

ANALYTICAL FRAMEWORK OF THE FACTORS AFFECTING CUSTOMER SATISFACTION THROUGH E- BANKING

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Today, customers expect higher quality services from banks which, if fulfilled, could result in significantly improved customer satisfaction levels. This empirical research study mainly focuses to identify the important factors for the customers to choose E-banking for their satisfaction. Therefore, help the bank management not only in improving the level of satisfaction but also strengthening the bond between the banks and their customers, thereby helping them to retain and/or expand their overall customer base. The data has been collected from 200 customers and has been analyzed with the help of the SPSS 13 software using data reduction technique i.e. factor analysis. In light of the research and analysis done it can be concluded that, internet banking is marked by the factors such as credibility, responsiveness, competences, reliability, online services, security and access. E-banking is universally seen as a welcome development, and efforts are being made to put in place systems to manage and control the risks involved without restricting this service.

KEYWORDS: Credibility, Responsiveness, Competences, Reliability and Online Services.

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Introduction:

E-Banking, both as a medium of delivery of banking services and as a strategic tool for business development, has gained wide acceptance internationally and is fast catching up in India with more and more banks entering the fray. India can be said to be on the threshold of a major banking revolution with E-Banking having already been unveiled. At present, the total Internet users in the country are estimated at 9 lakh. However, this is expected to grow exponentially to 90 lacs by 2003. Only about 1% of Internet users did banking online in 1998. This increased to 16.7% in March 2000.*The growth potential is, therefore, immense. Further incentives provided by banks would dissuade customers from visiting physical branches, and thus get 'hooked' to the convenience of arm-chair banking. The facility of accessing their accounts from anywhere in the world by using a home computer with Internet connection, is particularly fascinating to Non-Resident Indians and High Net worth Individuals having multiple bank accounts.

Costs of banking service through the Internet form a fraction of costs through conventional methods. Rough estimates assume teller cost at Re.1 per transaction, ATM transaction cost at 45 paisa, phone banking at 35 paisa, debit cards at 20 paisa and Internet banking at 10 paisa per transaction. The cost-conscious banks in the country have therefore actively considered use of the Internet as a channel for providing services. Fully computerized banks, with better management of their customer base are in a stronger position to cross-sell their products through this channel.

The Indian banking and financial sector has also welcomed this change. Today, more and more Indian banks are trying to differentiate themselves in a fiercely competitive industry. Not only this helps them align their offerings to the constantly evolving customer needs and developments in technology, it also serves to replace some of traditional bank functions, thereby reducing significant overheads associated with bank branches. As an increasing number of Indian banks look at the innovative ways, such as Online banking, to make a customer's banking experience more convenient, efficient, and effective, it becomes even more important to ascertain the customers' perception of the overall service quality and their satisfaction with the current online banking services. Measuring customer satisfaction can provide banks useful information about customer loyalty and retention, and also help them devise effective strategies to use efficient customer service as a distinguishing factor in this heavily customer-oriented service industry.

Products and services offered

With gradual adoption of Information Technology, the bank puts up a web-site that provides general information on the banks, its location, services available e.g. loan and deposits products, application forms for downloading and e-mail option for enquiries and feedback. It is largely a marketing or advertising tool. For example, Vijaya Bank provides information on its web-site about its NRI and other services. Customers are required to fill in applications on the Net and can later receive loans or other products requested for at their local branch. A few banks provide the customer to enquire into his demat account (securities/shares) holding details, transaction details and status of instructions given by him. These web sites still do not allow online transactions for their customers.

Some of the banks permit customers to interact with them and transact electronically with them. Such services include request for opening of accounts, requisition for cheque books, stop payment of cheques, viewing and printing statements of accounts, movement of funds between accounts within the same bank, querying on status of requests, instructions for opening of Letters of Credit and Bank Guarantees etc. These services are being initiated by banks like ICICI Bank Ltd., HDFC Bank Ltd. Citibank, Global Trust Bank Ltd., UTI Bank Ltd., Bank of Madura Ltd., Federal Bank Ltd. etc. Recent entrants in Internet banking are Allahabad Bank (for its corporate customers through its 'Allnet' service) and Bank of Punjab Ltd. State Bank of India has announced that it will be providing such services soon. Certain banks like ICICI Bank Ltd., have gone a step further within the transactional stage of E-Banking by allowing transfer of funds by an account holder to any other account holder of the bank.

Some of the more aggressive players in this area such as ICICI Bank Ltd., HDFC Bank Ltd., UTI Bank Ltd., Citibank, Global Trust Bank Ltd. and Bank of Punjab Ltd. offer the facility of receipt, review and payment of bills on-line. These banks have tied up with a number of utility companies. The 'Infinity' service of ICICI Bank Ltd. also allows online real time shopping mall payments to be made by customers. HDFC Bank Ltd. has made e-shopping online and real time with the launch of its payment gateway. It has tied up with a number of portals to offer business-to-consumer (B2C) e-commerce transactions. The first online real time e-commerce credit card transaction in the country was carried out on the Easy3shoppe.com shopping mall, enabled by HDFC Bank Ltd. on a VISA card.

Review of Literature:

(Pikkarainen, Karjaluoto, and Pahnla 2004) define Internet banking as an 'Internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments'. With the exception of cash withdrawals, Internet banking gives customers access to almost any type of banking transactions at the click of a mouse. The use of the Internet as a new alternative channel for the distribution of financial services has become a competitive necessity instead of just a way to achieve competitive advantage with the advent of globalization and fierce competition (Flavian, Torres, & Guinaliu, 2004; Gan, Clemes, Rueangthanakiet Pairo, 2008) defined Customer's satisfaction as the company's ability to fulfill the business, emotional, and psychological needs of its customers. However, customers have different levels of satisfaction as they have different attitudes and experiences as perceived from the company. Customer's satisfaction is affected by the importance placed by the customers on each of the attitudes of the product/ service. Customer satisfaction measurement allows an organization to understand the key drivers that create satisfaction or dissatisfaction; and what is really driving their satisfaction during a service experience. When customers pay money to buy a service he has some minimum expectations from the transaction. These expectations from the purchase have to be met substantially, if not entirely for the customer to become a loyal customer of the service (Akbar and Parvez, 2009). These expectations are fulfilled of a promises- quality, fair price, availability, after sale services, complaints handling process, information, and variety etc. the customers are demanding high quality of services and low prices or charges. Better quality for the same cost is the motto of the customers.

Research Methodology:**Demographic profile of Respondents:**

Table 1(a) presents the demographic profile of the respondents. Majority of the respondents were female (54%) and the males constituted only 46% share of total sample. In terms of age groups, all respondents fall in the age category of 21-30 (100%). This shows that our sample is inclined towards the opinion of youngsters on E-banking. With regard to the respondents' occupation, highest number of respondents were from student category (90%), followed by businessman (5%) and the remaining were others (2%).

Need, Objectives and Research Methodology:

The Banking sector in India has introduced E-banking in a phased manner. Foreign banks are the pioneers in E-banking, private banks introduced it in a big way and public sector banks are in the process of transformation from traditional banking to –banking. The present paper primarily aims to identify the important factors for the customers to choose E-banking for their satisfaction. Two null hypotheses have been framed:

H0 (1): For the customer satisfaction, all factors are equally important.

H0 (2): There is no correlation amongst the different factors to judge the customer satisfaction.

Sampling and Data Analysis:

The data was collected from the customers of the banks under study through a structured questionnaire to evaluate the services of E-banking. The customers of five banks i.e. State Bank Of India, Punjab National Bank, HDFC Bank, AXIS Bank and ICICI Banks were selected and the rationale for selection of these banks for the study was on the basis of their asset base structure. Stratified random sampling technique was used and a sample of 300 respondents was chosen. Data collected has been analyzed by using factor analysis with the help of SPSS-13 version. The 20 service quality variables were analyzed. The variables with factor loadings of .440 were considered as significant. To check the reliability of the data, KMO, Bartlett's test of Sphericity and Cronbach Alpha were used.

In the statistics we assume that we are extracting factors of Eigen value 1 or more have specified to the computer package while doing factor analysis. The objective is to reduce the variables to a fewer number of factors by retaining only those factors with an Eigen value of 1 or more (in other words, factor must explain at least much of the variance if not more than a single original variable(Nargundkar,2002).

In order to achieve the objective of the study, first and foremost, the reliability of the data is tested by using Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity. The value of KMO statistics in Table 1(b) is >0.5 , therefore, null hypothesis is rejected. null hypothesis is rejected as all the factors are not considered equally important for measuring the service quality of E-banking. Bartlett test of sphericity shows the value of Chi-

square which is significant at 1 percent level of significance. These two tests show that the data is fit for conducting the factor analysis. The sampling adequacy measure was also tested for questionnaire in Table 1(b) and the value found to be 0.734, which is greater than 0.5 and falls between permissible limit of 0.5 to 1 and is considered as highly significant.

The present study is based on primary as well as secondary data. Secondary data is collected through research papers, journals, websites, books etc. The primary data is collected through structured questionnaire from 300 young respondents during the period of February 2012 to April 2012. The respondents were interviewed through a pre-tested questionnaire which was administered personally. Questionnaire had two sections. First section contained questions regarding demographic profile of customers while second section contained a list of 20 statements pertaining to various attributes of E-banking. Likert scale was rated from 1 to 5 with referring 1 to strongly disagree and 5 to strongly agree.

The results of factor analysis with the variables, their names, factor loadings, reliability, eigen value and percentage of variance is presented in Table 1(c) The Principal Component Analysis Varimax Rotation was employed for extracting the factors. The process of extraction was stopped where the size of Eigen value has gone less than 1.0 and at that level it explained 63.798% of the total variance. Large communalities indicate that a large amount of variance has been extracted by the factor solution. A factor loading represents the correlation between an original variable and its factor. The criteria given by Hair (1995), where factor loading based on sample size taken as the basis for decision about significant factor loading, was adopted.

Factor loading is nothing but coefficient of correlation. The factor analysis yielded seven factors which throw light on the most important variables included in each factor. The derived seven factors are: credibility, responsiveness, competences, reliability, online services, security and access.

Results and Discussions:

1. Credibility:

The credibility factor consisted of five variables. In this factor, Eigen value is greater than 1 i.e. 5.384 and constituted 26.921 percentage of variance. The factor so called is 'credibility' as E-

banking enhances reputation, updated information, punctuality, transparency, accountability, easier transfer of funds, and confidentiality of password is also provided to customer that was earlier not possible by brick and mortar banking. This is an important factor having high factor loading closer to 1.

2. Responsiveness:

The responsiveness factor consisted of four variables and each of these variables was analyzed using factor analysis. The factor loadings of all the statements were calculated and it was found that the loadings of all the statements were greater than .5. and thus, all were accepted. The Cronbach alpha, percentage of variance and Eigen values are .750, 7.999 and 1.600 respectively which suggest a good consistency of the data. This factor is consisted of quick and prompt, reduces the waiting time; transfer of funds is faster as compared to manual banking system and necessary. This shows that E-banking is a major factor for the growth and expansion of banking sector and the economy as a whole by reduction of wastage and less paper involvement in electronic transactions.

3. Competences:

The competence factor consisted of three variables. The analysis shows that the Eigen value represents 7.421 percent of variance of data. Two variables having value closer to 1 and .68. The variables extracted were trusted by young generation most, explains the service itself and convenient location of service facility.

4. Reliability:

The reliability factor consisted of three variables and each of these variables was analyzed using factor analysis. The factor loading of all the statements was calculated and it was found that the loadings of all the statements were greater than 0.4 and thus, all were accepted. The Cronbach alpha and Eigen values are .523 and 1.311 respectively which suggest a good consistency of the data. This factor explained 6.554 percentage of variance of data. This factor is a combination of E-banking provides 24*7*365 days service to customers, provides effective medium of promotion of various schemes and it provides accuracy in billing.

5. Online services:

The online services factor consisted of only one variable i.e. Online purchase of Goods & Services including Online Payment is easier. The factor loading of this statement is .851 and closer to 1 and thus, accepted. The Eigen value of this factor is greater than 1 i.e. 1.237 explained 6.184 percentage of data.

6. Security:

The Security factor consisted of three variables and the cronbach alpha and Eigen value is .427 and 1.073 respectively, which suggest a good consistency of data. This factor explained 5.366 percentage of variance of data. The factor loading of all the statements were greater than 0.5 and thus, all were accepted. This factor consisted of statements like E-Banking ensures physical security of the Transaction, assures customers that the problem will be handled and provides service at the designated time. So, much influence in security issue is of physical security which provides immense helps to the customers in maintaining secrecy of their money as well as transactions.

7. Access:

The Access factor consisted of only one variable. The statement included in this factor is E-banking Service is accessible via internet banking, mobile banking and ATM. The Eigen value is 1.018, which is more than 1 and explained 5.092 percentage of variance of data. The factor loading is closer to 1 i.e. .864. This shows that customers agrees that E-banking is easily accessible through mobile, ATM, and internet banking.

Conclusion and Implication:

The study focused on the various dimensions of service quality being applicable on the banking industry. The factors taken into consideration provide a wide platform to the banking industry to consider the various factors important for the customer's satisfaction and further improvement. E-banking has contributed a lot to improve the service quality. Seven factors were developed having the various statements to measure the service quality. In light of the research and analysis done it can be concluded that, internet banking is marked by the factors such as credibility, responsiveness, competences, reliability, online services, security and access. These factors give a wide choice in selecting the various factors important for the service quality. In order to judge the level of satisfaction among customers regarding the E-banking services, a list of 20 variables

was compiled into seven factors. The results showed that all the factors are not equally important for measuring the level of satisfaction. For 'credibility' factor, reputation, updated information, punctuality, transparency, accountability, easier transfer of funds, and confidentiality of password is also provided to customer are highly ranked by the customers because their factor loading was very high. In the 'responsiveness' factor, quick and prompt, reduces the waiting time; transfer of funds is faster as compared to manual banking system and this shows that E-banking is a major factor for the growth and expansion of banking sector and the economy as a whole. The elements of 'competences' like trusted by young generation most, explains the service itself and convenient location of service facility plays a vital role in banking industry. For the 'reliability' factor, customer loaded high value to E-banking provides 24*7*365 days service to customers, provides effective medium of promotion of various schemes and it provides accuracy in billing, so E-banking is an improvement over traditional banking. The factors like 'online services', 'security' and 'access' are considered to be equally important in various other statements. To promote customers' satisfaction, it is unavoidable for banks to give due weightage to all the above-mentioned factors. With the help of these factors, banks can focus more upon delivering qualitative E-banking services to the customers. Today, the click of the mouse put forward customers banking services at a lesser cost and also allows them with unparalleled liberty in choosing among different vendors available for their financial service needs. E-banking is universally seen as a welcome development, and efforts are being made to put in place systems to manage and control the risks involved without restricting this service.

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Table 1(a): Demographic Profile of Respondents

Demographic Variables	Demographic Characteristics	Frequency	Percentage
Gender	Male	138	46.0
	Female	162	54.0
Age	21-30	300	100.0
Occupation	Service Man	9	3.0
	Business Man	15	5.0
	Student	270	90.0
	Others	6	2.0

Table (b): KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.734
Bartlett's Test of Sphericity	Approx. Chi-Square	1868.089
	df	190
	Sig.	.000

Table (c): Naming of Factors

S. No.	Name of Factor	Statements	Factor Loading	Cronbach Alpha	Eigen Value	% of Variance
1.	Credibility	a13.E-Banking increases the reputation of the banks	.694	.721	5.384	26.921
		a7.It provides the up to date information	.667			
		a10.E-Banking provides more Punctuality, Transparency & Accountability	.654			
		A9.Transfer of funds is easier through E-banking.	.620			
2.	Responsiveness	a19.Password facility provides confidentiality to transaction	.584	.750	1.600	7.999
		a17.Response of service through E-Banking is very Quick & Prompt	.753			
		a3.It reduces the waiting time to receive service	.739			
		a11.Transfer of funds is faster as compared to manual banking system	.590			
3.	Competences	a16.E-Banking is necessary for the development of new economy of India	.569	.620	1.484	7.421
		a12.It is trusted by young generation most	.799			
		a5.E-banking explains the service itself	.687			
4.	Reliability	a4.It provides convenient location of service facility	.443	.523	1.311	6.554
		A20.E-Banking provides 24*7*365 days service to customers.	.749			
		A8.E-Banking provides effective medium of promotion of various schemes.	.674			
5.	Online services	a14.It provides accuracy in Billing	.476	.427	1.073	5.366
		A2.Online purchase of Goods & Services including Online Payment is easier.	.851			
6.	Security	a18.E-Banking ensures physical security of the Transaction	.751	.595	1.018	5.092
		A6.It assures customers that the problem will be handled.	.595			
		a15.It provides service at the designated time	.512			
7.	Access	a1.E-Banking Service is accessible via Internet Banking, mobile banking & ATM	.864			