perception of having the knowledge to deal with the internet may be due to the fact that the related internet technology knowledge is crucial especially where the internet is relatively new in Malaysia.

Moreover, according to the study done by The Office of Small and Medium Enterprise Promotion (2001) majority of the SMEs entrepreneurs and employees have relatively low education and their accesses to information are quite limited. On the contrary, Malaysia government, through various programs has provided financial vehicles for the SMEs to speed up their IT related resources and technological support (Sandra, 2000) but only a small number of the SMEs benefit from the program. Further research should be

done to look at this matter especially SMEs in Kuching.

In order for an organization to employ IT related technologies in their day to day business operations, IT literate workers should be employed. The literate level may be determine by attending short courses or workshop, through formal education or “informal” skill (i.e. experiencing and learning on their own) in using the internet. A study by Marron (2003) revealed that 40% of the SMEs employees in the Canada do not know how to use the internet as a business tools. Marron (2003) also contended that the SMEs in Canada are slow in adopting the internet in their businesses as compared to larger corporation. However, in Malaysian case, according to Justin (2002), the local Malaysian SMEs have not yet installed the internal IT infrastructure e.g. LAN and less than 30% have the internet access. On the contrary, 94% of the respondents in Kuching have the internet access. This is may be due to fact that as years goes by, people are more aware of the internet capability and contribution as their business tools.

Another finding by Loh et al (2001), most of SMEs in Singapore fail to implement the It related technology including the internet as their business tools due to the lack of management of know how, qualified staff

and organizational peculiarities of small family firms. In case on Kuching, this may be true for the case of the 3 SMEs which has yet to adopt the internet as their business tools.

Even though many study reveals that hackers and viruses can cause a more depressing experience, respondents seems to be less concern about these issues. The assumption may be, they don't have any experience attacked by hackers and viruses therefore they cannot really associated viruses threat with the internet adoption as a business tools. The Age (2003) reveals that, 14% of the SMEs in Australia were concerned about hacking activities. In relation to that, security technology in Malaysia in still at its infancy level (Yusof, 2001). Furthermore, Awang (2003) reported that between August 1997 and July 2002, around 3,000 cases of cybr crimes and Internet security breaches were reported and another 122 cases in the first quarter of 2003.

8.0 CONCLUSION

To conclude, much need to be done to improve the SMEs perception towards the implementation of the internet as one of their business tools since they perceived that funding availability, the knowledge of using the internet and security factors have significantly influence their perception. Apart from government support, the SMEs managers and owners in this study seems to have their own initiative to adopt the internet as their business tools. However, they should be more concern about the security factors on top of the other factors as contended by Marron (2003), security and privacy issues are the critical barriers to the internet adoption for businesses as well as consumers.

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