Impact of E-Banking Services on Customer Satisfaction: A Study

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ABSRACT : Banking industries offering E-Banking services to exist and strive to become an integral part of the lives of their new and existing customers and therefore always strive harder to keep satisfying their customers through better channels of delivering their offerings services. There are many dimensions which have an impact on customer satisfaction, those are helps to understanding E-banking services, and their contribution towards Customer satisfaction. The Methodology of the research paper; An exploratory survey method used with the help of a Likert scale based questionnaire was conducted to investigate the impact of E-banking services on customer satisfaction, Convenience sampling was used and with sample of 417 E- banking customers. The ANOVAs analysis revealed that HO^1 found that there is a significant impact E-Banking services on demographical variable except Occupation, followed with that HO^2 found that there is a significant impact of E- banking services dimensions like E-banking services are generally faster than traditional banking, Quality of the E- banking services, Implemented by Best Technology, Reduced time of transactions significant impact on customer satisfaction, remaining determinates are not significant impact on customers towards giving satisfaction.

Keywords: Banking, E-Banking services, customers, customer satisfaction.

1. INTRODUCTION

The technological innovation of electronic channel of service delivery has brought in a level playing field for businesses by eliminating geographical, regulatory, and industrial barriers .In the words of **Balachandher et al.,** this revolution in the market place has set in motion a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace. According to **Awad,** there are four electronic commerce activities internet users perform. These activities require a banking relationship and are: shopping, banking, investing, and online electronic payment for Internet services. The enormous increase of the internet is changing the way businesses interact with consumers as most businesses are now conducted using the internet. It is this introduction of e-commerce as a means of payment that has urged banks to take a leap from the traditional banking services, offering a service strongly through the medium of internet, which has come to be known as internet banking or e-banking. Existing literature on internet banking in India indicates that despite its growing use and adoption by many banks, no significant effort has been made to understand whether the customers whom the technology is meant for are satisfied or not and what are the demographic characteristics of the ones who have adopted the technology. Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society. Online banking is also referred as Internet banking, e-banking, virtual banking and by some other terms. This new channel has added a new dimension to the concept of customer satisfaction and how it can be

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affected in a positive way. All organizations exist and strive to become an integral part of the lives of their customers and therefore always strive harder to keep satisfying their customers through better channels of delivering their offerings. There are many factors which have an impact on customer satisfaction, one of the most important being service quality. Due to the varying nature of the products offered in manufacturing sector and in the services sector the definition and measurement of service quality, it was seen could not be the same for both. Especially, in the present era, with the emergence of internet as a major channel of service delivery, the need for a scale to measure the service quality in electronic media of services was felt strongly. Hence, service quality was taken up by the research scholars specifically in terms of the e-services which lead to the development of various models that helped in measuring e-service quality in the services sector.

2. REVIEW OF LITERETURE

Pikkarainen, Karjaluoto, and Pahnila 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, Limsombunchai, & Weng, 2006). Rueangthanakiet Pairot, 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 and 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 for 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 promise- 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. The concept of "Customer or User Satisfaction" as a key performance indicator within the businesses has been in use since the early 1980s (Bailey & Pearson 1983; Ives, Olson, & Baroudi 1983). Similarly, the end user computing satisfactions have been studied since the 1980 (Bailey & Pearson 1983; Chin, Diehl, & Norman 1988; Ives et al., 1983; Rivard & Huff 1988). The user satisfaction can be seen as the sum of the user's feeling and attitudes toward several factors that affect the usage situation (Bailey et al., 1983). End user experience has become an important factor in internet-based businesses because the end user often pays for the majority of new products and services. Therefore, new product characteristics such as perceived ease of use, quality, aesthetics, appeal and value for money must be matched or exceeded with customer expectations toward the product (Wilson & Sasse 2004). Therefore, assessing customer satisfaction has become very important, especially for high tech products and services. In general, customer satisfaction has been measured using questionnaire scales for which either a Likert or a semantic differential scale has been used. A study by (Picado, Gonzalez & Eckelman 2004) investigated customer satisfaction in the service industries using quality function deployment (QFD). They considered both external and internal service

management issues and subsequent service innovations based on the framework of QFD. The study also includes benefits and disadvantages of the QFD process as compared to service quality and customer paradigms, in addition to recommendations for future applications, with particular interest in the online banking service management issues. Various research studies on consumer attitude and adoption of internet banking have shown that there are several factors influencing the consumer's attitude towards online banking such as person's demography, motivation and behavior towards different banking technologies and individual acceptance of new technology. It has been found that consumer's attitudes toward online banking are influenced by the prior experience of computer and new technology (Laforet and Li 2005). As far as online banking adoption is concerned, security, trust and privacy concerns have been outlined as extremely important ones from the consumer's standpoint (Benamati and Serva 2007).Online banking requires perhaps the most consumer involvement, as it requires the consumer to maintain and regularly interact with additional technology (a computer and an Internet connection) (Jane et al, 2004). Consumers who use ebanking use it on an ongoing basis and need to acquire a certain comfort level with the technology to keep using it (Servon, and Kaestner 2008). The service quality attributes that banks must offer to encourage consumers to switch to online banking are perceived usefulness, ease of use, reliability, security, and continuous improvement (Liao and Cheung 2008).In another study (2002), they also found that individual expectations regarding accuracy, security, user involvement and convenience were the most important quality attributes in the perceived usefulness of Internet based e-retail banking. A study by (Ibrahim et al, 2006), revealed six composite dimensions of electronic service quality, including the provision of convenient/accurate electronic banking operations; the accessibility and reliability of service provision; better queue management; service personalization; the provision of friendly and responsive customer service; and the provision of targeted customer service. Perceived usefulness, security and privacy are the most influencing factors to accept online banking (Qureshi et al, 2008)

3.OBJECTIVE
The main objective of this study is to examine the perception level of customers banks. In addition, the study's objective was accomplished through the following objectives:
- To examine the correlation between demographical variable of the customer and E-Banking service.
- To analyse determinants of E- Banking services towards Customer satisfaction.

4. TESTING OF HYPOTHESIS
The following are the hypothesis designed with above objectives
- *HO1:* There is no significant impact of E-Banking services on demographical variable.
- *HO2:* There is no significant impact of E- Banking service on customer satisfaction.

5. METHODOLOGY
The study is concerned with the customer perception towards online banking services of Public and private banks based on that, both primary data and secondary data, the primary data were collected directly from the sample customers through a well devised questionnaire in Hyderabad city. Secondary data were collected from books, journals, research articles and magazines for the purpose of review of literature. Convenience Sampling method is used for the study. The sample size of the bank customers is 169.The data analyzed by using

percentage method, Independent sample t- test method used for data analysis. Data was presented in the form of tables.

6. SAMPLING DESIGN

Convenience sampling method used for the study. The study is conformed to only Hyderabad city and the sampling unit is selected from the Public and private banks i.e. SBI Bank and ICICI Bank in selected area. For understanding the influence of E-banking services determinants on the customers towards selected public and private banks. The researcher decided to select a sample size of 169 respondents from Public and private banks , those are SBI Bank(85 respondents) and ICIC Bank (84 respondents) in selected area. The processing, classification, tabulation, analysis and interpretation of the data are done with the help of SPSS 20.0 Version, the followed statistical techniques have been applied depending on the nature of the data collected from the respondents, Independent sample t- test method was used.

7. Results And Discussion

Table-1: Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.783	.792	18

Source: Authors finding

From the Table 1, it shown that the questionnaire is tested for its reliability and presented the results here under. The questionnaire developed is pretested and validated through face validity as it was sent to a carefully selected sample of experts and it also has a sufficiently good reliability score. The result given the value of the as **0.783**. It indicates that, the data has a high reliability and validity.

Summary Item Statistics: It is evident that the summary of the means, variances, covariance and inter-item correlations are presented in the following table.

Table-2: Summary Item Statistics							
	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.513	1.331	4.642	3.315	3.514	.827	18
Item Variances	.975	.256	2.313	2.074	10.415	.382	18
Inter-Item Covariances	.056	-.851	1.452	2.254	-1.642	.074	18
Inter-Item Correlations	.048	-.543	.811	1.435	-1.482	.086	18

Source: Authors finding

It is obvious the minimum and maximum mean, Range, and variance values for item means, item variances are positive. Maximum mean is witnessed for Item means is 4.642. Maximum variance is 2.313, maximum inter item covariance is witnessed is 1.452 and maximum inter-item covariance is found to be .811.

Demographic Variables: The frequency distribution of demographic variables is presented in the following table.

Table-3

Particulars	Classification	No of Responses	Percentage
Age	20-25	93	22.3
	26-30	116	27.8
	31-35	113	27.1
	36-40	71	17.0
	41 and above	24	5.8
Gender	Male	290	69.5
	Female	127	30.5
Education	SSC	33	7.9
	Intermediate	26	6.2
	Degree	179	42.9
	Pg degree	117	28.1
	PhD and above	62	14.9
Occupation	Student	49	11.8
	Govt Employee	96	23.0
	Private Employee	164	39.3
	Business	57	13.7
	Self Employed	51	12.2
Monthly income (in rupees)	Below 20,000	35	8.4
	20,001-30,000	143	34.3
	30.001 - 40,000	118	28.3
	40,001-50,000	73	17.5
	50,001 and above	48	11.5
Total		*n = 417*	*100%*

The descriptive analysis of all the demographical variables is shown in the above table, from that more than 28% of respondents in the group of 26-30 years and 27% of respondents in the group of 31-35 years, followed with 70% of the respondents belonged male, 30% of respondents belonged female, 42% of respondents studied Degree and 28% of respondents studied PG, 39% of respondents working as a Private Employees, 23% are the Govt. employees, and finally, 34% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs.30,000-40,001 respectively.

ANOVA: ANOVA is conducted in order to understand whether there is any significant difference in opinion of the respondents on Customer Satisfaction towards E-banking services. It has been considered for the study is explained in the table.

- *There is no significant impact of E-Banking services on demographical variable*

		Sum of Squares	Df	Mean Square	F	Sig.
		Table-4 ANOVA				
Age In Years	Between Groups	38.648	20	1.932	1.318	.003
	Within Groups	536.043	396	1.354		
	Total	574.691	416			
Gender	Between Groups	4.194	20	.215	1.012	.004
	Within Groups	83.422	396	.212		
	Total	87.616	416			
Education	Between Groups	7.248	20	.361	.309	.000
	Within Groups	462.542	396	1.168		
	Total	469.790	416			
Occupation	Between Groups	33.059	20	1.653	1.266	.008
	Within Groups	527.013	396	1.306		
	Total	560.072	416			
Income in Rupees	Between Groups	25.212	20	1.261	.963	.001
	Within Groups	528.246	396	1.308		
	Total	553.458	416			

In order to understand whether there is any significant difference in E-Banking services and Demographical variables, with respect of the demographics i.e. Age, Gender, Education, Occupation and Income in rupees.

It is observed that from the above table, the sum of the squares of the difference between means of different respondents ages and E-banking services and the **Between groups** variation 38.648 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 536.043 is due to difference within individual samples. The table also lists the F statistic 1.318, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.003 is less 0.05, so its indicating that null hypothesis can be rejected. so age is significant difference with E-banking services. And followed with demographics like Gender, Education, Occupation and income status of between groups variations are 4.194, 7.248, 33.059, and 25.212, and their Within group variations are 83.422, 462.542, 527.013, and 528.246.

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followed with significant level are 0.04, 0.00 and 0.001 . This all are less than 0.05, so its indicating that null hypothesis can be rejected. so the demographic variables are influenced by E-banking services. except 0.08 is more than 0.05. it is indicating that null hypothesis accepted. So Occupation is not influenced by E-banking services.

- *HO2: There is no significant impact of E- Banking service on customer satisfaction*

DIMENSIONS		Sum of Squares	df	Mean Square	F	Sig.
		Table-5 ANOVA				
E-banking services are generally faster than traditional banking	Between Groups	21.824	12	1.736	1.982	.002
	Within Groups	354.044	404	.876		
	Total	375.868	416			
There is high degree of convenience in accessing E-banking services.	Between Groups	5.561	12	.462	.987	.053
	Within Groups	328.565	404	.789		
	Total	334.126	416			
Degree of confidence on e- banking	Between Groups	18.442	12	1.537	1.527	.009
	Within Groups	396.332	404	.981		
	Total	414.774	416			
Are transactions through internet secure	Between Groups	4.381	12	.365	.751	.012
	Within Groups	327.365	404	.810		
	Total	331.746	416			
Are you satisfied with the using of E banking	Between Groups	2.753	12	.229	.910	.037
	Within Groups	201.843	404	.252		
	Total	204.596	416			
Quality of the E-banking services	Between Groups	7.227	12	.601	.980	.001
	Within Groups	311.942	404	.770		
	Total	319.169	416			
Implemented by Best Technology	Between Groups	7.852	12	.654	.537	.000
	Within Groups	619.043	404	1.508		
	Total	626.895	416			
Easy to access E-banking services	Between Groups	8.664	12	.722	.891	.007
	Within Groups	341.168	404	.819		
	Total	349.832	416			
Trustiness E-banking services	Between Groups	14.184	12	1.182	.989	.018
	Within Groups	487.879	404	1.208		
	Total	502.062	416			

Reduced time of transactions	Between Groups	5.596	12	.466	1.052	.000
	Within Groups	189.156	404	.443		
	Total	194.752	416			

In order to understand whether there is any significant difference in the two different variables like E-banking services and consumer satisfaction, with respect of E-banking services dimensions like E-banking services are generally faster than traditional banking, There is high degree of convenience in accessing E-banking services, Degree of confidence on e- banking, Are transactions through internet secure, Are you satisfied with the using of E banking, Quality of the E- banking services, Implemented by Best Technology, Easy to access E- banking services, Trustiness E- banking services, Reduced time of transactions. It is observed that from the above table, the sum of the squares of the difference between means of different variables like E-banking services are generally faster than traditional banking and consumer satisfaction the Between groups variation 21.824 is due to interaction in samples between groups. If sample means are the close to each other. The Within variation 354.044 is due to difference within individual samples. The table also lists the F statistic 1.982, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.002 is less 0.05, so its indicating that null hypothesis can be rejected. so E-banking services are generally faster than traditional banking Significantly Different with consumer satisfaction. And followed with There is high degree of convenience in accessing E-banking services, Degree of confidence on e- banking, Are transactions through internet secure, Are you satisfied with the using of E banking, Quality of the E- banking services, Implemented by Best Technology, Easy to access E- banking services, Trustiness E- banking services, Reduced time of transactions of between groups variations are 5.561, 18.442, 4.381, 2.753, 7.227, 7.852, 8.664, 14.184 and 5.596.Their Within group variations are 328.565, 396.332, 327.365, 201.843, 311.942, 619.043, 341.168 and 189.156 . The table also lists the F statistic are .987, 1.527, .751, .910, .980, .537, .891, .989 and 1.052 and followed with significant level are .053, .009, .012, .037, .001, .000, .007, .018, and .000. 1st, 6st,7th and 10th dimensions significant values are less than 0.005, so this is indicating that null hypothesis can be rejected. This dimensions are influenced on customer satisfaction, remaining dimensions significant values more than 0.05. So this is indicating that null hypothesis can be accepted, so this are statistically significant with consumer satisfaction towards respected E- banking services.

8. LIMITATION

1. As the geographical area of the study is limited to Hyderabad area only, Hence the findings and conclusion has its own limitations.
2. A convenience sample method was used for the data collection, which makes the results not readily generalizable
3. The study carried out to understand the customer performance towards E-banking of Public and private banks in Hyderabad city.

9. CONCLUSION

Present scenario, E-banking services play major role for giving more satisfaction to customer, and retaining existing customers towards them. The major objective of this research paper was to study Customer satisfaction towards e-Banking services, there are two major objective and data collected with through questionnaire. It was analysed by the percentages and ANOVAs. As per results 28% of respondents in the group of 26-30 years and 27% of respondents in the group of 31-35 years, followed with 70% of the respondents belonged male, 30% of respondents belonged female, 42% of respondents studied Degree and 28% of respondents studied PG, 39% of respondents working as a Private Employees, 23% are the Govt. employees, and finally, 34% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs.30,000-40,001. The results of the ANOVAs from the HO^1 found that there is a significant impact E-Banking services on demographical variable except Occupation, followed with that HO^2 found that there is a significant impact of E-banking services dimensions like E-banking services are generally faster than traditional banking, Quality of the E- banking services, Implemented by Best Technology, Reduced time of transactions significant impact on customer satisfaction, remaining determinates are not significant impact on customers towards giving satisfaction.

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