

A Comparative Study On The Factors Influencing Customer Satisfaction On E-Banking In Trivandrum And Addis Ababa

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Abstract - Today the refined technology has taken an important place in the upcoming development of financial service, particularly banking sector development is affected more than any other financial provider groups. Increased use of mobile services and internet as a new delivery channel for banking transactions and international trading requires influencing the banking sectors to pay more attention towards factors of e-banking to satisfy customers. Thus, this study assesses the factors affecting customer satisfaction of e-banking with a particular reference of Trivandrum and Addis Ababa Commercial bank customers. To achieve the aim of the study, the descriptive survey method was employed and multi-stage sampling technique was utilized. To this end, a sample size of the study was (n = 835). The collected data were analyzed based on Factor analysis tool. The major finding was that there is significant difference on factors affecting of customer satisfaction on e-banking between Trivandrum and Addis Ababa.

Keywords - E-Banking, Customer Satisfaction, Technology-based option, Service Quality

Introduction

Electronic banking products and services are crucial for banks to operate and remain in a global competitive environment. The e-banking service is based on the use of new technologies to provide various banking services directly to customers around the clock. Banks offer a wide range of these services that can be used by electronic tools such as ATM, cell phone, cards, television banking, point of sales and Internet (Ammar, 2012). Hence, E-banking can refer as to the deployment of banking services and products over electronic and communication networks directly to customers (Wandaogou, et., al., 2011). It has arisen as a strategic resource for attaining efficiency, control operations, throughput, and profitability. Indeed, it has changed the traditional way of banking transactions through that the e-banking customer do not visit to the bank office in order to carry out banking transaction. For instance, customers are using automated teller machines (ATM) in place of cashier tellers, and credit cards and electronic cash in place of bank transactions (Alagheband, 2006). It also allows customers to submit their requests for different services, make queries on their account balances and also electronically transfer funds to their accounts, pay bills, and conduct other banking transaction online (Firouzeh, 2006). The introduction of e-banking into the banking sector is to bring customer satisfaction, thereby to enhance the banks' profitability. Unless this technology brings improvement in customer satisfaction than the traditional branch office services, customer may recognize as the same as different branches rather than advanced channels of delivery. Accordingly, obtaining competitive advantage on e-banking is secured through the intelligent identification and satisfaction of customer's needs superior and quicker than competitors, which is the sustenance of customer's satisfaction through better products and services. However, majority of banks have limited to in this regard. This study was assumed that the customer may or may not be satisfied by what the bank offers as its e-banking service and products. Thus, it is aimed at assessing factors affecting customer satisfaction on e-banking in Trivandrum and Addis Ababa.

Literature review

Technology based options

Technology is developing as a key-driver of business in the financial service industry. It is one leading driving force these days in different businesses (Lake and Hickey, 2002). It is therefore important to research the investments in technology and their impact on the banking sector. The development in computer technology and telecommunication has revolutionized the financial industry and banking on the net is fast catching on. In introducing any new technology or system, organizations or companies could bring and introduce a lot of options. For instance, the most common options that are itemized in different authorities are Security, Privacy, Ease of Use, Perceived Usefulness, Accessibility and Awareness. Hence, this particular study emphasized the attributes as technology based option of **Security**: a person wants to safeguard their own money and banks their own exposure and **Privacy**: is the bank's duty of confidentiality protections all customers' information about themselves and their accounts obtained by the bank, regardless of the information source. According to Davis, et, al., (1989), perceived **ease of use** designates that the degree to which a person considers that using a particular system would be free of effort. Moreover, further emphasizes on **Perceived Usefulness**: It explained that an individual's choice of behavior is based on the likelihood that an action will provoke a specific result. Another measurement technology based option dimension for customer satisfaction on e-banking is **Accessibility**: the simplicity with which individual can locate a specific product or service. This is closely related to **Awareness**: is knowledge of something existing to implement or uses the existing products.

Service Quality

The digital revolution has absolutely changed almost every activity of daily life as the generation stepped into the twenty first century. Service business operators often consider the service quality provided to their customers in order to improve their service, to quickly identify problems, and to better assess the customers' satisfaction. Service quality is a serious factor of competitiveness of establishing and sustaining satisfying relationships with customers. Therefore, this study draws on customer satisfaction using the service quality dimension or the SERVQUAL models originated by Parasuraman et al., (1988). The five SERVQUAL dimensions are: Reliability, Responsiveness, Tangibility, Assurance and Empathy were used in this particular study.

Statement of the problem

The introduction of e-banking into the banking sector is to bring customer satisfaction by gaining an in-depth understanding of the factors and conditions. However, despite the importance of these identified factors, limited studies are currently available in the case of Addis Ababa, Ethiopia. Moreover, the benefits of e-banking like transferring money, collecting receivables, paying bill, etc. seems did not realize due to congeals factors. Therefore, to address the current gap in the literature, this study is designed to identify and compare the factors that affecting customer satisfaction on E-banking in Trivandrum and Addis Ababa.

Objectives

The following objective is planned in the present investigation:

- To determine and compare e-banking factors towards customer satisfaction in Trivandrum and Addis Ababa.

Hypothesis

The study is based on the following hypothesis.

Ho: There is no significance difference between e-banking factors towards customer satisfaction between Trivandrum and Addis Ababa.

Methodology

Research methodology deals with a scientific and systematic method that can be adopted to solve research problems. Methodology is a vital step in any research since it directly affects the whole research and its findings. The present study will be carried out to gain an insight into the customer satisfaction level with the e-banking services provided by Trivandrum and Addis Ababa commercial banks. The descriptive research design was employed through survey approach. The sample was used six banks' customers from Trivandrum city and five banks' customers in the Addis Ababa city were selected proportional to the total number of banks from the cities. The data were collected in the questionnaire. Questionnaires were distributed for 900 respondents and 835 questionnaires were completed and used for the analysis. The questionnaires were administered through convenience sampling. Primary data were entered into the SPSS and analyzed by using inferential statistics.

Analysis

Factor Analysis

In this section the researcher is attempting to identify factors that affect customer satisfaction on e-banking by using factor analysis. It is extremely powerful and useful analytic approach to psychological, behavioral, financial and other types of data (Potti, 2015). It is also a statistical technique for determining the underlying factors or forces among a large number of interdependent variables or measures. Thus, factors were arranged in this study into two components (factors), service quality factors (Reliability, Responsiveness, Tangibility, Assurance and Empathy) and Technology-based option factors (Security, Privacy, Ease of use, Perceived usefulness, Accessibility and Awareness) to identify major factors for the Trivandrum and Addis Ababa customers.

Rotation of Factor analysis

Factor analysis presently used rotation type of factor analysis. The idea of rotation is to reduce the number factors on which the variables under investigation have high loadings. Looking at the table 1 and 2, it can be seen that Security, Privacy, Ease of use, Perceived usefulness, Accessibility and Awareness are substantially loaded on Component – I, while Reliability, Responsiveness, Tangibility, Assurance and Empathy are substantially loaded on Component - II. All the variables are substantially loaded on Factor. In order to determine the factors affecting customers' satisfaction on e-banking, the Factor analysis extracted was done and for clarification of the results, coefficients below 0.60 were suppressed. The results depicted numerical evidence to support identified factors of customer satisfaction.

Component - I: Technology based option dimension

The following factors have emerged after factor analysis when all the statements were put together in the context of Technology based option. The analysis gives an overview of component matrix and rotated component matrix wherein Principal Component Analysis extracts the six factors.

Table 1: Technology based option - Factors

Factors	Items	Trivandrum	Addis Ababa
Factor 1: Security	Login process is secure	.776	
	Secured from theft and fraud	.629	.823
	Physical safety of the transactions	.768	.802
	Feel confident using e-banking services	.800	.906
	Carefully done the transaction process		.669
Factor 2: Privacy	Keeps personal data as private	.734	.882
	Confidence to keep safely		.814

	Protected the information	.713	.868
Factor 3: Ease of use	Easy to login and navigate	.909	.826
	Available at any time and any place	.825	.827
	User friendly	.731	.765
	Simple and easy to understand	.696	
	No need technical skills	.726	
Factor 4: Perceived usefulness	Flexibility	.794	.716
	Speed	.839	.851
	Relevant	.796	.802
	Comfortable	.708	.653
	Control	.805	.784
Factor 5: Accessibilities	Access my accounts	.721	.840
	Access e-Banking products anywhere in the city		.786
	Quality of services	.816	.833
	Easily find policy and notice statements	.825	.827
	Reduces the waiting time		.692
Factor 6: Awareness	Customer support and training		.758
	Fit customers' needs	.836	
	Accuracy	.898	.893
	Individualized attention to the customers	.895	.841
	Knowledge to use e-banking	.817	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Source: survey data

Factor 1: Security

Generally, this factor is related to Security, this first factor of Trivandrum and Addis Ababa consists of four items each. Among these, three items are commonly found in two cities. It means that the first factor, security, satisfying customers of Trivandrum and Addis Ababa is not the same. Most prominent variables affecting customer satisfaction of Trivandrum and Addis Ababa are found to be 'feel confident using e-banking services', at the factor loading values 0.800 and 0.906 respectively. It implies that security system of e-banking service has been used standard procedures. These findings are consistent with the studies of Abdullah et al., (2011); Yousafzai et al.,(2003); Casaló, et al.,(2008) in which they found customer satisfaction with online banking being created by website security and safety to customer's transactions, reducing security risks and thus improving customer satisfaction.

Factor 2: Privacy

Pertaining to privacy factors, it consists of two variables in Trivandrum and three variables in Addis Ababa. Two factors are commonly found in the two cities. The most prominent variable was found in Trivandrum and Addis Ababa identical variable "keeps personal data as private", which is the loading factor, portrayed that 0.734 in Trivandrum and 0.882 in Addis Ababa. The result indicates that only two variables (keep personal data as private and Protected the information) were affected by Trivandrum customers and three variables (keep personal data as private, Confidence to keep safely and Protected the information) in Addis Ababa customers, which is the factory loaded were considered 0.6 and above. It implies that there is differed in the nature and number of variables as well as the score of factor loaded values.

Factor 3: Ease of Use

It consists of five variables viz. "Easy to login and navigate", "available at any time and any place", "user friendly", "easy to understand" and "No need technical skills" in both Trivandrum and Addis Ababa. The table 2 depicted that customer of Trivandrum affected by both five variables, whereas, customers of Addis Ababa affected by three factors. Among the variables that commonly affecting by the two cities, the most dominant factors were found in Trivandrum "ease to login and navigate" (0.909) and "available at any time and any place" (0.827) in Addis Ababa. It suggests that Trivandrum customers are affected by many variables in high factor loaded compared with Addis Ababa counterparts. Therefore, banks should be focused on the identified variables to improve their customer satisfaction.

Factor 4: Perceived usefulness

It also consists of five variables viz. "Flexibility", "Speed", "Relevance", "Comfortable" and "Control" in both Trivandrum and Addis Ababa. The table 6.1 depicted that both the five variables are affecting customer satisfaction of the two cities. Most prominent variables affecting customer satisfaction of Trivandrum and Addis Ababa are found commonly to be 'speed of the system' at the factor loading values 0.839 and 0.851 respectively. It implies that customers will always want to be swift in the bank, no matter the transaction. They will not just tolerate any form of delay. So if customers think the bank has a short turnaround time, then it is a plus for the bank.

Factor 5: Accessibility

Generally, this factor is related to Accessibility of e-banking. The Accessibility factor of Trivandrum consists of the three variables and that of Addis Ababa consists of five variables. Among those variables three are found to be common in both cities. It means that the three factors of e-banking customer satisfaction of Trivandrum and Addis Ababa is similarly affected by this factor 5. The prominent variable of Trivandrum was “easily find a policy and notice statements” (0.825), whereas in Addis Ababa the prominent variables was found “access my accounts anywhere and anytime” (0.840). It implies that Addis Ababa customers are very sensitive on 24/7 service of the e-banking. Indeed, one of the major benefits of e-banking is access to customer accounts anywhere and anytime, but the result shows that there is a gap in the Addis Ababa banks cases.

Factor 6: Awareness

The Awareness factor of Trivandrum consists of the four variables and that of Addis Ababa consists of three variables. Among those variables three variables are found to be common in both cities. As clearly seen on table 1, both cities are affecting by different variables with different levels of loading factor scores. Although, Awareness about the accuracy of e-banking was found as the most prominent factors in both Trivandrum and Addis Ababa, with 0.898 and 0.893 respectively. It implies that the accuracy of the transaction is very sensitive items for both Trivandrum and Addis Ababa customers. Thus, to increase awareness among customers, Banks in Trivandrum and Addis Ababa should advertise and conduct special awareness programs to make E-Banking services more popular among customers.

Component - II: Service Quality dimensions

The following factors have emerged after factor analysis when all the statements were put together in the context of service quality:

Table 6.2: Service Quality - Factors.

Factors	Items	Trivandrum	Addis Ababa
Factor 7: Reliability	Quick and swift service	-.721	.763
	Services are accurate		.645
	Stable supply of services		.756
	Keep promises	.804	.837
	Understandable contents	.777	.801
Factor 8: Responsiveness	Ability to understand customers' problems.	.749	.892
	Prompt and quick response.	.634	.629
	Faster services	.723	
Factor 9: Tangibility	Consistent and standardized navigation	.829	.729
	Queues at the bank branches	.609	
	Modern looking equipment	.794	.886
	Visually appealing materials		.803
	Charges imposed by the bank on E- Banking	.820	.838
Factor 10: Assurance	Punctuality, transparency, accountability		.873
	Reputation of the banks	.763	.904
	Safe in their transactions	.606	.633
	Ability to fulfill the requirement	.688	
	Quality of customer care services	.845	.788
Factor 11: Empathy	Attracting and retaining customers	.816	.847
	Necessary information to the customer		.875
	Individualized attention to the customers		.750
	Non-time bound services	.773	.905
	Operate convenient time	-.687	-.706

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Source: Survey data

Factor 7: Reliability

This is the consistency of the service performance, which breeds dependability, from the first time the service is correctly performed to the ability of the firm to keep its promises. Table 2 depicted that reliability factors of Trivandrum consist of three variables, whereas, factors of Addis Ababa consists of five variables. “Keeping promises” variables are most prominent variables that affecting Trivandrum and Addis Ababa customers under reliability actors. It suggests that bank services are mostly judged by whether they are keeping promises or not. So banks should be providing service in line with the promised.

Factor 8: Responsiveness

The responsiveness factor of Trivandrum consists of the three variables and that of Addis Ababa consists of two variables. Among those variables two variables are found to be common in both cities. It means that the responsiveness factors of e-banking customer satisfaction of Trivandrum and Addis Ababa is differently affected by this factor. However, the prominent variable of Trivandrum is the same as Addis Ababa, which is “ability to understand customers' problems” with factor loading

values 0.749 and 0.892 respectively. This is the willingness on the part of the service supplier to assist the customer and provide prompt service.

Factor 9: Tangibility

The Tangibility factor of Trivandrum consists of the four variables and that of Addis Ababa consists of three variables. Among those, two variables are found to be common in both cities. It means that the Tangibility factors of e-banking customer satisfaction of Trivandrum and Addis Ababa is similarly affected by this factor Tangibility. The prominent variable of Trivandrum was “consistent and standardized navigation” (0.829), whereas in Addis Ababa the prominent variables was found “modern looking equipment” (0.886). It implies that the two cities were affected by two common tangibility factors, but with different magnitude on factor loading. The difference of the two cities on this tangibility factor may exist due to varied perception of the customers.

Factor 10: Assurance

The assurance factor of Trivandrum consists of the four variables and that of Addis Ababa also consists of four variables. Among those, three variables are found to be common in both cities. It means that the three factors of e-banking customer satisfaction of Trivandrum and Addis Ababa is similarly affected by the factor of assurance. The prominent variable of Trivandrum was “quality of customer care services” (0.925), whereas in Addis Ababa the prominent variable was found “reputation of the bank” (0.940). The customers need to be professional in handling customers in order to assure them. The customer needs to be assured the staff knows what he/she is doing and that is what builds the confidence and trust. It suggests that customers always need professional care in order to assure the service or products.

Factor 11: Empathy

Concerning with Empathy factor, Trivandrum consists of the three variables and that of Addis Ababa consists of five variables. Among those, three variables are found commonly in both Trivandrum and Addis Ababa cities. As clearly depicted in table 2, both cities are similarly affected by three variables, but with different levels of loading factor scores. The prominent variables of Trivandrum were “attracting and retaining customers” (0.816), whereas, in Addis Ababa the prominent variable was found “non-time bound services” (0.905). It is therefore important to care for the customers and treat every customer special.

Testing of Hypothesis

From the results it is evident that through the eleven factors generally related to technology-based options and service quality, the nature and magnitude of their components are different for Trivandrum and Addis Ababa customers. Hence, the result of the null hypothesis is rejected. Therefore, there is a significant difference on factors affecting of customer satisfaction on e-banking between Trivandrum and Addis Ababa. It implies that the factors that used in this particular research are affecting customer satisfaction on e-banking with different magnitude. This is due to the fact that overall customer satisfaction is assumed to be the outcome constructs of the above identified variables. Thus, to satisfy customers on e-banking, banks could be provide much attention on those factors based on the country’s context.

Conclusion and Suggestions

This study investigates e-banking products that influence customer satisfaction in Trivandrum and Addis Ababa. It reveals that Technology-based option and Service Quality are the significant factors that influence customer satisfaction. Customers have also shown great interest in banks that satisfy their needs and wants. Both components in the banking sector are the most important criteria and asset for evaluating and satisfying customers and thereby increase the customer loyalty and average retention rate of customers. The very same factors have been responsible for the predominance of Trivandrum and Addis Ababa customers to satisfy on e-banking and those factors have always played a pivotal role. These factors might also help develop substantial potential for class banking in the state in the future. With various choices offered, customers are not willing to put up with anything less than the best. Banks have recognized the need to meet customers’ desires.

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