

ARE MALAYSIAN STILL TECHNOPHOBIA ABOUT E-FINANCE PRODUCT: A LITERATURE REVIEW

(ADAKAH RAKYAT MALAYSIA MASIH TEKNOFOBIA TERHADAP PRODUK
E-KEWANGAN MUDAH ALIH: SATU SOROTAN LITERATUR)

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Abstract: Previous studies have shown that there is an increased transaction of application without cash in the Malaysia via the medium of internet. The literature has also looked into the occurrences of the declining trend of users to continue to use the internet on the basis of models of technology applied in studies in Malaysia. This issue is related to Technophobia, to evaluate the negative (phobic) attitudes of consumers towards innovative products, which caused them to be less open to these products, experience discomfort when using them, and ignore the benefits offered by the technology with its use. Thus, the conceptual article discusses the potential development of an e-finance community with the existence of online financial management in the financial management strategies efficiently to tackle the increasing cost of living.

Keywords: e-finance, technophobia, cost of living, internet.

Abstrak: Kajian literatur menunjukkan terdapat peningkatan terhadap penggunaan aplikasi urus niaga tanpa tunai di Malaysia yang semakin meningkat. Pada masa yang sama, kajian-kajian yang lepas juga telah memaparkan berlakunya kemerosotan perkembangan pengguna untuk terus menggunakannya berasaskan kepada model-model teknologi yang diaplikasikan dalam kajian di Malaysia. Teknofobia bagi menilai sikap negatif (fobia) pengguna ke arah inovasi produk tertentu, yang menyebabkan mereka kurang terbuka kepada produk-produk ini, rasa tidak selesa apabila menggunakannya, dan mengabaikan faedah yang ditawarkan oleh teknologi yang berkaitan dengan penggunaannya. Justeru itu, artikel konseptual ini membincangkan potensi pembangunan yang mewujudkan masyarakat e-kewangan dalam konteks mewujudkan pengurusan kewangan secara dalam talian yang menjadi strategi pengurusan kewangan yang efisien untuk mengatasi kos sara hidup yang semakin meningkat.

Kata kunci: e-kewangan, teknofobia, kos hidup, internet.

Introduction

Virtual market pioneered by the creation of the internet has been rapidly growing compared to other technology-based finances. For example, business advertising strategy through the radio only came into effect after 30 years of its invention due slow access. Recently, various studies have been carried out to investigate the factors of awareness and the influence in accepting the use of e-finance, especially e-banking, using different models and theories. The reason is because the factors of development in the internet, especially e-banking, as a technology that is expected to create new markets in banking industries, provides significant benefits to both parties (users and providers). The definition by Hamid, Amin, Lada, and Ahmad (2007) is that internet banking is the use of the internet

as a delivery channel for the banking system via the World Wide Web (WWW). Sharma (2011) explained that, e-banking now is used by the world's banking sector to attract and retain customers. Ivo and Saskia (2011), and White (2003) have examined the existence of ICT that allows financial institutions to create, process, and disseminate information quickly and cheap. A research by Murillo, Llobet, and Fuentes (2010) found that towards the internet banking receipt among the U.S. users is part of the bank's strategy and alternative to opening new outlets. Issues related to user behaviour to use the e-money is still being debated by various researchers; Loo and Sim (2002), Teo, Lim and Lai (1997), Teo and Yuanyou (2005), and Widjana and Basuki (2011). Findings have shown that some similarities still do exist among

users who hesitate to use financial transactions electronically. Zahariah, Irfah, and Nik (2012) explain the various methods introduced by the bankers to attract customers, and two methods that are implemented through the innovation is the system of Islamic banking, and the internet banking. On those basis, the banks generally always note the changes in the aspects of innovation to get their value added products to benefit their users.

The Challenges Faced by Finance Customers in Malaysia

Recently, the issue of increasing cost of living, world oil prices, and low salaries have often become topics of debate in many developing countries. In order to achieve the developed country status and address the issues of increased cost of living, the concentration of users should switch to the basic aspect to the issue of financial management. The value of higher income does not reflect the luxury of the users’ life if they lack good financial system and as for the low-income users, in order to ensure a good cost of living, they should be prudent in spending. Zahariah *et al.*, (2012) explained the concepts of human behaviour, especially among users who always pay attention to the issues of pricing, rates, fees, charges, surcharges, service

charges, and promotions in their daily activities. Narayanasamy, Rasiah, and Tan (2011) assert that among the local companies of Malaysia, there are dimensions of cost and profit that give impact on the growth of e-finance in Malaysia. A report obtained from the Bank Negara Malaysia (2009) showed the level of household debt from gross domestic product (GDP) rose to 76.6 percent in 2009, compared to 63.9 percent in 2008. Household debts include utility bills, household expenses, risky and harmful household financial management, to name a few, and if these are not solved, it may lead towards bankruptcy.

The increase in cost of living requires wise financial management. The existence of e-finance is part of the bank’s strategy and alternative to opening new outlets to facilitate its users to interact with the online banking as a medium of their financial plan. In Malaysia, the use of online payment system has increased against cash, which is almost 90% or equivalent to RM1.8 million, including cheques, to 17.1 million uses electronically. On average, the users’ transactions per capita increased from 49 to 56 for the years 2011 and 2012. The number of financial transactions through internet banking increased by 16.3% in 2012, with 226 million payments that supported the participation of the banks to provide payments to the statutory bodies, and this is at par with the increase of internet access in the households (BNM 2013).

Figure 1 displays the number of users of internet banking that has been growing. However, as asserted by Sinkovics, Stöttinger, Schlegelmilch, and Ram (2002), technophobia still occurs in Malaysia. Yes, the reason is because although both the number of the registered and active users has increased, the number of active users has remained lower than the registered users.

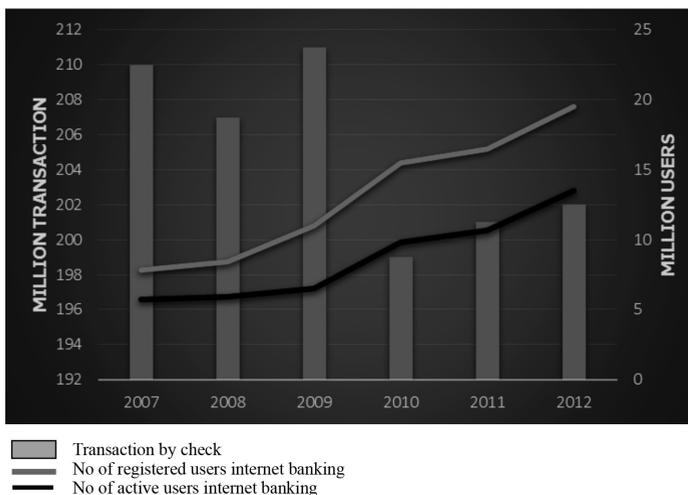


Figure 1: Users of the Internet Banking and Check in Malaysia
 Source : Central Bank of Malaysia 2013

Typically, the cost of living for the low income is associated with spending patterns required to meet the current needs. As shown in Table 1, the average income increases in Malaysia in small voids. The description of cost of living does not only focus on the increase in salaries and wages or the minimum wage in a particular sector, but it is indicated by the development of the local living community within a cost that have to be used and the choices they have at each period for the sake of survival with their financial management in a more intelligent and systematic manner. A study conducted by Gathergood (2012) in the United Kingdom found that bankruptcy problems and financial constraints occur due to lack of individual skills in money management and unable to control expenditure.

Malaysia is among the countries that focus on human development, especially from the aspects of well-being. Furthermore, Malaysia was ranked the 6th place in the best human development index, as shown in Table 2. Besides, Malaysia has the highest internet users in the Southeast Asia with 61 for 100 people due to the freedom of internet use. The effect can also be seen through computer ownerships and the highest broadband customers, better than other countries like Brunei Darussalam, though

categorized as higher than Malaysia for human resource development. Reports issued by the United Nations Association of human resource development (UNDP), classified Malaysia to

Table 1: Average Household Income and Annual Growth in Malaysia

State	Ringgit Malaysia (RM)		Average Annual Growth (%)
	2009	2012	2009-2012
Johor	3,835	4,658	6.5
Kedah	2,667	3,425	8.3
Kelantan	2,536	3,168	7.4
Melaka	4,184	4,759	4.3
Negeri Sembilan	3,540	4,576	8.6
Pahang	3,279	3,745	4.4
Pulau Pinang	4,407	5,055	4.6
Perak	2,809	3,548	7.8
Perlis	2,617	3,538	10.1
Selangor	5,962	7,023	5.5
Terengganu	3,017	3,967	9.1
Sabah	3,102	4,013	8.6
Sarawak	3,581	4,293	6.0
W.P. Kuala Lumpur	5,488	8,586	14.9
W.P. Labuan	4,407	6,317	12.0
W.P. Putrajaya	6,747	8,101	6.1

Source: Compiled by the author using data from Department of Statistic 2012 and 2013

Table 2: Acceptance of Innovation and Technology for Selected Southeast Asian Countries

Country	Rank HDI	Personal Computer	Internet Users	Broadband users	Mobile phone subscribers
		(per 100 person)			
		2002-2009	2011	2010	2010
Malaysia	HHD** (64)	22.7	61	7.3	135.3
Brunei	VHHD* (30)	9.1	56.0	5.4	129.1
Thailand	MHD*** (103)	6.6	23.7	4.6	113.6
Filipina	MHD (114)	7.2	29	1.8	92.9
Indonesia	MHD (121)	2.0	18	0.8	107.5
Vietnam	MHD (127)	9.7	35.07	4.1	196.0
Kemboja	MHD (138)	0.4	3.1	0.3	60.2

* Very high human development

**High human development

***Medium human development

Source: Human Development Report, United Nations Development Programme (UNDP), 2013
Telecommunication Development Sector (ITU), 2013

be ranked with high human development with the receipt of technology and innovation in the Southeast Asia.

However, there are gaps in linking between the internet and its users. Bhattacharjee (2001) found that an increase of 1 percent acceptance of the internet banking will lead to a reduction of 18 percent of decrease in operational costs. Thus, this study focuses on how the Internet has impacted the process for collaborative innovation and the users' willingness to try the internet services for finance management. A better understanding of consumer motivation is important as far as the internet is concerned as an intermediary mechanism for its users and to facilitate transactions between them. The implications of the efficiency and integration of the existence of the internet for the market can be used for future empirical research. The context of the development actually does not only reflect the index, but also the ability of the country to development strategies. Rahman (2004) asserts that the goal of human development is to expand the options to make a living and have power, as well as the ability to make decisions related to the development that should be made use of.

Qingfei, Shaobo, and Gang (2008) believe that the importance of the research is related to the acceptance of information technology, which started in the mid-1980s because of the acceptance of the users is a pre-requisite to utility maximization and awareness of potential value to technological advancement. The utility maximization and growth should always be parallel to avoid household debts so people would not bring back balance which is too low to pay expenses as a result of debt burden. This issue, if not solved, has the possibility to lead to higher bankruptcy among Malaysian consumers, and the mission to transform into a high-income country will not be achieved. Financial management awareness is now unrestricted because of the increase in credit card debt, housing loans, and debts of households, but the issue here is how systematic financial management is handled among each individual. Hopefully the integration of technology in financial management is the main goal of debt

this innovation. This is because users in the urban areas who continue to experience smart financial management through e-banking should see it as a platform for smart users. McKenna *et al.*, (2013) tells how to measure the perceived utility of the information system and how a variety of contributing service activities is dependent on the users' behaviour and their culture.

Conceptual Model of E-Finance in Malaysia

This article shows the theoretical and conceptual models developed to assess the acceptance and application of the internet-based e-finance in Malaysia since it has obtained approval from the Bank Negara Malaysia in 2000 especially e-banking (Khalil, Janejira and Nor Hamimah, 2010). The overall findings show that Malaysian consumer acceptance has remained moderate due to lack of promotion and uncertainty about the aspects of security and privacy risks to use in place of conventional banking. The method proposed in this study is to enhance the use of internet banking to be on policies geared to the promotion and good internet access in the country. A study conducted by Yee (2013) made a comparison between internet banking users in Malaysia and the United States in terms of gender and age. The methodology used mean and t-statistics of independent and dependent variables. The study found that the women in Malaysia were more concerned in using internet banking than American women. The study also showed that the young people in America were more inclined towards the internet banking usage compared to Malaysians. This is because of the lack of advertising to promote the use of internet banking due to high costs. Mahdi and Alipour (2010) categorize internet banking interest can be seen in terms of users, bankers and economic benefits. A study conducted in Iran in 2008 among consumers and business people at random (800 respondents) with the majority being employees of lower income (30%) and 20.33% businessman. The findings showed that the Iranians enjoyed using internet banking as the best delivery system. The study also displayed the efficiency of the banking sector towards the customers. Lack of information about internet

banking has led to the lack of efficiencies of the Iranian banking community by encouraging the use of internet banking.

Technology Acceptance Model (TAM) and Combined TAM / TPB

Technology Acceptance Model (TAM) is the basic model developed by Davis (1989) in assessing the extent to which individuals (consumers) believe and are aware of certain systems in improving their performances. The existence of TAM seeks to explain and prove the acceptance of users of computerized information system. TAM provides a theoretical basis to understand the factors that influence the acceptance of new technologies by the users or organizations. TAM also explains a causal relationship between confidence (benefits of an information system from ease of use), behaviour, goals or needs, and use technology systems. This model is expandable up to TAM- 3 and is combined with some concepts of technology models. Two key concepts in the TAM model is the perception usefulness (PU) and perceived easy to use (PEOU). PU refers to the extent to which individuals believe that using a particular system can increase an individual’s work performance, and PEOU refers to the extent to which individuals believe that using a particular system is free of physical and mental efforts. Tero, Kari, Heikki and Seppo (2004) found that the basic model is often used to measure consumer perception of the technology because it has the power to predict the ease applied in different information systems.

Previous studies show that the most popular models used in studying the information system

is the technology acceptance model (TAM). Tero (2004), Davis *et al.*, (1989), Mathieson (1991), Davis and Venkatesh (1996), Gefen and Straub (2000), and Al-Gahtani (2001) found that the basic model of system utilization (actual behaviour) is determined by perceived usefulness (perceived usefulness) and ease of use (PEOU) associated with attitudes toward intent and ultimately, the behaviour. According to TAM, PU and PEOU are of primary importance for the acceptance of the computer. PU refers to the subjective potential users that use specific applications or performance to improve. PEOU is defined as the potential that users expect the system to be more comfortable to use (Davis *et al.*, 1989). According to Tero (2004), and DeLone and McLean (1992), the use of the system as a dependent variable is accepted, but it is not mandatory. (Tero, 2004; Mathieson, 1991; Davis and Venkatesh, 1996). TAM has been extensively tested with different samples in different situations and proved to be valid and reliable models describing the system in the adoption and use of information.

The theory of TAM, as shown in Figure 2, indicates how behaviour is determined by the reaction of individuals to perform the actions. According to Davis (1989), in essence, the study of external variables determines or influences attitudes towards the application of information technology in identifying the perception of ease of use and usefulness as the primary independent variable. The most important assumptions in TAM are the attitude or behaviour constantly changes (volitional), and it is at the discretion of the consumer and industry players in the study. In the previous studies, the basic model is frequently used to describe the different types of

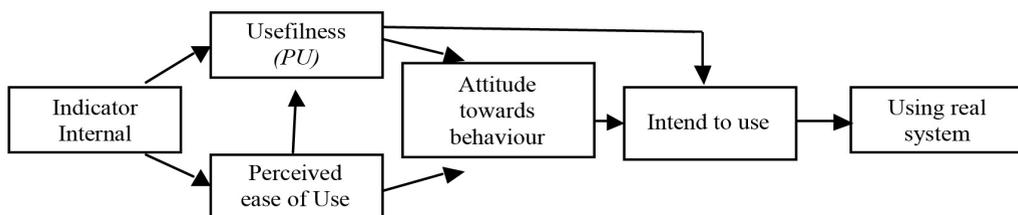


Figure 2: Technology Acceptance Model (TAM)

Source: Pikkarainen *et al.*, (2004)

technology that should be improved, as Internet banking has over a decade of its introduction, the inclusion of variables that could explain the current performance and potential of internet banking adoption is required and updated on the current situation. Jan, Kolodinsky, Hogarth, and Hilgert (2004) developed the acceptance of e-banking in the U.S. The impact of adoption from the previous study is applied to the TAM (Davis, 1989). The study was done by Alain, Ooi, Lin, Tan (2010) in Vietnam with full use of TAM in the study of the basic applications and integration of the model with TPB (Theory of Planned Behaviour). The analysis involved adapting the Vietnamese Internet banking based on factor analysis and scale reliability of 0.70, which is a good value, according to Molina, Martin, and Esteban (2007). Multiple regression showed the relationship between the benefits of online banking and consumer use of online banking were still at the level of acceptance and security issues affected the consumers from fully adopting it.

Most products and services available on the Internet are growing rapidly although the consumers tend to emphasize the safety and personal issues. Consumers want to control the type of data collected, the purpose of taking, how long the data is stored, how the data is processed and the purposes (Tero, 2004; Kobsa, 2001; Konsa, 2002). Minjoon *et al.*, (2004) found that the quality of online services is the key to the success of on-line service providers. Minjoon *et al.*, (2004) also introduced the 6 key factors of quality analysis: reliability, responsiveness, access, ease of use, interest, security, and credibility. Internet customers are more concerned of the methods and the ways to contact the online merchants, such as home addresses, emails and phone numbers. The study concludes that the ease of use is related to the unique characteristics of the online system which maintains a website, and online sellers should focus on the accessibility, maneuverability, good catalogue structure, and understandable terms and conditions given. Dishaw and Strong (1999) studied the integration between TAM

and TTF (Task Technology Fit) to look into the perception of TAM and the TTF needs, and the IT capabilities in use. This study was conducted by the programmers.

A study has found new findings for households in Taiwan in evaluating conventional transition of on-line banking by Lee, Tsai, and Corazon (2010). Taiwan is the first to introduce online banking in 2003 when first introduced Automated Teller Machines (ATM) as a financial medium. The method of finding differed from the previous studies because it was concerned with the use of computer skills in every individual. Its main purpose was to obtain the equilibrium level of knowledge of computer application among users. The results found least acceptance of online banking if with low level computer skills, and they will continue with the conventional methods. The TAM model was used to add multiple indicators appropriate to the situation in Taiwan. A business model was developed from the research on the physical market to the virtual market or online.

A method to overcome this issue is to increase the knowledge of people through TV channels and websites. In Malaysia, various studies were carried out to investigate and identify the internet banking receipt factors within and outside Malaysia, which uses different models and theories. Table 3 below displays recent researches conducted in Malaysia in respect to e-finance product.

Widjana and Rachmat (2011) integrated the TAM and combined it with the TPB, and showed the layout of e-banking websites should be emphasize as a safety factor. Additional findings also underline the bank as service providers should always take care of any queries. The e-banking should have a handbook or brochure provided by the bank to explain the security of e-banking system of their banks. Using a different language to the banking site to avoid clients from misunderstanding that can cause errors in the transaction. Chen *et al.*, (2007) also combined TAM and TPB because it has the right information and assumptions on consumer behaviour.

Table 3: Previous Studies of E-Finance in Malaysia

No	Researcher	Theories	Findings
1	Ramayah <i>et al.</i> , (2003)	TAM (Theory Acceptance Model)	The study found most respondents in Penang agreed that internet banking will become a major transaction method in Malaysia within 5 years.
2	Ainin <i>et al.</i> , (2005)	Mean Score	This research focused on gender and age to define which was more influenced, where findings showed age and gender gave more impact (gen Y was more acceptable than gen X). But the findings have similarity that this technology will facilitate their daily operations.
3	Ndubisi and Sinti (2006)	IDT (Innovation Diffusion Theory)	Consumers' attitudes and characteristics of the site are able to attract consumers to use internet banking. The results show the lifestyle and financial management technology influenced the use of internet banking.
4	Hanudin (2007)	TAM and SCT (Social Cognitive Theory)	The study involved university students in Labuan using the TAM theory. The results showed acceptance was high among respondents with good skills in using the internet because their benefit from it. But the study showed that computer skills did not guarantee the credibility of users in using the I-system due to security and confidentiality.
5	Mohamad <i>et al.</i> , (2007)	–	A study on the comparison between the providers of internet banking in Malaysia and Thailand. The findings shared the same problem in internet banking; adapting the belief in the financial channels through the Internet, the issue of prejudice to the service providers' reputation in both conventional banks have an impact on the consumers' acceptance for Internet banking.
6	Ndubisi and Sinti (2006)	TAM and SCT	Studies conducted in Kota Kinabalu displayed the existence of direct contact, ease of use with benefits to be gained from the internet banking.
7	Sudha <i>et al.</i> , (2007)	U-Test and T-Test	The study makes a comparison between users and non-users of internet banking with the findings of both of these respondents were not satisfied with the level of security in online transactions and should be improved. This occurs because of the lack of publicity about the safety of Internet transactions.
8	Norazah (2010)	IDT	Used 100 respondents and found that past experience and the usability gave impact to the users to use the internet. Internet banking was more easily accepted by the educated and with computer skills.
9	Khalil <i>et al.</i> , (2010)	IDT	Studies among postgraduate students who find lifestyle with technology can give impact by increasing the use of internet banking and the bank proposed to improve the Internet access service and low economic cost.

10	Khalil <i>et al.</i> , (2010)	TAM	The study makes a comparison between ethnic Malays and Chinese with the findings of ethnic Chinese consumer benefits higher than the Malays. Both ethnic groups also agree that disobedience factor of safety and trust are key issues in the sustainable use of internet banking.
11	Yeoh and Benjamin (2011)	UTAUT (Unified Theory of Acceptance and Use of Technology)	The study was conducted in Kuala Lumpur (200 respondents), looking at the social influence to help increase the use of internet banking. The study improved the UTAUT model by looking at direct contact model IV and DV. The study found that gender, status, ethnicity, and education level did not affect the acceptance of internet banking but the difference in age and income affected them.
12	Zahariah <i>et al.</i> , (2012)	-	Prices for services determined the consumers' behaviour to change their banks. The findings suggested that increasing self service internet banking, especially benefits from the bank, as it involved comfort, geography, and time of consumers.
13	Yee (2013)	TAM	The study compared the United States and Malaysia in terms of gender and age of internet banking. The findings showed young people in America were more accepting of the internet banking than in Malaysia.

Xue *et al.*, (2011) found that the benefits earned by the bank from internet banking involved cost savings and easier access to customers with 24 hours a day, and 7 days a week. Their study found that 80 percent of U.S. respondents used e-banking, but only half of them made financial transactions through the internet banking as mostly were hesitant in engaging in financial transactions on the internet. This is because researchers found that the difficulty to understand the personality of the individual and their perceptions about the internet banking influenced their actual utilization. The method used was the seven (7) Likert scale by a factor of usability dimensions, private dimensions, dimensions of security and social influences dimensions. Previous study by Murillo *et al.*, (2010) on internet banking among the U.S banks found that they were part of the bank strategy and alternative to opening new branches. The existence of alternative internet banking improves profitability, attracts new customers, and retains the existing customers.

Conclusion

Technological innovativeness on the use of e-finance especially e-banking, it can be concluded that has negative and significant to reducing users' based on previous studies in Malaysia. The challenges faced in Malaysia and other countries from the previous studies are more to the issue of technophobia in innovation of banking, based on security and trust in online systems if it involves their finances. Nafis and Ibrahim (2010), in their study in Sudan, concludes that a lack of efficiency in the infrastructure was the main reason for the slowdown in the implementation of online banking in Sudan in the 90's. It is also due to lack of skilled manpower in the field of online banking among the banking staff, especially in terms of management, development and application of internet banking. Therefore, it is necessary to see the contribution of telecom sector to the national economic growth rate and to reach performance that is too savvy in the country through the contribution in the form

of investment in the country's annual budget. To develop innovation among the Malaysian society based on New Economics Model (NEM), is not only capable of forming efficiency in daily activities but from the point of financial management, users can develop and manage their finance efficiently than the conventional method based on "one click" only. The reason about the issue also of community sensitivity, the technology is still low. Thus, the underlying condition of the role of the bank is to enhance consumers' knowledge of security, banking technology should be emphasized, and users are protected by the law, will be able to finance a significant impact for consumers to continue to be active rather than as passive consumers.

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