

**THE STUDY OF PEOPLE'S ACCEPTANCE TOWARDS
ONLINE BANKING**

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DEDICATION

This thesis dedication to all my family with full of love.

ABSTRACT

The online banking was recognized in Malaysia in 2001 toward development of technology and allows people to manage their account and transactions using internet. However, this system not fully utilize regarding to the number of people visit the physical bank is still high. This also proved by the statistic of online banking subscribers using the online banking in Malaysia is not drastically increase as the statistic of internet user since 2006-2009. Theoretically, the increment for both statistics should be equal. Moreover, the criminal cases happen all over the world includes Malaysia and create the negative perception among people towards online banking. The others internal factors that could be considered is the motivation, understanding and awareness among the people to the online banking. All these reasons encourage the researcher to investigate what exactly the main factor attracts people to use online banking. However, the researcher is limiting the study by focus on the internal factors affect the number of people using the online banking, Malaysia. The study focused on intrinsic and extrinsic motivation represented by the perceived usefulness (PU), perceived ease of use (PEOU) and perceived enjoyment (PE) as the independent variables in this research. Whilst, the dependent variables signified by the people's acceptance to the online banking. The objectives of this study are examine the factors that influence people using the online banking based on demography, investigate the main factor that motivates people deal with online banking particularly in banking environment, examine the other factors which influence people choosing online banking and lastly to investigate the relationship between PU, PEOU and PE towards online banking. A survey was conducted by distributing questionnaires to a randomly selected sample of 150 people located within the Klang Valley, in Malaysia. However, only 120 questionnaires were returned and available to analyze. The location of the survey was selected in view of its advancement, development and implementation of IT applications as compared to other locations in Malaysia. By connecting to the internet only the user can apply the online banking. To achieve the research objectives, researcher used SPSS Version 16.0 to analyze the data from questionnaires. The value of Cronbach's alpha is 0.852 explained the reliability of the study. This study found that, the main factor attract people to use online banking is because of PU, where the analysis proved that PU is significant to the usage and PEOU. Logically, the people use the service because it very useful and they will patronize with it if it is ease to use. The results also revealed that most of working people patronize and familiar with online banking since most of them familiar with internet and have problem to visit the bank. Finally, the researcher hope that this study are valuable for future research, people and bank management in providing new insights about the online banking.

ABSTRAK

Perbankan internet di Malaysia telah bermula semenjak 2001 sejajar dengan perkembangan teknologi. Ini membolehkan pengguna menguruskan kewangan mereka secara terus melalui internet. Walaubagaimanapun, perkhidmatan ini didapati makin kurang memandangkan masih ramai orang lebih selesa berurusan terus dengan pihak bank secara fizikal. Penambahan kes penipuan melalui internet, turut menyumbang kepada persepsi negatif masyarakat terhadap perbankan internet. Selain itu, faktor dalaman iaitu tahap motivasi pengguna terhadap produk berteknologi turut menyumbang kepada masalah ini. Berdasarkan statistik pada 2006-2009 juga, kadar pengguna didapati masih kurang berbanding jumlah penambahan pengguna atau pendaftar internet setiap tahun yang semakin bertambah secara drastik. Sehubungan itu, penyelidik memilih untuk menjalankan penyelidikan terhadap permasalahan ini. Penyelidik hanya memfokuskan kepada motivasi iaitu interinsik dan ekstrinsik untuk mengetahui faktor dalaman yang mempengaruhi penggunaan perbankan internet. Motivasi ini diwakili oleh tiga faktor sekaligus menjadi pemboleh ubah tidak bersandar iaitu disebabkan oleh faktor keseronokan, kepentingan penggunaan dan mesra pengguna yang terdapat dalam penggunaan perbankan internet. Manakala bagi pemboleh ubah bersandar diwakili oleh penerimaan masyarakat terhadap perbankan internet. Dalam kajian ini, sebanyak 150 soalan soal selidik telah diedarkan secara rawak di sekitar Lembah Klang, Malaysia. Walaubagaimanapun, hanya 120 soal selidik yang boleh digunakan dalam kajian ini untuk dianalisa. Kawasan ini dipilih kerana kebanyakan kawasan telah dilengkapi kemudahan internet di mana ia memberi ruang besar kepada masyarakat untuk mengakses perbankan internet. Dapatan kajian mendapati faktor utama yang mempengaruhi penggunaan sistem ini adalah kerana kepentingan penggunaannya terhadap aplikasi harian. Kepentingan penggunaan perbankan internet juga mempunyai signifikan positif terhadap faktor mesra kepenggunaan, tetapi ianya memberi bertindak balas secara negatif terhadap faktor keseronokan ataupun kepuasan menggunakan sistem ini. Dapatan kajian juga mendapati antara faktor lain yang mempengaruhi penggunaan perbankan internet adalah kesibukan, jadual waktu yang padat dan masalah sosial lain seperti kesesakan lalu lintas dan sebagainya yang mendorong mereka untuk memilih sistem perbankan ini. Sejalan dengan ini, penyelidik berharap agar penyelidikan ini dapat menyumbangkan sesuatu yang positif bagi semua pihak termasuk pengguna, organisasi mahupun penyelidik yang lain. Menjadi harapan penyelidik agar kajian ini dapat membuka mata semua dalam memahami aplikasi perbankan internet pada masa kini dan akan datang.

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LIST OF ABBREVIATIONS

ATM	Automated Teller Machines
ANOVA	Analysis Of Variance Between Groups
BNM	Bank Negara Malaysia
BAFIA	Banking and Financial Institution Act
FDIC	Federal Deposit Insurance Corporation
ICT	Information Communication Technology
IT	Information Technology
MMS	Multimedia Messaging System
PU	Perceived Usefulness
PEOU	Perceived Ease Of Use
PE	Perceived Enjoyment
TAM	Technology Acceptance Model
TRA	Theory Of Reasoned Action
TPB	Theory Of Planned Behaviour
SFNB	Security First Network Bank
SMS	Short Messaging System
SPSS	Statistical Package For The Social Science

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter present background of the study, preliminary research, problem statement, research hypotheses, research questions, research objectives and significance of the study.

1.2 Background of the Study

The main function of banks is keeping our money and they are recognisable as a safe place to do so. Besides that, they also let us earn a certain amount of interest on the money deposited to them. Some banks provide services such as money transaction to the third party, mortgage, bill payments and loan repayments. Nowadays functions of banks are still same as before, and internet banks continue the same function. The only difference is in the way the transactions are made.

Banking business in Malaysia has been durable great transformation since independence in 1957. The first step in the evolutionary process was the gradual deregulation of the financial sector, which begin in the 1970's. In the 1980's the

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BIBLIOGRAPHY

- Adams, D.A., R.R. Nelson & P.A. Todd (1992). "Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication", *MIS Quarterly*, Vol. 16, No. 2, pp. 227-247.
- Agarwal, R., Prasad, J. (1999), "Are Individual Differences Germane To The Acceptance Of New Information Technologies", *Decision Sciences*, Vol. 30 No.2, pp.361-91.
- Al-Gahtani, Said S. (2003). "Computer Technology Adoption in Saudi Arabia: Correlates of Perceived Innovation Attributes", *Information Technology for Development*, Vol.10, pp.57-69.
- Ajzen, I. and Fishbein, M. (1980), "Understanding Attitudes and Predicting Social Behavior", *Prentice-Hall, Englewood Cliffs, NJ*. pp.34-45.
- Anonim. 1999 "*Internet Banking: Comptroller's Handbook*". *Comptroller of the Currency*, Administrator of National Banks.
- Ashur, H. Budi, H.(2005), Analisis Karakteristik Individu Dan Prilaku Pengguna Internet Banking: Reliabilitas Dan Validitas Instrumen Pengukuran, *Seminar Nasional Aplikasi Teknologi Informasi 2005*, pp. 39-44.
- Balachandher,K.,Santha,V.,Norhazlin,I.,(2005), "Electronic Banking in Malaysia: A Note on Evolution of Services and Consumer Reactions", Malaysia.
- Bank Negara Malaysia (1999). *The Central Bank and the Financial System In Malaysia-A Decade of Change*. Kuala Lumpur: Bank Negara Malaysia.
- Bank Negara Malaysia (2007), *Program Pendidikan Pengguna: E –Transaksi Dan Anda (Perbankan Internet)*. Kuala Lumpur: Bank Negara Malaysia.
- Bryman, A. (2004), *Social Research Methods*, Oxford University Press, Oxford.

- Burnett, J.J. (1993) *Promotion Strategy*. Boston, UK: Houghton Mifflin Co.
- Cameron, Rondo, Bovkyin, V.I (1992), *International Banking 1870-1914*. Oxford: University Press Incorporated.
- Cox, D. (1988) *Success in Elements of Banking. 4th Edition*. Suffolk, London: Richard Clay Ltd.
- Cox, D. and Fardon, M. (1989) *The Business of Banking*. Worcester, London: Northwick Publisher.
- Cox, J., B, G. (2001), "Dale service quality and e-commerce: an exploratory analysis", *Managing Service Quality*, Vol. 11 No.2, pp.121-31. Dilley, Deborah (2008), *Essentials of Banking*. London: Northwick Publisher.
- Cuevas, J. (1998), "The Internet banking horizon: bleak or bright for community banks?", *Journal of Internet Banking and Commerce*.
- Daniel, E. (1999), "Provision Of Electronic Banking In The UK And The Republic Of Ireland", *International Journal of Bank Marketing*, Vol. 17 No.2, pp.72-82.
- Datamonitor (1999), "By 2004, in the UK, 3.5 Million Customers Will Use Internet Services In Retail Banking", *European Business Review*, Vol. 99 No.6, pp.10.
- Davis, F.D., (1989), "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology", *MIS Quaterly*, Vol 13, pp. 319-339.
- Davis, F.D., Bagozzi, R.P., Warshaw, P.R. (1989), "User acceptance of computer technology: a comparison of two theoretical models", *Management Science*, Vol. 35 pp. 982-1003.
- Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1992), "Extrinsic And Intrinsic Motivation To Use Computers In The Workplace", *Journal of Applied Social Psychology*, Vol. 22, pp. 111-32.

- Davis, F.D. (1993), "User Acceptance Of Information Technology: System Characteristics, User Perceptions And Behavioral Impacts", *International Journal of Man-Machine Studies*, Vol. 38, pp. 475-87.
- Davis, F.D. (1986), "A Technology Acceptance Model For Empirically Testing New End-User Information Systems: Theory And Results", PhD thesis, Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA.
- D. Robey and R.F. Zeller (1999), *Factors Affecting The Success And Failure Of An Information System For Product Quality*, New York: Interfaces Publisher.
- Donaldo, D.S.D., (1998), "Managers' Motivation For Using Information Technology", *Industrial Management & Data Systems* Vol.98 pp. 338-342.
- Eun, C., Resnick, B.G. (2004), *International Financial Management*. New York: McGraw Hill.
- Fenech, T. (1998), "Using Perceived Ease Of Use And Perceived Usefulness To Predict Acceptance Of The World Wide Web", *Computer Networks and ISDN Systems*, Vol. 30 pp.629-30.
- Fitzpatrick, T., Doran, D. (2003), "The Irish banking sector: a comparative overview", *The Irish Bankers' Review*, No.Autumn, pp.29-46.
- Gefen, D., Straub, D.W. (1997), "Gender differences in the perception and use of e-mail: an extension to the technology acceptance model", *MIS Quarterly*, No.December, pp.389-99.
- Goldfarb, J. (2001), "Customers prefer branch visits to online banking, survey finds", *BNA's Banking Report*, No.30 April, pp.739.
- Greene, W. (2000), *Econometric Analysis*, 4th ed., NJ:Prentice-Hall, Upper Saddle River.

- Gunasekaran, A., Love, P. (1999), "Current and future directions of multimedia technology in business", *International Journal of Information Management*, Vol. 19 No.2, pp.105-20.
- Gup, Benton E.(2002), *Future of Banking*. United States:Greenwood Publishing Group Incorporated.
- Guriting, P., Ndubisi, N.O. (2006), ""Borneo online banking: evaluating customer perceptions and behavioural intention", *Management Research News*, Vol. 29 No.1-2, pp.6-10.
- Hakan C ,(2007), "What Determines Turkish Customers' Acceptance Of Internet Banking?", *International Journal of Bank Marketing*, Vol. 26 No. 5, pp. 353-370.
- Hair, J.F., Babin, B., Money, A.H., Samouel, P. (2003) *Essential of Business Research Methods*. USA: John Willey & Sons, Inc.
- Hardjono, Thomas, Dondeti,Lashkminath R. (2005), *Security in Wireless LANS and MANs*. Artech House.
- Harian Metro, April 22, 2010, titled Penipuan Internet Meningkat.
- Holmes, T. (2002), "Crossing The Digital Divide; Is Owning A Computer Enough? Not Anymore", *Black Enterprise*, Vol. 32 No.9, pp.51-65.
- Howcroft, B., Hamilton, R. and Hewer, P. (2002), "Consumer Attitude And The Usage And Adoption Of Home-Based Banking In The United Kingdom", *International Journal of Bank Marketing*, Vol. 20 No. 3, pp. 111-121.
- Igbaria, M.,Iivari, J., and Maragahh, H. (1995), "Why Do Individuals Use Computer Technology? A Finnish Case Study", *Information & Management*, Vol.29, pp.227-238.
- Jasim, A. Hameeda, A.H. Nadhem, A.S. (2009), Clients Of Conventional And Islamic Banks In Bahrain, *International Journal of Social Economics*, Vol. 36, 7pp.1086-1112

- Jaska, P., Hogan, P.T. (2006), "Effective Management Of The Information Technology Function", *Management Research News*, Vol. 30 No.6, pp.420-31.
- Jones, Andrew (2004), *Management Consultancy and Banking in an Era of Globalization*. Palgrave Macmillan.
- Karjaluoto, H., (2003), "Individual Differences In Private Banking: Empirical Evidence From Finland", Proceedings of the 36th Hawaii International Conference on System Sciences (HICSS), *Big Island, Hawaii*, pp.182- 196.
- Kuczmariski, T.D. (2002) *Managing New Product*. New Delhi, India: Viva Books Private Limited.
- Lee, E., Lee, J., Eastwood, D. (2003), "A two-step estimation of consumer adoption of technology-based service innovations", *Journal of Consumer Affairs*, Vol. 37 No.2, pp.256-82.
- Lipscombe, G. (1990) *Banking: The Business*. London: Pitman Publishing.
- Liao, S., Shao, Y.P., Wang, H. and Chen, A. (1999), "The Adoption Of Virtual Banking: An Empirical Study", *International Journal of Information Management*, Vol. 19 No. 1, pp. 63-74.
- Mary J. Cronin (1999), *Banking and Finance on the Internet (Internet management Series)*. Hardcover Incorporated.
- Meidan, A. (1984). *Bank Marketing Management*. MacMillan Publisher Ltd.
- Mennel, S., Murcott, A. and van Otterloo, A.H. (1992), *The Sociology of Food: Eating, Diet and Culture*. London: Sage Publisher.
- Mullen, K.,Williams, R. and Hunt, K. (2000), "Irish Descent, Religion And Food Consumption In The West Of Scotland", *Appetite*, Vol. 34, pp. 47-54.

- Ndubisi, N. O., & Jantan, M. (2003), "Evaluating IS Usage in Malaysian Small and Medium-sized Firms Using the Technology Acceptance Model", *Logistics Information Management*, 16(6), pp. 440-450.
- Nunnally, J.C., and Bernstein, I.H (1994). *Psychometric Theory*. (3rd Edition). New York: Mc Graw Hill Ltd.
- Parasuraman, A., Berry, L.L, Zeithaml, V.A. (1991), "Understanding Customer Expectations Of Service", *Sloan Management Review*, Vol. 32 No.3, pp.39-49.
- Pavlou, P.A. (2003), "Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model", *International Journal of Electronic Commerce*, Vol. 7 pp.101-34.
- Pennathur, A.K. (2001), "'Clicks And Bricks': E-Risk Management For Banks In The Age Of The Internet", *Journal of Banking and Finance*, Vol. 25 pp.2103-23.
- Polatoglu, V.N., Ekin, S. (2001), "An Empirical Investigation Of The Turkish Customers' Acceptance Of Internet Banking Services", *The International Journal of Bank Marketing*, Vol. 19 No.4, pp.156-65.
- Pyun, C.S. (2002), "Internet Banking In The US, Japan And Europe", *Multinational Business Review*, No. Fall, pp. 73-81.
- Ram N.A., Albert.K, Srinivasa, R.L. (2008), "Online Banking Applications And Community Bank Performance", *International Journal of Bank Marketing*, Vol.26,pp 418-439.
- Ramayah, T., Lo, M. (2007), "Impact of shared beliefs on "perceived usefulness" and "ease of use" in the implementation of an enterprise resource planning system", *Management Research News*, Vol. 30 No.6, pp.420-31.
- Saad, R., Bahli, B. (2005), "The impact of cognitive absorption on perceived usefulness and perceived ease of use in on-line learning: an extension of the technology acceptance model", *Information & Management*, Vol. 42 pp.317-27.

- Sack, D. (2001), Whitebread Protestants, "Food and Religion in American Culture, Palgrave", *New York Research*, pp. 23-35.
- Sathye, M. (1999), "Adoption Of Internet Banking By Australian Consumers: An Empirical Investigation", *International Journal of Bank Marketing*, Vol. 17 No. 7, pp. 324-34.
- Schneider, I. (2001), "Is Time Running Out For Internet-Only Banks?", *Bank Systems & Technology*, September, Vol. 1, pp. 18-28.
- Shimp, T., Beardon, W.O. (1982), "Warranty And Other Extrinsic Cue Effects On Consumers' Risk Perception", *Journal of Consumer Research*, Vol. 9 pp.38-46.
- Stewart, Kate (2003), "Online Banking (Part 2)", *International Journal Of Marketing*, Vol. 21, pp.46.
- Straub, D., Keil, M., Brenner, W. (1997), "Testing The Technology Acceptance Model Across Cultures: A Three Country Study", *Information and Management*, Vol. 33 pp.1-11.
- Subramanian, G.H. (1994), "A Replication Of Perceived Usefulness And Perceived Ease Of Use Measurement", *Decision Sciences*, Vol. 25 pp.863-74.
- Succi, M.J. and Walter, Z.D. (1999), "Theory Of User Acceptance Of Information Technologies: An Examination Of Health Care Professionals", *Proceedings of the 32nd Hawaii International Conference on System Sciences (HICSS)*, pp. 1-7.
- Suh, B., Han, I. (2002), "Effect of trust on customer acceptance of internet banking", *Electronic Commerce Research and Applications*, Vol. 1, pp. 247-63
- Szajna, B. (1996), "Empirical evaluation of the revised technology acceptance model", *Management Science*, Vol. 42 pp.85-92.
- Taylor, S., Todd, P.A. (1995). "Understanding Information Technology Usage: A test of Competing Models", *Information Systems Research*, 6(2), pp. 144-176.

- Teo, T.S.H. (1999), "Intrinsic and extrinsic motivation in internet usage", OMEGA, *The International Journal of Management Science*, Vol. 27 No. 1, pp. 25-37.
- Tero, P., Kari, P., Heikki, K., Seppo, P. (2004) "Consumer Acceptance Of Online Banking: An Extension Of The Technology Acceptance Model". *Internet Research*, Vol. 14 pp. 224–235.
- The Star InTech, April 21, 2005, titled How To Make Online Banking Secure.
- Turban, E., Lee, J., King, D. and Chung, H.M. (2000), *Electronic Commerce: A Managerial Perspective*. NJ :Prentice-Hall, Upper Saddle River.
- Utusan Malaysia, 21 December 2009, titled Dibocor 'Orang Dalam'.
- Utusan Malaysia, Januari 7, 2010, Keselamatan Siber Rumah.
- Venkatesh, V. (2000), "Determinants Of Perceived Ease Of Use: Integrating Control, Intrinsic Motivation, And Emotion Into The Technology Acceptance Model", *Information Systems Research*, Vol. 11 No.4, pp.342-65.
- Venkatesh, V., Morris, M.G. Davis, G.B., Davis, F.D. (2003), "User Acceptance Of Information Technology: Toward A Unified View", *MIS Quarterly*, Vol. 27 No.3, pp.425-478.
- Ya-Yueh, S., Kwoting, F.(2004) "The Use Of A Decomposed Theory Of Planned Behavior To Study". *Internet Banking In Taiwan Internet Research* Vol. 14 pp. 213–223.
- Yakhlef, A. (2001), "Does the Internet compete with or complement bricks-and-mortar bank branches?", *International Journal of Retail & Distribution Management*, Vol. 29 No.6, pp. 272-81.
- Zarehan, S., Nahariah, J., Ong,H.B. (2009). "Technology Acceptance in Malaysian Banking Industry" *European Journal of Economics, Finance and Administrative Sciences*, Vol.2 pp.45-65.

Zheng, L., Yonghong, Z. (2005), "The Adoption of Virtual Banking in China: An Empirical Study", *Chinese Business Review*, Vol. 4 pp. 75-98.