Factors Affecting Customer Perceptions and Behavioural Intention of Internet Banking

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ABSTRACT

In the 21ˢᵗ century, the Internet is used as a tool for worldwide communication. Producers and entrepreneurs can sell their products online as internet promotes trading. It has enabled every individual to get information and knowledge at the click or tap of their fingers. Internet has revolutionised how business takes place in the modern world and thus banking and financial organizations have also moved forward with Internet banking or online banking. A study was conducted to examine the factors affecting customer satisfaction of internet banking. The primary purpose of this article is to explore the factors which determine customer satisfaction of internet banking. Furthermore, this paper also investigates the impact of tangibles, responsiveness, assurance, reliability and empathy on customer satisfaction. The results of this study would help banking institutions to understand which factors they should concentrate on to improve their interactions with customers online. This would also help them to provide better user interface which would further lead to customer satisfaction as well as acquisition in the long run. Using online survey, responses were collected through convenience sampling. The results can also help banks to improve the mobile applications which they have designed for their users. Common method variance can lead to errors when both dependent and independent variables are captured from the same person. Correlation and Regression are used to test the hypotheses and conceptual framework. The results deduced that all five factors affecting internet banking is significant to customer satisfaction. The results demonstrate that having good amount of Tangibles helps in generating the Customer Satisfaction the most. It was followed by Reliability, Empathy, Responsiveness and Assurance accordingly. Therefore, developing Tangibles in internet banking can certainly influence customer satisfaction. Organization will understand the high importance of factors of internet banking and will consider these factors while developing internet banking for their organisation. The limitation of this study is that all the respondents are from urban or semi-urban areas and thus, this study cannot be used to examine the factors which would lead to customer satisfaction of internet banking for rural people.

Keywords: Tangibles, Responsiveness, Assurance, Reliability, Empathy, Customer Satisfaction, Banking

I. INTRODUCTION

In recent times there is steep increase in usage of mobile banking which is at a phase much faster than the internet. This paper explores the impact of five factors such as tangibles, responsiveness, assurance, reliability, and empathy on customer satisfaction of internet banking. The paper thoroughly focuses on the various claims of researchers for the need and application of these factors, particularly in online banking. In this regard, the paper can provide guidelines for the bank to understand the importance of the factors. It can also be helpful to improve the technology provided by the bank by making them understand where customers want them to focus. Ever since the turn of the century, technology has been growing at a rapid pace. And with the advent of Internet, the world has become smaller and the database has become larger.But because of the fast pace of change in technology, the feature of Internet Banking turned from competitive advantage to competitive necessity pretty quickly.Butbecause of the rapid development of computer technology as a commercial tool, Internet banking is still being used to attract more customers to perform banking transactions in related banks. (Ling, Fern, Boon, & Huat, 2016) The marvellous kinds of innovation in technology and the blending of it with customers and IT made a major shift in the banking industry. Human beings have managed to create another world within the amazing world they live in through technology. (VASAN, 2014) The major force behind this revolution is technology, which has brought in a level playing field for businesses by eliminating geographical, regulatory, and industrial barriers. Also, it is important to create business more customer oriented because new products and services are increasing day by day. (Zafar, Zaheer, ur-Rahman, & ur Rehman, 2011)Parasuraman's SERVQUAL model is widely used to measure perceived service quality in various industry such as retailing, restaurants, banking, telecommunication, services, airline, catering, hotels, hospitals, automotive, education and so on (Ladhari, 2009) A service quality gap exists when there are shortfall occur in which the service provider would like to close (R. Lewis, 1994).To determine the linkage of factors (tangibles, responsiveness, assurance, reliability and empathy) and

customer satisfaction of internet banking. To suggest few important factors which will help to develop better online banking technology.

Dependent variables used in this study are:

1. TANGIBLES

"Tangible is from Latin tangere, "to touch." So you might not need to physically touch something for it to be tangible, but it has to be grounded in the real world of facts." (Vocabulary.com, n.d.).But in this study the term 'tangibles' is usedto signify the visual appearance of the website through which internet banking is taking place. Therefore tangibles will include language and online content, eye-pleasing colors, etc.

2. RESPONSIVENESS

"Responsiveness means 'being able to react quickly.'" (Vocabulary.com, n.d.)

In this study 'responsiveness' variable is linked to the amount of time taken by the bank servers to complete customer requests; whether it be handling their complaints or aiding them to transfer money.Thus, banks would need to have more data servers and also be able to operate on a lesser bandwith.

3. ASSURANCE

"An assurance is a vote of confidence." (Vocabulary.com, n.d.)

In this study the variable 'assurance' means the bank website gives customers the confidence that their transactions are safe and their personal information is kept confidential. They also need to assure their customers that their service of online banking will actually be available 24x7.

4. RELIABILITY

"Reliability means dependability." (Vocabulary.com, n.d.)

In this study the 'reliability' variable indicate that the website is frequently updated and no information have become irrelevant. In addition to this, reliability also means that a customer can rely on any of the conditions and assurances that the bank has given to them.

5. EMPATHY

"The adjective empathic describes the ability to understand other people's feelings." (Vocabulary.com, n.d.)

In this study 'empathy' variable includes the level of support the customer gets from the website. It indicates how customer friendly the website is. It also means that the website is arranged in such a way that the customer would find it easier to understand how to operate the network and thus, do their work more easily.

A. RESEARCH QUESTIONS
1. Is these factors necessary for internet banking?

2. What are the various aspects of internet banking?

3. How to develop better online banking application?

B. OBJECTIVES
➢ To highlight different aspects of the internet banking.

C. SCOPE OF THE STUDY
The scope of the study is to evaluate various factors affecting customer satisfaction in internet banking and which factor is most effective in influencing customer satisfaction. Also, this study will give an idea as to which factors should be taken care the most when developing an online banking application. This will help in gaining customers preference, which will lead to the success of the internet banking application.

II. LITERATURE REVIEW
According to (Dr. Hasina Sheykh & Md. Khaled Bin Amir, 2017), a research was undertaken to figure out the lever of customer comfort, a bit of guidance to develop internet banking service quality. With regard to online banking services & one bank limited in Bangladesh have been chosen as sample. Information was taken from five branches from different places in the city of Dhaka. 50 customers in total were questioned about their comfort level with regard to online banking. Majority favoured security, user friendliness and updating frequency of the website. Once a thorough research was undertaken in online banking, services of one Bank Limited the outcome signified that the customers were pleased with security and user friendliness of the website of the banks, and had the same thinking with regard to update frequency.

(Worku G, Tilahun A, & Tafa MA, 2016)conducted a study to understand how electronic banking has impacted customer satisfaction. They also tried to understand the challenges they face when they use e-banking and also the benefits they avail when using it.They used different variables such as, relationship of e-banking with that of age, occupation, and education, of customers and they also studied the impact of e-banking on traditional brick and mortar banking service. There were 402 respondents for this study and the study was conducted through questionnaires. Participants consisted of e-banking customers.They studied the relationship between demographic characteristics of customers and e-banking by using frequency tables and percentages. They also used chi-square independence test to analyse whether the number of visits have had any significant change before and after the advent of e-banking. They found that there is a significant relationship between the demographic characteristics of the customers and e-banking. The customers who are young, educated and have a salary are more prone to use e-banking while businessmen and women are less prone to use e-banking.

According to (VASAN, 2014) took the initiative to understand how comfortable customers are with internet banking services. In addition to this, the researchers also tried to understand the thought process of the customers while using e-banking and also tried to analyse whether the customers felt a need for this service.The basic information for this research was taken with the support of 120 banking customers of ICICI Bank, who were granted questionnaire. The author concluded from the study that majority of their study's participants experienced a high level of comfort while using internet banking. And majority of the participants also felt a huge need for internet banking

(Jamil Hammoud, Rima M. Bizri, & Ibrahim El Baba, 2018), examined which factors affecting the service of E-Banking had an impact on customer satisfaction. They also tried to analyse which of the factors had the highest impact on customer satisfaction so that banks could understand which factor to focus most on.The variables used in the study were "reliability, efficiency, and ease of use, responsiveness, communication, security and privacy". Bank clients in the Lebanese banking sector were the respondents of the study. The authors used structural equation modeling with SPSS and Amos to understand and analyse the data. The results showed that reliability had the highest impact on customer satisfaction but other factors were significant as well.

According to research undertaken by (Firdous & Farooqi, 2017), we could understand the effect of Internet Banking service quality on customer comfort level in New Delhi with the help of an exploratory survey along with a Likert based questionnaire. Evaluative and useful sampling was used and several types of internet banking customers were met in New Delhi. Sample of 194 internet banking customers provided the data. Different structures of internet banking service quality were usability, system availability, completion, privacy, contact and responsiveness. The outcome signified that the internet banking service quality structures have an enormous effect on the customer comfort level of internet banking. Customers and structures of contact personally contribute 70% of the entire customer comfort level in internet banking.

(Mr. Lakshmi Narayana.K, Mr. Sri Hari.V, & Dr.P. Paramashivaiah, 2013), also investigated on which factors of e-banking had a higher impact on e-banking services. This research helped the banking authority to understand which factor had the highest influence and also helped them to make a change in the size of their customer support.

According to (Ling, Fern, Boon, & Huat, 2016)a research was undertaken to analyse which of the five factors-"Service quality, web design and content, security and privacy, convenience and speed" could boost customer comfort level toward internet banking. 200 corporates were a part of this research through questionnaire survey and have given their opinions to the above sources that boost customer's decision to use Internet Banking. The outcome of this research revealed that web design and content, convenience and speed are the top three sources that boost customer comfort level toward Internet Banking. This research showed that speed, convenience and web design and content help in increasing customer comfort level while using Internet Banking.

(Simon Nimako, Nana Kwame Gyamfi, & Abdil Mumuni Moro Wandaogou, 2013)investigated whether the internet banking service quality (IBSQ) in the Ghanaian banking industry was improving Customer Satisfaction (CS). The study used a questionnaire for collecting primary data. There were 200 respondents from two banks. The results showed that customers of two banks were disappointed at the following"the speed of responding to customer request, guidance availability online to resolve problems, preferentially lower fees/ rates and charges, and reasonability of the transaction fee.

According to (Jham, 2016), a study was carried out to understand the use of internet banking and satisfaction by existing bank customers through an examination of the factors that influence customer's approval of Internet banking services. Clients in six banks helped to identify the factors which enhance satisfaction with internet banking services with the help of a data reduction technique called Factor Analysis in the exploratory study. Regression analysis was used to examine the function of trust in affecting customer satisfaction with internet banking.

III. RESEARCH METHODOLOGY

The purpose of the study is to determine the factors affecting customer satisfaction of internet banking. The methodology has reviewed the outlined procedures and methods used to gather data and data analysis that was utilized in the study. This study is a descriptive research design, which is having five types of variables that affect Customer satisfaction. Those five variables: (a) Tangibles (b) Responsiveness (c) Assurance (d) Reliability (e) Empathy.

The participants were selected from Mumbai who uses internet banking. The number of participants was 140. The sampling technique which was used was the Snowball Sampling technique. We selected some respondents and these individuals recruited their acquaintances to be a part of this study. The questionnaire which was used had a 5-point Likert scale so that respondents can accurately fill the questionnaire. This will make it easy to identify which factor is more dominant and which is not. The questionnaire had two parts. The first part was designed to gather information about the factors and the second part was designed for the customer satisfaction assessment. The some participants were asked to participate in the study through email. If they choose to participate, they were given a link to access Google form survey application to begin the assessment and some participants were given offline forms. They had to provide consent to participate in the study and were at least 18 years of age. The survey provided an explanation of why the study was being conducted and along with thorough instructions to complete the instrument. In addition, an assurance that their participation was confidential and no individual data would be shared or reported. The participants were contacted in May.

IV. DATA ANALYSIS

The table 1 reveals the demographic variables of the respondents. It can be observed that the study consists of 62.1% Males and 37.9% Females. Regarding the age of the respondents, 67.9% of them are in the age group of (18-30) years, 21.4% are in the age group of (30-40) years and 10.7% are lie in the age group of (40-50) years. With reference to the qualification of the respondents, 27.9% of them have UG qualification, 52.9% have pursued a PG degree and 19.3% have done other courses.

Table I: Demographic Information Of Respondents

SL.no.	Classification	Categories	Frequencies	Percent
1	Gender	Male	87	62.1
		Female	53	37.9
		Other	0	0
		Total	140	100
2	Age	18 yrs to 30 yrs	95	67.9
		30 yrs to 40 yrs	30	21.4
		40 yrs to 50 yrs	15	10.7
		Total	140	100
3	Qualification	UG	39	27.9
		PG	74	52.9
		Other	27	19.3
		Total	140	100
4	Annual Income	Less than 3 lakhs	71	50.7
		3 lakhs to 5 lakhs	32	22.9
		5 lakhs to 7 lakhs	25	17.9
		More than 7 lakhs	12	8.6
		Total	140	100
5	Living Status	Staying alone	19	13.6
		Nuclear Family	97	69.3
		Joint Family	24	17.1

		Total	140	100

It can also be observed that the annual income of 50.7% of the respondents are less than Rs.3 Lakhs. 22.9% of the respondents have an annual income between Rs.3 Lakhs to Rs.5 Lakhs. 17.9% have an annual income within the range of Rs.5 Lakhs to Rs.7 Lakhs and 8.6% have an annual income greater than Rs.7 Lakhs. With reference to the Living status of the respondents, 13.6% of the respondents are staying alone, 69.3% of respondents are in nuclear family and 17.1% are in joint family.

Table 2: Reliability Analysis

SI. No.	Variables	Cronbach's Alpha Percentage
1	Tangibles	.852
2	Responsiveness	.850
3	Assurance	.859
4	Reliability	.869
5	Empathy	.768

Cronbach's Alpha should be greater than 0.7 to have an acceptable degree of consistency. From the above Reliability Analysis table 2 it can be observed that the Cronbach's Alpha the factors pertaining to factors are 0.852 (Tangibles), 0.850 (Responsiveness), 0.859 (Assurance), 0.869 (Reliability) and 0.768 (Empathy).The Cronbach's Alpha scores of all the variables are higher than 0.7. Hence, all the variables have good internal consistency.

Table 3: Factor Analysis

SL. No.	Variables	KMO Value
1	Tangibles	0.839
2	Responsiveness	0.883
3	Assurance	0.828
4	Reliability	0.904
5	Empathy	0.856
6	Customer satisfaction	0.886

From the above Factor Analysis Table 3,the accepted KMO value is .7 and higher. Since a high KMO value shows that the sampling is adequate. The KMO value of Tangibles is .839, Responsiveness is .883, Assurance is .828, Reliability is .904, Empathy is .856 and Customer satisfaction is .886. Since KMO values of all the variables are higher than .7, the sampling is more than adequate.

Table 4: Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842[a]	.709	.699	. .33321

From the above Regression Analysis table 4, it can be inferred that that R value is 84.2%, R Square value is 70.9%, and Adjusted R Square value is 69.9%. Hence, it is apparent that 70.9% of Customer satisfaction is contributed by Tangibles, Responsiveness, Assurance, Reliability and Empathy. The impact of Factors on Customer satisfaction is measured using Karl Pearson's Correlation Coefficient. The hypotheses developed in this regard are:

H_1 Tangibles have a significant impact on Customer satisfaction.

H_2 Responsiveness has a significant impact on Customer satisfaction.

H_3 Assurance has a significant impact on Customer satisfaction.

H_4 Reliability has a significant impact on Customer satisfaction.

H_5 Empathy has a significant impact on Customer satisfaction.

Table 5: Correlation

Correlation		Tangibles	Responsiveness	Assurance	Reliability	Empathy	Customer satisfaction
Tangibles	Pearson Correlation	1	.704	.648	.660	.615	.744

	s					
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	140	140	140	140	140	140
Responsiveness	Pearson Correlations	.704	1	.680	.770	.730	.700
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	140	140	140	140	140	140
Assurance	Pearson Correlations	.648	.680	1	.734	.580	.676
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	140	140	140	140	140	140
Reliability	Pearson Correlations	.660	.770	.734	1	.782	.741
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	140	140	140	140	140	140
Empathy	Pearson Correlations	.615	.730	.580	.782	1	.739
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	140	140	140	140	140	140
Customer satisfaction	Pearson Correlations	.744	.700	.676	.741	.739	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	140	140	140	140	140	140

From the above correlation table, it can be inferred that Tangibles is significant with customer satisfaction. Furthermore, it can also be observed that maximum degree of correlation is witnessed between customer satisfaction and tangibles at 74.4% followed by Reliability at 74.1%, Empathy at 73.9%, Responsiveness at 70.0% and Assurance at 67.6%. Therefore, all the hypotheses H1, H2, H3, H4 and H5 are accepted.
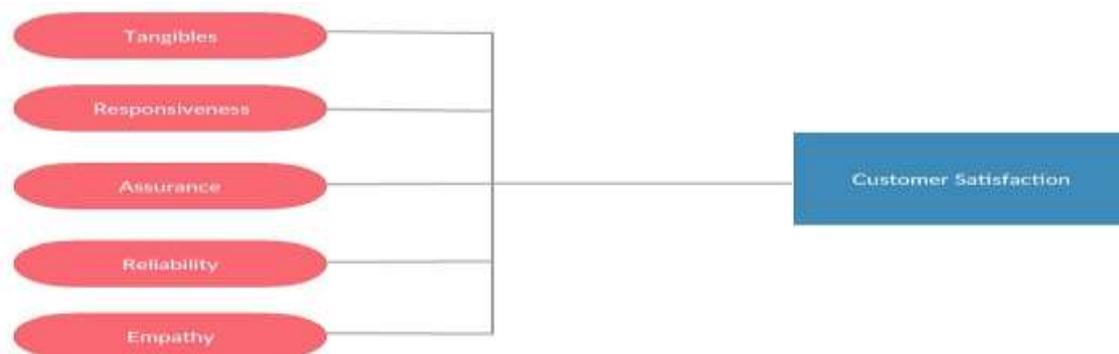

Fig.1. Conceptual Framework

From Fig.1, we can see the factors affecting customer satisfaction of internet banking.

V. CONCLUSION
1) DISCUSSION
The present study makes us understand the customer satisfaction construct. It also makes us understand the relationship between factors of internet banking (tangibles, responsiveness, assurance, reliability and

empathy) and customer satisfaction. Careful attention to factors of internet banking such as tangibles, responsiveness, assurance, reliability and empathy can lead to customer satisfaction. The findings suggest that all the factors of internet banking has a direct effect on customer satisfaction. As discussed before we are considering five factors of internet banking which are tangibles, responsiveness, assurance, reliability and empathy these factors later lead to customer satisfaction, the above study shows us that tangibles, responsiveness, assurance, reliability and empathy are independent variables where has customer satisfaction is a dependent variable. The results demonstrate that having good amount of Tangibles helps in generating the Customer Satisfaction the most followed by Reliability, Empathy, Responsiveness and Assurance accordingly. Therefore, developing Tangibles in internet banking can certainly influence customer satisfaction.

2) MANAGERIAL IMPLICATIONS

This study will contribute towards helping managers to evaluate which factor of internet banking will have greater effect in their organisation. Managers will understand the high importance of factors of internet banking and will consider these factors of internet banking while developing internet banking for their organisation. These factors of internet banking can also be developed for existing internet banking. It will help in analysing the performance of existing internet banking of an organisation. Managers can understand the reasons for the level of performance of the internet banking by understanding the factors of internet banking.

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