# THE USE OF INTERNET FOR BUSINESS: OPPORTUNITIES AND CHALLENGES

## CHUAH TOON HONG

Bachelor of Electrical Engineering The University of Melbourne Victoria, Australia 1991

Submitted to the Faculty of Business and Accountancy,
University of Malaya, in partial fulfillment
of the requirements for the degree of
Master of Business Adminstration

1999

Dimikrofisken No. Mikrofis.	pada	1620	2.2002 
		m.	
HAMSIAH	UNIT FE	HAMAD PROGE TAKAA	RAFI N UTAMA

## **TABLE OF CONTENTS**

1. INTRODUCTION	1
1.1 The Use of Internet for Business	1
1.2 Research Questions	2
1.2.1 Research Objectives	3
1.3 Significance of the Study	3
1.4 Scope of the Study	4
1.5 Research Approach	5
1.6 Limitations of the study	6
1 6 1 Survey	6
1 6.2 Other Important Factors	6
1.7 Organisation of the Study	7
2. LITERATURE REVIEW	8
2.1 The internet	8
2.2 World Wide Web (WWW)	9
2.3 Characteristics of Internet	9
2.4 Internet Services	11
2.4.1 Internet Access	11
2 4.2 Electronic Mail (E-mail)	11
2 4 3 Web Pages and Web Sites	17
2.5 The Internet as a Commercial Medium	12
2.5.1 Internet in Asia	13
2.5.2 Internet in Malaysia	13
2.6 Internet Surveys on Users	14

2.6.1 GVU 9 <sup>th</sup> WWW User Survey	14
2.6.2 1st Asian AltaVista Asianwide User Survey (1997)	15
2.7 Business Use of Internet	16
2.7.1 Marketing and Advertising	17
2.7.2 Market Research and Information gathering	17
2.7.3 Customer Service and Support	18
2.7.4 Electronic Commerce	18
2.7.5 Communication and Other Functions	19
2.8 Factors Influencing the Use of Internet for Business	20
2.8.1 Benefits to the Firms	21
2.8.2 Firms Perception on Internet and E- Commerce	23
2.8.3 Firm Size	26
2 8 4 Information Need	28
2.8.5 Competitiveness of Environment	29
2 8 6 Staff Internet Knowledge	29
2.8.7 Barriers to the Use of Internet	29
3. RESEARCH METHODOLOGY	34
3.1 Research Models	34
3.2 Research Hypothesis	35
3.2 Research Hypothesis 3.3 Sample	35
3.3 Sample	38
3.3 Sample 3.3 1 Internet Survey	<b>38</b>
3.3 Sample 3.3.1 Internet Survey 3.3.2 Survey by Traditional Method	<b>38</b> 38 38
3.3 Sample 3.3.1 Internet Survey 3.3.2 Survey by Traditional Method  3.4 Data Collection Procedure	38 38 38 39
3.3 Sample 3.3 1 Internet Survey 3.2 Survey by Traditional Method  3.4 Data Collection Procedure 3.4 1 Data Collection Method	38 38 38 39
3.3 Sample 3.3 1 Internet Survey 3.2 Survey by Traditional Method  3.4 Data Collection Procedure 3.4 1 Data Collection Method 3.4.2 Survey Questionnaires	38 38 39 39 40
3.3 Sample 3.3 1 Internet Survey 3.3.2 Survey by Traditional Method  3.4 Data Collection Procedure 3.4.1 Data Collection Method 3.4.2 Survey Questionnaires  3.5 Measurement	38 38 39 39 40
3.3 Sample 3.3.1 Internet Survey 3.3.2 Survey by Traditional Method  3.4 Data Collection Procedure 3.4.1 Data Collection Method 3.4.2 Survey Questionnaires  3.5 Measurement 3.5.1 Likelihood of Using Internet	38 38 39 39 40 43

3.5.5 Information Need, Competition and Staff Internet Knowledge	44
3.6 Data Analysis Techniques	44
4. RESEARCH RESULTS	46
4.1 Instrument Validation	46
4.1.1 Factor Analysis	46
4.1.2 Reliability Test	49
4.2 Characteristics of Organisations	50
4.2.1 Perception Towards Internet	52
4.2.2 Internet Usage Pattern of Organizations	54
4.2.3 Internet Applications in Business Process	56
4.3 Hypothesis Testing	58
4 3 1 Likelihood of Internet Adoption	58
4.3.2 Extent of Using Internet for Business	63
4.4 Barriers to The Use of Internet for Business	68
4.4.1 Reasons for not using or using more of Internet applications	68
4.4.2 Problems that faced by the Internet users	71
5. CONCLUSION AND RECOMMENDATIONS	74
5.1 Summary of Results	74
5.2 Conclusions	77
5.3 Suggestions for Additional Research	78
5.4 Implications of the Research	79
6. BIBLIOGRAPHY	80
7. APPENDICES	84

### LIST OF TABLES

Table 2-1 World Web Revenues	12
Table 2-2 Cost of New Web Site	30
Table 4-1 Factor Analysis - Perception Towards Internet	47
Table 4-2 Factor Analysis - Information Need, Competition and Staff Internet Knowledge	48
Table 4-3 Reliability Test - Cronbach Alpha	49
Table 4-4 Characteristics of Organisations	51
Table 4-5 Perception Towards Internet	52
Table 4-6 Possibility of Adopting and Using More of Internet in the Near Future	53
Table 4-7 Internet Usage Pattern	55
Table 4-8 Business Use of Internet	56
Table 4-9 E-Commerce - Planning to use within next 12 months	57
Table 4-10 Pearson Correlation Matrix - Likelihood of Using Internet	58
Table 4-11 t-test	59
Table 4-12 Chi-square test - Likelihood and Firm Size	60
Table 4-13 Chi-square Test - Firm Size and Internal IS	61
Table 4-14 Discriminant Analysis - Likelihood of Using Internet	61
Table 4-15 Results of Discriminant Analysis - Significant Variables Only	62
Table 4-16 Pearson Correlation Matrix - Extent of Using Internet	64
Table 4-17 Regression Analysis - Extent of Using Internet	65
Table 4-18 Factor Analysis - Barriers	68
Table 4-19 Factors Analysis - Problems	71
Table 5-1 Summary of Hypothesis Testing	75
Table 7-1 Discriminant Analysis	84
Table 7-2 Regression Analysis	85

#### **ACKNOWLEDGEMENTS**

I would like to express special thanks to my supervisor, Dr Ainin Sulaiman for her valuable guidance and whose many insights has helped to make this research possible. I am especially grateful for her patience in encouraging me to create new ideas and put them into practice.

Thanks, also, to my fellow course mates who were helpful in showing me the lights and to those organisations who took the time to answer the survey questions and provided valuable information.

Finally, I wish to express my sincere appreciation to my family for their constant support, encouragement, and sacrifice in motivating me to complete this MBA course.

#### **ABSTRACT**

The Internet in recent years has gained huge popularity among the business throughout the world. However, the use of Internet by the Malaysia business is still at the early stage. Therefore, this paper intends to investigate how the business in Malaysia used Internet and what factors and barriers that influenced their decisions in using Internet. Firstly, the business processes in which Internet was used were identified and the findings showed that most organisations use Internet for communication and information sharing, marketing and advertising, customer service and support, market research and information gathering, and to a lesser degree. electronic commerce. Secondly, the perceptions of the organisations towards Internet was found to be highly positive and this has contributed significantly in motivating the organisations to use Internet. Other influencing factors include firm size, export orientation, target customers, availability of in-house development team, and ownership. Thirdly, the problems and concerns faced by the organisations were investigated and they include cost, security, potential, application difficulties, infrastructure, marketing and service and support. The findings showed that Malaysian business has yet to capitalise the opportunities provided by the Internet. However, they are aware of its benefits and has indicated interest in adopting and using more Internet in the near future