Critical Success Factors for the Adoption of e-Banking in Malaysia

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Abstract: *The aim of this study is to examine the critical success factors for the adoption of electronic banking in the context of Malaysia. Dimensions such as trust, costs, security and privacy were examined. Results from a survey involving 268 respondents in Malaysia show user trust and privacy concerns have the highest effect towards electronic banking adoption in Malaysia. The findings of this study would help the banking sector to better understand their online banking market segment, their perception and behaviors in relation to using online banking services.*

Keywords: *e-Banking, Adoption, Trust, Costs, Security, Privacy, Malaysia.*

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1. Introduction

In the past ten years, the major lifestyle trend that has emerged is the widespread use of e-commerce applications in businesses [22]. As a result of e-commerce acceptance among the general internet users, e-banking adoption is expected to grow due to the accessibility of bank services online as well as the promotional efforts of banks to retain loyal customers [19]. Internet banking or electronic banking (e-banking) is simply customers doing their banking transactions over the internet using intelligent electronic devices such as personal laptops or smartphones [8, 31]. Globally, the banking industry is highly competitive with regards to e-banking, stimulating banks to rethink their commitment to information technology towards gaining competitive advantages [19, 25].

Decreasing bank operational costs, increasing efficiency [22], customers' loyalty and their shares, improving services and providing value added for their clients are the main advantages of e-banking [28]. Besides, the cost savings achieved by banks that offer electronic banking services has enabled them to offer lower or no service fees at all for e-banking services; as well as in some cases offer higher interest rates [15]. For many customers, factors such as higher level of flexibility and convenience of service delivery are also important and expected from banks [19, 29]. Nevertheless, some researchers also found that bank reputation and individual expectations are the reasons that customers switch to online banking [16, 30].

On the other hand, previous researchers have studied factors influencing adoption of online banking in different regions and found that the e-banking adoption rates are significantly different. For example in Finland, online banking adoption is about 70-80 percent of internet users, in Germany is 40 percent, and in Romania is only 10 percent [30]. These differences shows that determinants of e-banking studies deserves more rigorous study as e-banking features are unique and vastly different compared to traditional banking [30]. In Malaysia, although the internet penetration rate is higher than most neighboring countries, the adoption of e-banking is still low due to a myriad of related factors such as security, service quality, e-banking features, trust and marketing [21]. Therefore, assessing the factors that influence the adoption of e-banking in Malaysia is vital because the result will be beneficial for banks to understand customer's preferences, increase their loyalty and strategize accordingly to create the demand for e-banking [25, 32].

As studies on e-banking in Malaysia are limited [25, 32], this study examines the crucial factors that influence the adoption of e-banking such as trust, cost, security and privacy in Malaysian context. Nelson and Queenie [21] also indicated that prior studies on e-banking remain inconclusive and even in Malaysia, more evidence is necessary to confirm the key determinants of e-banking adoption. Therefore, the findings of this study aims to provide a greater understanding on the crucial factors and contribute to the current body of literature on e-banking.

2. Literature Review

For most customers, e-banking is certainly attractive to many due to lower costs and convenience; users are able to access banking services at virtually any time and any place [8, 30]. However, bank charges and internet connection expenses are known to be among the obstacles for online banking. To circumvent this problem, several banks encourage customers to use e-banking services by offering lower fees or better rates on deposits and loans [20]. According to a local study [32], the cost factor associated with use of internet and service charges is found to be significantly associated with e-banking adoption. The study reported that most of the users were aware of the fee charges and found it acceptable. Most of the customers profess that they will continue to use e-banking as the overall cost is negligible. On the contrary, another study [25] reported that cost of internet and computers does not significantly influence e-banking adoption.

The internet as a medium of communication for banking transactions presents a unique environment that differs from traditional face-to-face communication where there exists a greater level of uncertainty and impersonal relationship between the relevant parties [32]. This points out to the importance of trust towards every aspect of online interactions including e-banking. Therefore, trustworthiness is generally viewed as an important construct as it has a high impact towards customer's risk perceptions and attitude towards internet banking services [30, 34]. Customers have fears relating to bank privacy policies which have arresting influence on their willingness to engage in internet exchanges of money and personal information [3]. In addition, customer trust reflects the confidence of customers towards the bank competencies to provide reliable and secure e-banking transactions [6]. Trust issue in online services can also be viewed in several different aspects; for example, customers lack trust about the other party such as the vendor, internet or bank itself when they experience any situations that pertain to violation or erroneous exchanges of information online. Therefore, trust is defined as a multidimensional construct that is related to the individual, cultures and contexts [10, 30].

According to Joaquin *et al* [14], perceived risk is one of the factors of e-adoption of e-banking that can be viewed through several dimensions such as security risk and privacy risk [18]. Security risk is generally associated with loss of personal data or money and errors in transactions whereas privacy risk is associated with violations of customer' privacy such as disseminating customer information to other parties without their knowledge [18,32]. Generally, e-banking studies are supportive of security and privacy as critical factors that influence users' intention to adopt e-banking [9,32]. When business customers perceive e-banking transactions are not secure enough, they will not be willing to adopt e-banking [2, 5].

Therefore, one vital requirement of e-banking technology is incorporation of sufficient level of security and privacy features to encourage the adoption of e-banking [32]. However, laws relating to security and privacy issues remain ambiguous to many users. This affects the trustworthiness of e-banking from users' point of view. For example, in the case of a study in America, possibility of personal data transfer, loss of money in cash or credit, insecure transactions and hackers' threats are the main reasons for internet distrust among Americans [14,18]. Therefore, addressing the security concerns of e-banking that include privacy of personal information to fears of financial loss is a primary responsibility of banks [8].

To mitigate the security and privacy concerns of their customers, banks are compelled to incorporate new technologies such as encryption and verification in the security features of e-banking sites [3]. E-banking professionals should consider moderating these concerns by improving authentication processes, protecting password, supplying adequate information about site security, giving absolute loss guarantees, providing accessible customer service and educating customers on the features of e-banking [11, 28]. When customers perceived the security of the web site and ease of use as high, their satisfaction will increase. In effect, this will increase their loyalty towards the bank and likelihood of positive word of mouth in the context of e-banking services [3, 17]. Since clients' perception about e-banking security is influenced by publicity of the banks, banks need to design a plan to notify and update their customers about the rules, regulation and security level that is implemented [13].

3. Research Model and Hypotheses

The objective of this study is to examine the factors that influence the adoption of online banking in Malaysia. Specifically the study seeks to:

- Study the relationship between customers' trust and the adoption of e- Banking.
  According to [6, 12, 25, 27] trust is a critical factor in internet banking in the financial services sector and is a key influence in persuading customers to use internet banking. Trust on security and online banking will influence the adoption of e-banking [4, 34]. Besides, trust is especially important in online transactions [7]. Therefore, this study proposes the following:
  H1: There's a significant relationship between users' trust perception and the adoption of e-Banking.
- Study the relationship between costs and the adoption of e- Banking.

E-banking offers a competitive advantage to banks as it allows banks to reduce administrative and operating costs and leverage on these benefits by offering e-banking services for free or at a minimal fee [32]. In this study, it is predicted that that costs will have significant impact on adoption of e-banking [32]. Therefore, this study proposes the following:

H2: Charges/ Cost have significant effect on users' adoption of e-Banking.

- Find the relationship between privacy concern and adoption of online banking.

  Customers often have fears regarding how their online information is being distributed or used by banks which reflect their privacy concerns. Therefore, privacy is viewed as an essential factor towards adoption of e-banking [32]. This study proposes the following:

  H3: Privacy has significant effect on users' adoption of e-banking.
- Study the relationship between security and the adoption of e-banking.

  The most important challenge that banks are facing is how they can best address customers' security and privacy concerns. Fears of revealing personal information and insecurity have negative effect on adoption of e-banking [14]. Several studies have identified security to have an impact on customer's decision to adopt e-banking [9,32]. Therefore, this study proposes the following:

  H4: Security has significant effect on users' adoption of e-banking.

4. Methodology

In this study, one dependent variable and four independent variables are tested. Dependent variable is Adoption of Online Banking, and independent variables are Trust, Cost, Security and Privacy.

4.1. Research Instrument

In this research, data sources are from primary data and secondary data. Secondary data is obtained from related Journals, international conferences and online articles. For primary data, a questionnaire was designed for data collection which comprises to two sections:

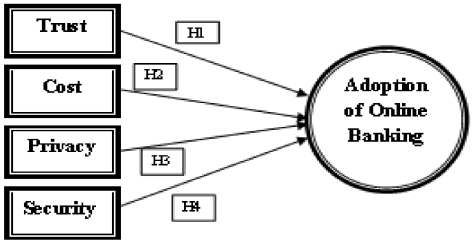

Figure 1: Research Theoretical Framework.

Section A contains the demographic information of respondents, which consists of gender and income level.

Section B measures the independent and dependent variables which include Trust, Cost, Security, Privacy and the adoption of online banking. In this section, each variable was measured by Likert Scale from Strongly Disagree to Strongly Agree.

4.2. Sampling

Survey questionnaire was distributed randomly to bank customers; commonly found nearby bank locations in Kuala Lumpur, Petaling Jaya, Cyberjaya and Melaka. We tried to control for gender to gather equal respondents from both genders. Upon removing incomplete questionnaires, data from 268 respondents were finalized for analysis.

4.3. Data Analysis

Statistical Package for Social Science (SPSS) software version 17 was used to perform various statistical analyses and hypotheses testing.

5. Results and Discussion

Two hundred and sixty eight (268) samples were used for data analysis and hypotheses testing. From 268 samples, 134 are male respondents (50%) and 134 female respondents (50%). The study found 44.8% of male respondents are active internet banking users; slightly higher than female 42.2%. Percentage of non-users is higher among female bank users (7.8%) compared to male which is 5.2%. However, there were no statistically significant differences between the male and female in the adoption of online banking [23].

Table 1. Gender of Respondents (By Usage).

	Percent	Cumulative Percent
Male - Users	44.8	44.8
Male Non-User	5.2	50.0
Female User	42.2	92.2
Female Non-User	7.8	100.0
Total	100.0	

Out of 268 respondents, 10.1% (n=27) had less than RM1000 per month, 14.2% (n=38) had RM1000-2000 per month, 17.5% (n=47) had RM 2000-3000 salary per month, 9.3% (n=25) RM 3000-4000 salary per month, 9.7% (n=26) RM 4000-5000 RM per month. Another 26 persons (9.7%) has more than RM 5000 salary per month. The majority of respondents do not have an income per month, 29.1% (n=78).

However, the obtained results of a previously reported study showed that the majority of the respondents are with monthly salary less than RM3000 in Malaysia [31].

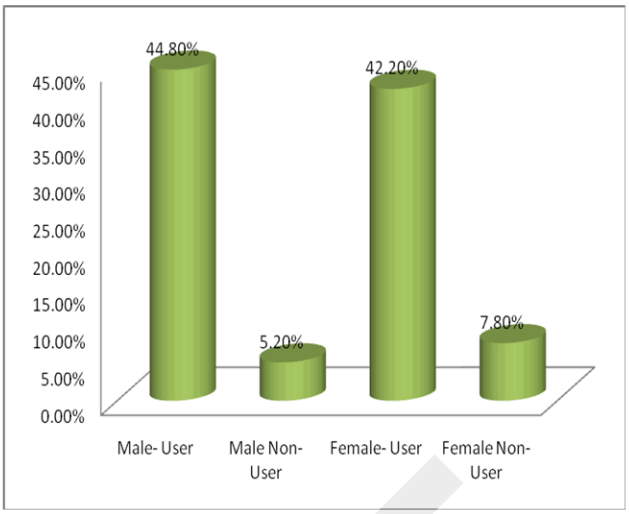

Figure 2. Gender of Respondents (Grouped by Usage).

Table 2. Monthly Salary Range of Respondents.

Salary Range	Frequency	Percent	Cumulative Percent
Less than 1000	27	10.1	10.1
1000-2000	38	14.2	24.3
2000-3000	47	17.5	41.8
3000-4000	25	9.3	51.1
4000-5000	26	9.7	60.8
> 5000	26	9.7	70.5
Not Disclosed	79	29.5	100.0
Total	268	100.0	

Among all variables, security ranked the highest mean (4.21), adoption ranked second (4.02), followed by privacy (3.87), trust (3.64), and lowest mean is ranked by fees and charges (3.52). All Means are higher than 3.5 and normally distributed based on normality test in Table 3.

Table 3. Descriptive Statistics of Research Variables.

	Min	Max	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Err	Statistic	Std. Err
Security	2.00	5.00	-1.07	.149	2.14	.297
Privacy	1.00	5.00	-1.07	.149	3.42	.297
Adoption	1.00	5.00	-.80	.149	1.84	.297
Costs	1.33	5.00	-.35	.149	.82	.297
Trust	1.00	5.00	-1.23	.149	3.47	.297

Reliability analysis was carried out to test for internal consistency of the research variables. Result shows all variables have high reliability (Refer to Table 4); obtained alpha score of more than 0.7 [23, 28]. For Security the Alpha value is 0.744; for Privacy is 0.853; for Trust Cronbach's Alpha 0.865, while Alpha value for Costs and Charges is 0.831. Finally for adoption of online banking, Cronbach Alpha value is 0.934.

Table 5 shows Pearson correlation analysis conducted for research hypothesis testing.

Table 4. Descriptive Statistics of Research Items.

Research Items and Computed Constructs	Mean	SD	CA(α)
1. Security	4.21	0.502	0.744
Security of e-banking is important for me	4.66	0.693	
The authorized username and password are important	4.66	0.611	
I do not save my login ID and password on the computer	4.48	0.846	
I do not leave my computer unattended, while connected to the e-banking services	4.47	0.795	
Online banks have ability of correcting erroneous transactions	3.57	0.986	
Online monetary transaction is safer than carrying money	3.99	0.889	
Overall online banking is highly secure	3.65	0.847	
2. Privacy	3.87	0.567	0.853
Confidential information is delivered safely from banks to customers	3.77	0.797	
Banking institutions keep customers information P&C	3.78	0.830	
The information found in the site is credible	3.68	0.761	
I find the website information trustworthy	3.72	0.750	
I can safely make an online transaction	3.88	0.786	
Privacy in e-banking is important to me	4.40	0.769	
Overall, online banking privacy is high	3.90	0.765	
3. Trust	3.64	0.546	0.865
I trust in internet banking services.	3.69	0.744	
I trust in the safety of online money transfer.	3.69	0.749	
Bank service personnel assist users in trusting internet banking.	3.47	0.809	
I trust the bank to handle my personal information in confidentiality.	3.65	0.804	
I trust the information presented on e-banking websites.	3.69	0.783	
Internet banking system can be attacked.	3.59	0.906	
I trust the bank's privacy protection to the users.	3.63	0.704	
Overall, I trust online banking.	3.72	0.707	
4. Costs and Charges	3.52	0.552	0.831
Prices of computer are reasonable and affordable.	3.55	0.746	
Fee of internet connection is affordable.	3.39	0.861	
E-banks charge lower transaction fees.	3.44	0.867	
Price of service fees is acceptable.	3.48	0.777	
E-banks charge annual fee.	3.00	1.013	
I won't terminate services even if bank charges annual fee.	3.26	1.010	
I can save my time and money by using internet banking.	4.12	0.783	
Transaction done at internet banking is less costly than bank branches.	3.79	0.835	
Overall, the fees and Charges are reasonable.	3.68	0.785	
5. Adoption	4.01	0.701	0.934
It's likely that I will use online banking.	3.97	0.771	
It is highly likely that I will adopt online banking.	3.96	0.780	
I would like to use internet banking.	4.07	0.741	
I intend to use online banking in the near future.	4.07	0.778	

Trust has the highest association on user's adoption of online banking (Correlation Coefficient of 0.613)

indicates high correlation; followed by Privacy (Correlation Coefficient 0.526) [9] indicating moderate correlation level; Costs and Charges (Correlation Coefficient 0.505) has moderate correlation level, and finally Security (Correlation Coefficient 0.449) has moderate correlation level.

Table 5 Pearson Correlation of Research Variables with users' Adoption of Online Banking

Research Variables	Adoption	Hypothesis	Hypothesis Substantiated	Correlation Level
Trust	0.613**	H1	Yes	High
Privacy	0.526**	H4	Yes	Moderate
Costs	0.505**	H2	Yes	Moderate
Security	0.449**	H3	Yes	Moderate

** Significant at 0.001 significance level

Finding of this study is consistent with findings by other works in the similar area of research [5, 13,25,32,33].

Further, Multiple Linear Regression (MLR) analysis was carried out to test the simultaneous contribution and predictive effect of the research independent variables to the adoption of online banking. Table 6 shows the result of MLR test.

Table 6 Result of Multiple Linear Regression Test.

Model	*SC Beta	t	Sig.
(Constant)		-1.105	.270
Trust	.345	5.381	.000
Cost	.203	3.599	.000
Privacy	.112	1.774	.077
Security	.222	4.157	.000

* Standardized Coefficient
Dependent Variable: Adoption

The adjusted R Square from the result of MLR reveal 0.472, which indicates that approximately 47% of the variation in online banking adoption can be explained by the variables analyzed in this research. ANOVA result also shows a model fit with F statistics value of 58.660 and p-value < 0.001. All the tested variables are significantly predicting the user adoption of online banking at 5% significance level (Table 6), except Privacy. However, the variable is marginally above the 5% and significant at 10% significance level.

The findings of these analyses (Table 5 and 6) allow this study to substantiate all the research hypotheses forwarded for testing in this research (H1to H4).

6. Recommendation and Conclusion

This study prioritized crucial factors for the adoption of electronic banking in a fast developing country; Malaysia. The findings of this research show that trust, security, privacy, and costs have significant relationship with customers' adoption of online banking in Malaysia [9,20,32]. Higher trust can increase the number of internet banking users and subsequently adoption of e-banking [6,10,28, 30]. As trustworthiness assumes high significance towards user's willingness to adopt e-banking [25,34,30] in this study, banks can concentrate on factors that are found to influence customer's trust such as improving their security and privacy policies and creating more reliable web sites [24].

In addition, the findings discussed in this study are useful for banks to improve their security and privacy functions in e-banking that will safeguard customers' personal information and prevent fake web sites at the lowest costs for customers, while increasing clients' trust to achieving greater profitability in the long term [14, 17, 18, 34]. However, even though security and privacy features such as firewalls, authentication, encryption and etc are the norm of e-banking sites; most customers do not have the ability to fully comprehend the functions that are already implemented. Therefore, banks have the responsibility to equipped customers with this knowledge through more awareness messages and training approaches [14, 30]. Respondents also indicated that the current e-banking fees and charges are reasonable. This finding concurs with the finding of a local study [32].

Some limitations of this study include low regional diversity among the respondents participated in this survey. The study concentrated solely on respondents from regions in Malaysia comprising of Kuala Lumpur, Petaling Jaya, Melaka and Cyberjaya. Future studies could focus on collecting a larger number of responses from a wider region, as well as compare results of rural and urban society.

References

[1] Adam, V., and Evagelos, A., (2009), "Web banking layout effects on consumer behavioural intensions", *International Journal of Bank Marketing*, Vol. 27 No. 7, pp. 524-546.

[2] Ainin, S., C. Lim, et al. (2005). "Prospects and Challenges of e-banking in Malaysia." *The Electronic Journal of Information Systems in Developing Countries* **22**(0).

[3] Ala Eddin, M.K.A., and Hasan, A.A., (2011), "E-banking Functionality and Outcomes of customer Satisfaction: an Empirical Investigation", *International Journal of Marketing Studies*, Vol.3, No. 1, pp. 50-62.

[4] Alain, Y. L. C., Keng-Boon, O., Binshan, L., Boon-In, T. (2010),"Online Banking Adoption: an empirical analysis" *International Journal of Bank Marketing* Vol. 28 No. 4, pp. 267-287.

[5] Alam, S. S., R. Musa, et al. (2009). "Corporate Customers' Adoption of Internet Banking: Case of Klang Valley Business Firm in Malaysia."

International Journal of Business and Management **4**(4): P13.

[6] Anita, L. Z., Nicole, K. L., Stuart H. L., and Philippa, W. (2010), "Adoption of Internet Banking Service in China: is it all about trust?", *International Journal of Bank Marketing*, Vol. 28 No. 1, pp. 7-26.

[7] Carlos, F., Miguel, G., and Eduardo, T., (2006), "How bricks-and-mortar attributes affect online banking adoption", *International Journal of Bank Marketing*, Vol.24 No. 6, pp. 406-423.

[8] Ceren, S., and Simon, W., (2007), "Internet banking market performance: Turkey versus the UK", *International Journal of Bank Marketing*, Vol. 25 No. 3, pp. 122-141.

[9] Datta, S. K. (2010). "Acceptance of E-banking among Adult Customers: An Empirical Investigation in India." *Journal of Internet Banking and Commerce* **15**(2).

[10] Gefen, D. And Straub, D.W., (2004), "Consumer trust in B2C e-commerce and the importance of social presence: experiments in e-products and e-commerce", *International Journal of Management Science*, Vol. 32 No. 6, pp. 407-24.

[11] Hakan, C., (2008), "What determines Turkish customers' acceptance of internet banking?", *International Journal of Bank Marketing*, Vol. 26 No.5, pp. 353-370.

[12] Hamid, M. R. A., H. Amin, et al. (2010). "A comparative analysis of internet banking in Malaysia and Thailand." *Journal of Internet Business* **4**(0).

[13] Haque, A., A. K. Tarofder, et al. (2009). "Electronic transaction of internet banking and its perception of Malaysian online customers." *African Journal of Business Management* **3**: 248-259.

[14] Joaquin, A.M., Carlos, L. N., Carla, R.M., and Silvia, S.B., (2009), "The role of consumer innovativeness and perceived risk in online banking usage", *International Journal of Bank Marketing*, Vol. 27 No. 1, pp. 53-75.

[15] Jun, M., and Cai, S. (2001). "The key determinants of internet banking service quality: a content analysis", *International Journal of Bank Marketing*, Vol. 19 No. 7, pp.276-91.

[16] Kenneth B. Y, David H. W, Claire Loh and Randall B. (2010), Offline and online banking – where to draw the line when building trust in e-banking? *International Journal of Bank Marketing* Vol. 28 No. 1, pp. 27-46.

[17] Luis, V.C., Carlos, F., and Miguel, G., (2008), "The role of satisfaction and website usability in developing customers loyalty and positive word of mouth in the e-banking services", *The International Journal of Bank Marketing*, Vol. 26 No. 6, pp. 399-417.

[18] Luis, V.C., Carlos, F., and Miguel, G., (2007), "The role of security, Privacy, usability and reputation in the development of online banking", *Online Information Review*, Vol.31 No. 5, pp. 583-603.

[19] Margaret, T., and Thompson, S.H.T., (2000), "Factors Influencing the Adoption of Internet Banking", *Journal of the Association for Information Systems*, Vol. 1 No.5.

[20] Michal, P. And Tomasz, P.W., (2009), "Empirical analysis of internet banking adoption in Poland", *International Journal of Bank Marketing*, Vol. 27 No. 1, pp. 32-53.

[21] Nelson, O. N., and Queenie, S., (2006), "Consumer attitudes, System's characteristics and internet banking adoption in Malaysia", *Management Research News*, Vol. 29 No. ½, pp. 16-27.

[22] Pekka, L., Suvi, S., and Tommi, L., (2008), "Consumer resistance to internet banking: postponers, opponents and rejecters", *the international Journal of Bank Marketing*, Vol. 26 No. 6, pp. 440-455.

[23] Robert, J. N., (2009), "Electronic Commerce Adoption in the Arab Countries- An Emprical Study", *International Arab Journal of e-Technology*, Vol. 1 No. 1.

[24] Robert, J. N., and Paul, H. P. Y., (2011), "Crucial web usability factors of 36 industries for students: a large scale empirical study", *Electronic Commerce Research*, 11: pp, 151-180.

[25] Sadiq Sohail, M. and B. Shanmugham (2003). "E-banking and customer preferences in Malaysia: An empirical investigation." *Information Sciences* 150(3): 207-217.

[26] Shanthi, G., J.Daniel, W., and Fariborz, D., (2003), "A Multilevel Analysis of Factors Influencing the Adoption of Internet Banking", *IEEE Transaction on Engineering Management,* Vol.50, No.4, pp. 413-426.

[27] Sharma, R. and S. Abrol (2011). "Concentration of online banking." *Asia Pacific Journal of Research in Business Management* **2**(7): 305-318.

[28] Sharman, L., and Kristy, W., (2006), "Understanding Consumer Adoption of Internet Banking: An Interpretive Study in The Australian Banking Context", *Journal of electronic Commerce Research*, Vol. 7 No 2, pp. 50-66.

[29] Siriluck, R. and Mark, S. (2003), "Barriers to Internet Banking adoption: a qualitative study among corporate customers in Thailand", *International Journal of Bank Marketing*, 21/6/7, pp. 312-323.

[30] Sonja, G., Rita, F., (2008), "Consumer acceptance of internet banking: the influence of

internet trust", *International Journal of Bank Marketing*, Vol. 26 No. 7, pp. 483-504.

[31] Suki, N. M. (2010). "An Empirical Study of Factors Affecting the Internet Banking Adoption among Malaysian Consumers'." *Journal of Internet Banking and Commerce*, Vol 15, No.2, pp.1-11.

[32] Wai, C.P. (2008)," Users' adoption of e-banking services: the Malaysian perspective", *Journal of business and Industrial Marketing*, Vo 23 · No.1, pp. 59–69.

[33] Yee, B. Y. and T. Faziharudean (2010). "Factors Affecting Customer Loyalty of Using Internet Banking in Malaysia." *Journal of Electronic Banking Systems*, Vol. 2010.

[34] Yeoh, S.F., and Benjamin, C.Y.F., (2011), "Internet Banking Adoption in Kuala Lumpur: An Application of UTAUT Model", *International Journal of Business and Management*, Vol. 6 No. 4, pp. 161-167.

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