

Determination of Managerial, Financial and Security Factors for Successes of E-Banking Services among Malaysian Banks

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Abstract

Development of information and communication technology is cause of development and transformation of various industries such as banking industries. Information technology is cause of dramatic development in financial and monetary transaction that can leading to development of other business. In this study we want to determine and examine the role of successful factors in Managerial & Financial and Security categories for success adaption of E-banking services among Malaysian banks. Result base on 113 respondents from IT managers in who are expert in E-banking of two famous Malaysian banks (CIMB, Maybank).

Key words: Management Factors, Security-Financial Factors, e-banking, Explorers Factor Analysis

Introduction

Development and transformation of technology especially in telecommunication and information technology change the business in different service organization include banking industries. Internet –based information technology and electronic system are growing very fast and the banks also use their activity and business base on electronic technology. These days electronic banking and its unique service in society cannot be ignored. Given the importance of this argument and growing trend of electronic banking service, is one of the reasons that Scientifics was encouraged to study in this area. Electronic banking is one of the key tools in the implementation, development and facilitating E- commerce in the countries. But the point is that the most important studies in E-banking is related to process models for electronic banking or quality of E-banking services and the impact E-banking on customer satisfaction. But in some areas such as identifying key success factors or banks obstacles in adoption of E-banking

services was less studied by researchers. So in this exploratory research we want to identify management & security and financial most successful factors of E-banking services in Malaysia.

2. Literature review:

2.1 History of E-banking

Dramatic development of information technology and its spread to financial and monetary markets forced banking industries transform their traditional banking methods to facilitate banks customers in more satisfactory way (Sohail and Shanmugham 2003). The new technologies have transformed the banks communication with their customers. Periods of E-banking development has been divided into four stages (Floh and Treiblmaier 2006). In each stage of the new technology and E-banking period, speed, quality, accuracy, cost and variety of services are transformed and developed.

Table 1: Periods of Development of Electronic Banking

Sr.	Features	Development of Electronic Banking Periods
1	Introduced in 1960 : removed the notebooks and cards , send a daily circulation account at the end of each day to the central computer , the starting point for computer applications uses in the banking system convert paper documents into computer files	Automation behind counter
2	Introduced in 1970 :continuous access to current accounts by branch employees , enabling continuous transmission of information through the use of telecommunication lines and central computers,	Automation in front of counter
3	Introduced in 1980: allow customers access to personal accounts by phone , (ATM), a smart card or personal computer , transfer funds electronically , the development of customer communication systems with their accounts	Connecting customers to the accounts
4	Introduced in 1990::Real savings in manpower , money creation is fully electronic and intangible , and all electronic banking services	Integration of systems and connecting the client with all banking operations

2.2: E-Banking

E-banking can be addressed as one of the advantages and benefits from E-commerce. E-commerce is growing very fast in the world, and also in modern market different business such as banking business need to conduct their operations easy, quick and precise (Delone and Mclean 2004). It seems E-banking has very critical and important role in E-commerce in modern business. Actually E-banking means direct provision of banking service to customers via electronic interaction channels (Martins, Oliveira et al. 2014). In fact E-banking means optimum integration of bank activities through the use of modern information technology based on processes accordance with structure of other bank activities to offer all customer services perfectly (Hanafizadeh, Keating et al. 2014).

2.3 Electronic Banking Benefits

Electronic banking has many advantages such as increased customer and lower cost of banking transactions. In addition, banks can thus offer services with greater efficiency and at lower costs and to maintain and increase market share unlimited in terms of location and a focus on new distribution channels (Casal³, Flavi⁴n et al. 2008).

Table 2 shows the most important E-banking benefits (Ahmad and Al-Zubi 2011).

Table 2: Most important benefits of E-banking services

Benefits of electronic banking	Electronic Banking Services	
Brand competition	Access to account information	1
Improve the management of the relationship	Call Account and transaction	2
Offering a wide and varied services	Remit or transfer funds between accounts	3
Focus on cost and income growth	Deposit	4
Reduce transaction costs and logistics	currency exchange	5
provide close relationship between the bank	Pay water, energy, phone bill	6
Reducing environmental pollution	Buying and selling the stock	7
Enhancing retention and loyalty of customers	Buying and selling goods and services	8
Increase the efficiency of services	Foreign Exchange	9

2.4. Background of Success E-Banking Factors

For identifying key successes factor for banking business just few study have been done. In one research friendly and secure Internet banking, senior management support, rapid response to customer and fast delivery services were introduced as successes critical factors for E-banking industries (Rod, Ashill et al. 2009). Kassim (2011) also identify government support, ongoing training to staff about electronic banking, make trust and a culture of electronic banking application, use of specialists and use of equipment, software and communication platform as success factors for e-banking. In another study by Sinti (2006) network security, trusted customers to use E-banking services, quality website design and delivery of services and information related to them under the general title "The quality of banking services", are the factors that influencing success and development Electronic banking has been introduced. Another study by Grant (2007) also introduce Variables such as the usefulness of the system, ease of use, security of systems, quality Internet connection and offers enough information about the online services of banks as E-banking successful critical factors.

2.5 Purpose of the study:

2.5.1 Identification and review of management & financial and security most successful factors in E-banking services among Malaysian bank.

2.5.2: Determine the impact of each success factor (management & security and financial) in providing E-banking service among Malaysian banks

2.5.3: Identify and understand the significant correlation between the factors

3. Research Methodology:

In this research we use cross sectional, descriptive and exploratory approach. First of all we review the previous study and research by different authors about E-banking and the factors that influence the successes of E-banking services. After that the managerial and security-finance factors were selected for this research base on previous studies about successes factors that has influence in E-banking services. The questionnaire was designed and developed based on the factors identified and were distributed to expertise in two Malaysian banks. The respondents must answer 69 question based upon the Likert-Type of five point scale: 1) strongly disagree 2) disagree 3) natural 4) agree 5) strongly agree.

Cronbach's alpha set at 0.7 was considered for adequate internal consistency since it is the most common method of assessing internal consistency reliability. Before distributed the questioner to our respondent questioner was given to 3 experts with the cover letter and designation then collected and used their idea and feedback about structure of our questionnaire. Finally our survey questionnaire was modified and refined based on comment and feedback from pilot study.

4. Population of the study:

The unit of analysis included the senior and junior IT managers and experts for E-banking that work in two Malaysian banks (CIMB, Maybank). 150 questionnaires were distributed and out of 150 questioners just 125 questioners were completed and returned form respondent. Out of

the 125,13questioners had to be excluded. As a result, 113 returns were used for analysis, with a net response rate of 75%. Simple random sampling was selected for this study base on IT managers in these two banks.

5. Finding of the Study:

In this section, structural- cultural factors are analyzed by using Factor Analysis. First, the table of the model adequacy is given which includes KMO index, Bartlett sphericity index and the probability of this index.

Table 3. KMO index and Bartlett sphericity test results of the correlation matrix

index	values
index KMO	.799
Bartlett sphericity	6058.908
Sig.	.000

Based on the results of KMO, which is equal to 799/0, research data can be reduced to a number of Infrastructure and basic factors. Also Bartlett's test result (908/6058) which is significant in smaller than 01/0 error level, Shows that the correlation matrix between the items is not the unit and identity matrix. On the one hand the items Bartlett's test 908/6058 also result in significant error is smaller than 01/0, shows the correlation matrix between the items, and the unit is the identity matrix. On the one hand there is a high correlation between items within each factor and on the other hand there is no correlation between the items of one factor with the items of other factors. In addition, rotated matrix of factors determine the items related to the management factors and the items related to the financial- security factors. With regard to the review of the literature, the conceptual model of this research is formed which is visible in Figure 1.

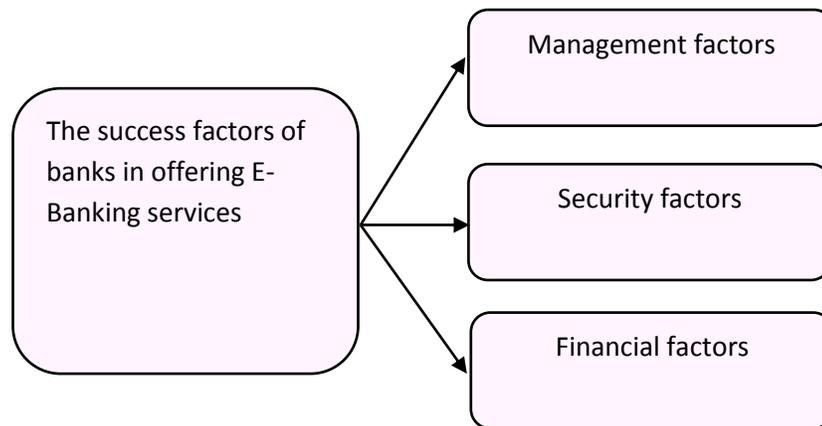


Figure 1. The conceptual model of study

Table 4: Rotated factor loading of successful factors for successes of E-banking

	Financial factors	Management factors	Security factors
Providing costs of telecommunication infrastructure investment	0.522	0.175	0.030-
Providing enough credit for web costs	0.513	0.245	0.107-
To apportion suit costs for updating and developing satellite systems and computers in bank	0.511	0.024	0.186-
Enough costs for e banking servicing to customers	0.467	0.040	0.108-
Customers training	0.315	0.548	0.022
Senior managers and assistants training	0.191	0.509	0.230-
Bank employers training	0.175	0.595	0.079-
Increasing clearness in strategies and decisions of management	0.443	0.590	0.022-
Control of perceived risks in E-banking services	0.234	0.747	0.198
Exist strategic thinking in top management levels of bank	0.338	0.618	0.290
Supporting of bank top management for developing e banking	0.288	0.695	0.060
Encouraging to coordinate trans department	0.040-	0.605	0.065

Improving to organize Information and Communications Technology management	0.008	0.617	0.220
Employ qualify and venture managers to subsume e banking systems	0.032	0.638	0.258
Consistent of Qualify and venture managers and prevent of turnover in short times	0.281	0.640	0.064
Governments focus on e banking services	0.268	0.544	0.028
Supporting of active organizations in e banking services	0.143	0.659	0.077
Developing of competition in e banking services	0.252	0.610	0.031-
governments Supporting of e banking services	0.279	0.580	0.165
Using governments and privets sectors of IT and ICT and e banking services	0.350	0.482	0.180
Encourage of efficacy and creating gracious experience for customers after using services	0.237	0.487	0.303
Increasing of reputation and publicity of bank in society	0.239	0.628	0.332
Reputation of previous bank in services	0.442	0.520	0.297
Exist of multi-channel for e banking services	0.328	0.237	0.617
Diversity of e banking survives	0.291	0.121	0.701
Lovable of e banking services systems	0.305	0.102	0.663
Responsibility of undertaking e banking services systems	0.100	0.383	0.648
Clearness and lack of ambiguity in servicing	0.174	0.265	0.747
Developing in security and reputation of e banking services	0.247	0.245	0.536
Developing of security in receiving of e banking services	0.188	0.070	0.542
Quality and improving speed of exchange and	0.193	0.008	0.491

receiving services			
Quality , accuracy and correctness information	0.180	0.283	0.433
Developing new markets and present new and special services	0.231	0.087	0.632
Quality designing of website and another equipment of e banking systems	0.032	0.326	0.587
Services Permanency in e banking systems	0.119	0.088	0.711
Protect of private environment for users	0.220	0.208	0.729
Increasing of security in systems	0.005	0.406	0.462
Improving of call centers systems	0.136	0.061	0.488
Easy usage of services	0.179	0.199	0.423
Convenience of services	0.178	0.166	0.508
User friendly of e banking services	0.136	0.133	0.623
Customer orientation manner with employment	0.354	0.149	0.680

6: Discussion and Conclusion:

This study sought to examine the managerial financial and security successful factors for success of Malaysian banks that provide E-banking service. To achieve this goal and to provide a comprehensive model exploratory factor analysis was used in this research. First of all the most important factors for the success of banks in E-banking were identified from previous researches were addressed by different authors. It is obvious that the degree of importance and the impact of the factors for the success of banks in offering electronic banking services are different. Therefore by using of exploratory factor analysis, factors loading of all questions have been indicated. Thus in this section, all of finding are analyzing. Finding of financial factors by exploratory factor analysis indicated which providing costs of telecommunication infrastructure investment with 0.522 factor loading in first level and then providing enough credit for web costs 0.513, to apportion suit costs for updating and developing satellite systems and computers in bank with 0.511 are in second and third level. For managerial factors in macro and micro environment indicated that Control of perceived risks in E-banking services with 0.747 in total managerial factors has maximum factor loading from experts view. Then supporting of bank top management for developing e banking with the 0.695 of loading factor and Supporting of active organizations in e banking services with 0.659 of loading factor are in second and third rank. The results of the survey of security factors also showed that Clearness and lack of

ambiguity in servicing with 0.747 in first rank of security factors followed by Protect of private environment for users with 0.729 and Services Permanency in e banking systems with 0.711 of loading factors in second and third rank. Therefore, considering all the positive values, it can be concluded reinforces each 3 factors; these factors can help Malaysian banks to provide E-banking successfully for their customers.

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