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Factors Influence On Customer Satisfactions and E- Banking Services

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Abstract
The major purpose of this research paper is to study factors that may influence customer satisfaction in E-banking services, and also it evaluates major factors like service quality, customer loyalty, customer perceived value and CRM affecting on customers satisfaction towards e-banking service. Moreover, the paper also aims to understand the correlation between respected factors towards customer satisfaction. For that a structure questionnaire was used to measure the consumer satisfaction, with sample size 427 respondents and tested via descriptive statistics, percentages ANOVAs, Correlations and Multiple regressions. For conducting customer's survey likert scale based questionnaire was developed. Collecting data was analysed using principle component using SPSS 20.0. The results of the correlation study showed that there is a strong correlation between CRM and Customer Value and between Customer Loyalty and Customer satisfaction, and also there is strong impact Customer loyalty and service quality factors of E-banking Services have higher positive evaluation towards Customer satisfaction.

Keywords: Customer loyalty, customer perceived value, CRM, Customer satisfaction, service quality

1. Introduction

In the last few decades, banks have seen a shift in their objectives and strategies due to the emergence of an information and communications revolution in the financial and banking markets. This has prompted banks to move towards the introduction of a new type of services based on information technology (IT), offering what is known as "electronic banking services", or e-banking, in addition to traditional banking services. There are new concepts and ways of providing services to customers based on IT, including checking customer satisfaction and profitability. The banking services provided through the Internet are varied, including: a) the dissemination of information of different services and products offered by banks to the public in general and their customers in particular; b) the possibility of receiving customer inquiries and responding to them through e-mail, as well as providing simple transactions allowing customers to submit their instructions and applications for various services; c) the provision of sites allowing customers to make inquiries about their account balances, undertake financial transactions and pay various bills; d) the opportunity to use various other bank products and deal with the purchase and sale of securities, inter alia. E-banking has had a significant impact on customers' use of bank services. Electronic services have become the main pillar for Saudi banks because of their ability to improve speed, performance and productivity. Online banking has been fully adopted in the Kingdom of Saudi Arabia as a value-added service to attain customer satisfaction and cost advantages. Banks have also sought to reduce operational costs through the provision of electronic services and gain access to the largest segment of customers in terms of the geographical and temporal dimensions. Moreover, banks have sought greater integration in e-shopping networks. Electronic services provide higher accuracy and reliability in banking service provision due to the low rate of human error, resulting in increased effectiveness and efficiency in the banking business. Although the benefits of the adoption of modern technology related to information systems are well known in many areas (administrative, financial, industrial), there are few studies that quantify these benefits scientifically. Thus,

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This study aims to examine customer satisfaction with e-banking services in the Saudi banking sector and study the reliability and privacy of banking service providers, as well as to address the mechanisms of monitoring and control over these services.

2. Review of Literature
There is hug literature available relation to measuring service quality and customer satisfaction relating to online and offline services. It elaborate that, there is strong relationship between service quality, brand perception and perceived value with customer satisfaction and loyalty.

2.1 Service quality and customer satisfaction
The relationship between expectation, perceived service quality and customers satisfaction have been investigated in a number of researches (Zeithaml, et al, 1988). They found that, there is very strong relationship between quality of service and customer satisfaction (Parasuraman et al, 1985; 1988 ;). Increase in service quality of the banks can satisfy and develop attitudinal loyalty which ultimately retains valued customers (Nadiri, et al 2009). The higher level of perceived service quality results in increased customer satisfaction. When perceived service quality is less than expected service quality customer will be dissatisfied (Jain and Gupta, 2004). According to Cronin and Taylor (1992) satisfaction super ordinate to quality-that quality is one of the service dimensions factored in to customer satisfaction judgment.

2.2 Customer loyalty
Customer satisfaction is stated to be one Of The Most Important Keystones When Creating Customer loyalty, especially in the bank sector as even discussed in [Ribbink, Van Riel, Liljander and Streukens (2004), Leverin and Liljander (2006) and Meth lie and Nysveen (1999)]. Customer satisfaction is defined as 'an overall evaluation based on the total purchase and consumption experience focused on the perceived product or service performance compared with pre-purchase expectations over time [Sharma, N. and Patterson, (2000) and Beerli, Martin, and Quintana, (2004)]

2.3 CRM
Girdhar (2009) observed that by satisfying the internal customers and building good relationship with them, the relationship with the external customers can also be retained and satisfied by the banks. Kumar & Rajesh (2009) reveals that any bank that wishes to either grow in size of its banking operation or improve its profitability must consider the challenges affecting its customer relationship. The challenge before the banks is not only to obtain updated information for each customer, but also to use the information to determine the best time to offer the most relevant products (Lau et al., 2003). It is also important to understand that if customers bring in profits for the bank, it becomes imperative for the bank to provide excellent services to those customers, otherwise they switch to other banks (Ray, 2007). Service quality in banking implies consistently anticipating and satisfying the needs and expectations of customers. Parasuraman et al. (1985) also hold the view that high quality service gives credibility to the field sales force and advertising, stimulates favourable word-of-mouth communications, enhances customers'

perception of value, and boosts the morale and loyalty of employees and customers alike. Puccinelli (1999) looks the financial services industry as entering a new era where personal attention is decreasing because the institutions are using technology to replace human contact in many application areas. Over the last few decades, technical evolution has highly affected the banking industry (Sherif, 2002). In today's competitive banking industry, customers have to make a choice among various service providers by making a trade-off between relationships and economies, trust and products, or service and efficiency (Sachdev et al., 2004).Roger Hallowell (1996) conducted a research on customer satisfaction, loyalty, and profitability and found that as compared to public sector, private sector bank customers' level of satisfaction is comparatively higher.

2.4 Customer perceived value
Customer preferred to use internet banking because it is convenient Gupta, Rao, and Upadhyaya, Shariq says internet banking plays a role of delivery channel. Deng, Lu, Wei, and Zhang define switching cost, where the customer endeavour from one service provider to another service provider and it includes the monetary cost or it may be in sense of facing of new firms as psychological perspectives or in the shape of time or effort that involved to use the new product or services. Oliver narrates perceived value where the ratio of outcome and input is equal to the ratio of customer satisfaction and its perceiving outcome what he input during the purchase.

3. Objective of the Study
The objectives of the study are to realise the following
- To study the influence of E-Banking services on demographic variables
- To analyse the factors, which is influence on customers satisfaction towards E-Banking service
- To examine the E-banking service towards customer satisfaction

4. Testing Hypothesis
The following are the hypothesis designed with above objective
- HO^1: There is no significant correlation between E-Banking services and demographical variables
- HO^2: There is no significant impact of E-banking factors on customer satisfaction.

5. Research Design
The study is concerned with the customer satisfaction towards E-banking services of 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.

6. Sampling Method
Convenience sampling method is used for the study. The sample size of the bank customers is 427.The data analyzed by using percentage method, ANOVAs, Correlation and Multiple regression methods used for data analysis. Data was presented in the form of tables. The processing, classification, tabulation, analysis and interpretation of the data are done with the help of SPSS 20.0 Version.

7. Discussions

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

Table-1: Demographical Analysis

Particulars	Classification	No of Responses	Percentage
Age	20-25	95	22.2
	26-30	117	27.4
	31-35	115	26.9
	36-40	75	17.6
	41 and above	25	5.9
Gender	Male	296	69.3
	Female	131	30.7
Education	SSC	34	8.0
	Intermediate	26	6.1
	Degree	183	42.9
	Pg degree	121	28.3
	PhD and above	63	14.8
Occupation	Student	54	12.6
	Govt Employee	96	22.5
	Private Employee	166	38.9
	Business	60	14.1
	Self Employed	51	11.9
Monthly income (in rupees)	Below 20,000	35	8.2
	20,001-30,000	143	33.5
	30.001 - 40,000	123	28.8
	40,001-50,000	77	18.0
	50,001 and above	49	11.5
Total		**n = 427**	**100%**

The descriptive analysis of all the demographical variables is shown in the above Table, from that more than 27% of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000 respectively.

ANOVA: The analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups.

- **Ho[1]: There is no Significant Correlation Between E-Banking Services And Demographical Variables**
  ANOVA is conducted in order to understand whether there is any significant difference in opinion of the respondents on E-banking services. It has been considered for the study is explained in the table

Table-2: ANOVA

		Sum Of Squares	Df	Mean Square	F	Sig.
Age In Years	Between Groups	71.026	18	3.946	3.076	.000
	Within Groups	523.4	408	1.283		
	Total	594.426	426			
Gender	Between Groups	4.837	18	.269	1.275	.000
	Within Groups	85.974	408	.211		
	Total	90.810	426			
Education	Between Groups	27.176	18	1.510	1.360	.001
	Within Groups	453.002	408	1.110		
	Total	480.178	426			
Occupation	Between Groups	21.576	18	1.199	.889	.003
	Within Groups	550.293	408	1.349		
	Total	571.869	426			
Income In Rupees	Between Groups	24.275	18	1.349	1.041	.002
	Within Groups	528.344	408	1.295		
	Total	**552.618**	**426**			

In order to understand whether there is any significant difference in opinion of respondents towards e -banking service, 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 service of banks, and the **between groups** variation 71.026 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 71.026 is due to

difference within individual samples. The table also lists the F statistic 3.076, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.000 is less 0.05, so its indicating that null hypothesis can be rejected. So age is influence on the e -banking service. And followed with demographics like Gender, Education, Occupation and income status of between groups variations are 4.837, 27.176, 21.576, 24.275, and their Within group variations are 85.974, 453.002, 550.293, 528.344. **F-Statistic** values are 1.275, 1.360, .889 and 1.041 followed with **significant level** are 0.00, 0.01, 0.03 and 0.002, all are less than 0.05.

So its indicating that null hypothesis can be rejected. So all the demographic variables are influenced by the E -banking service.

- **HO²: There is no significant impact of E-banking factors on customer satisfaction**
  ANOVA is conducted in order to understand whether there is any significant difference in E-banking services and Customer Satisfaction. It has been considered for the study is explained in the table

Table-3: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Customer loyalty	Between Groups	6.423	18	.357	2.394	.001
	Within Groups	60.822	408	.149		
	Total	67.245	426			
Service quality	Between Groups	3.099	18	.172	2.510	.001
	Within Groups	27.991	408	.069		
	Total	31.091	426			
Customer perceived value	Between Groups	8.170	18	.454	1.845	.000
	Within Groups	100.368	408	.246		
	Total	108.539	426			
CRM	Between Groups	1.458	18	.081	1.150	.001
	Within Groups	28.022	398	.070		
	Total	**29.480**	**416**			

In order to understand whether there is any significant difference in E -banking service and Customer satisfaction, with respect of E -banking service i.e. Customer loyalty, Service quality, Customer perceived value and CRM.

It is observed that from the above table, the sum of the squares of the difference between means of different respondents Customer loyalty and Customer satisfaction, and the **between groups** variation 6.423 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 60.822 is due to difference within individual samples. The table also lists the F statistic 2.394, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.001 is less than 0.05, so its indicating that null hypothesis can be rejected. So Customer loyalty is statistical difference with Customer satisfaction. And followed with E-banking dimensions like Service quality, Customer perceived value and CRM of between groups variations are 3.099, 8.170, 1.458, and their Within group variations are 27.991, 100.368, 28.022,. **F-**

Statistic values are 2.510, 1.845 and 1.150 followed with **significant level** are 0.01, 0.00, and 0.01, all are less than 0.05. so its indicating that null hypothesis can be rejected. So all the E -banking service dimensions are significantly different with customer satisfaction.

Correlation: Correlation is used to describe the linear relationship between two continuous variables. In general, correlation tends to be used when there is no identified response variable. It measures the strength (qualitatively) and direction of the linear relationship between two or more variables.

In order to develop further understanding of relationships among all the Customer satisfaction and E-banking dimensions constructs, the Pearson correlation technique was calculated in the study. Numerical values of the correlation coefficients reflect the degree of association between each of the Customer satisfaction dimensions constructs.

Table-4: Correlation

	E-banking	Customer loyalty	Service quality	Customer perceived value	CRM	Customer satisfaction
E-banking	1	.216[**]	.172	-.139	.188	.223
Customer loyalty	.216[**]	1	.152	.162	-.085	.259
Service quality	.172	.152	1	.121	.114	-.090
Customer perceived value	-.139	.162	.121	1	.435[**]	.143
CRM	.188	-.085	.114	.435[**]	1	.111
Customer satisfaction	.223	.259	-.090	.143	.111	1

From below Table, correlation results show that there is a strong correlation between CRM and Customer Value ($r = 0.435$) at the 1 per cent significance level and between Customer Loyalty and Customer satisfaction ($r = 0.259$).

Multiple Rgression: Multiple regression analysis is a set of statistical processes for estimating the relationships among variables. It helps to understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other

independent variables are held fixed. It also helps to determine the overall fit of the model and the relative contribution of each of the predictors to the total variance explained. So In order to understand correlation between the E-Banking services and demographical variables, Customer satisfaction.

- **Ho[1]: There is no Significant Correlation Between E-Banking Services And Demographical Variables**

Table-5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.242[a]	.059	.048	.30589	5.249	.000[b]
a. Predictors: (Constant), income in rupees, age in years, gender, education, Occupation						

From the above table, it reveals that R2 value is found to be 0.059, meaning there by that 59% of the variation in dependent variable is explained by predictors. Since the F value is found to be significant, the null hypothesis is

rejected and the alternative is accepted, meaning thereby that there is a significant difference in the variation caused by predictors towards E-banking services.

Table-6: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.489	.100		34.998	.000
	Age in Years	.112	.074	.234	4.421	.000
	Gender	-.091	.064	-.060	-1.200	.001
	Education	.126	.085	.088	1.724	.003
	Occupation	.079	.064	.071	1.357	.001
	Income in Rupees	.125	.084	.092	1.816	.000
a. Dependent Variable: E-banking						

From the Table 6, it is evident that Education (.126) emerged as the most important demographic variable, followed with income in rupees (.125). It concluded that higher education qualification of respondents will have higher positive evaluation on e- banking services. And also results shown that there is negative impact of gender with

E-banking services, which concluded that higher age, generate negative perception on E-Banking services.

- **HO[2]: There is no significant impact of E-banking factors on customer satisfaction**

Table-6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	.234[a]	.055	.043	.30780	4.741	.000[b]
b. Predictors: (Constant), CRM, service quality, customer loyalty, customer value						

From the above table, it reveals that R2 value is found to be 0.055, meaning there by that 55% of the variation in dependent variable is explained by predictors. Since the F value is found to be significant, the null hypothesis is

rejected and the alternative is accepted, meaning thereby that there is a significant difference in the variation caused by predictors towards customer satisfaction.

Table-7: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.316	.343		6.762	.000
	Customer loyalty	.176	.038	.224	4.605	.000
	Service quality	.161	.056	.052	1.079	.001
	Customer perceived value	.101	.041	.001	.025	.000
	CRM	.131	.063	.026	.488	.002
a. Dependent Variable: Customer Satisfaction						

From the above table, it is evident that Customer loyalty (.176) emerged as the most important E-banking service factor, followed with Customer loyalty (.161). It concluded that higher Customer loyalty and service quality factors of E-Banking services will have higher positive evaluation towards Customer satisfaction.

Conclusion
The major theme of the research was to study customer

satisfaction towards E-banking services in the Hyderabad city banks. There are three major objective and data collected with through questionnaire. It was analysed by the percentages, ANOVAs, Correlation and multiple regression. As per the results 27% of respondents in the group of 26-30 years and 26% of respondents in the group of 31-35 years, followed by 70% of the respondents belonged male and 30% of respondents belonged female, and 42% of respondents studied Graduation and with

followed 28% of respondents studied Below Post Graduation, 38% of respondents working as a Private Employees, 22% are the Govt. Employee, and 33% of respondents earned Rs.20,001-30,000 for month and 28% of respondents earned above Rs. 30,001-40,000. Followed with the results of the correlations showed that there is a strong correlation between CRM and Customer Value ($r = 0.435$) at the 1 per cent significance level and between Customer Loyalty and Customer satisfaction ($r = 0.259$) and multiple regression showed that Education (.126) emerged as the most important demographic variable, followed with income in rupees (.125). It concluded that higher education qualification of respondents will have higher positive evaluation on e- banking services. And also results shown that there is negative impact of gender with E-banking services, which concluded that higher age generate negative perception on E-Banking services, and Customer loyalty (.176) emerged as the most important E-banking service factor, followed with Customer loyalty (.161). It concluded that higher Customer loyalty and service quality factors of E-Banking services will have higher positive evaluation towards Customer satisfaction.

Acknowledgement

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