Rambabu Lavuri
Dept. Of Business
Management, Osmania
University,
Hyderabad, India

Customer Perception on E Banking Service of HDFC Bank

Rambabu Lavuri

Abstract
E- Banking is the most intensive service offered by the banks. In the present banking scenario, e-banking services have been replacing the traditional banking practices and the revolutionary e-banking is accepted by the customers with growing awareness and education. Many of people are shifted from traditional banking to e-banking services; it helps to build good relations with customers towards banking. The present paper was attempts understand the customer perception level on e-banking services of HDFC bank, for this purpose, a structured questionnaire was developed and the sample of 162 respondents was taken from the HDFC bank customers from the Hyderabad city only, and the tested by the ANOVAs by the using SPSS 20.0 Version. The ANOVAs analysis revealed that the relationship with different income group of respondents that the perception about the e–banking services offered by banks. The study revealed that education, gender and income play an important role in usage of online banking.

Keywords: E-banking, customer perception, intensive service, traditional banking services

1. Introduction

In the present scenario online services have become an added feature in the banking sector. Online banking or Internet banking allows customers to conduct financial transactions on a secure website. Credit goes to internet that provided ultimate ease to the customers at their door step. Online banking allows people to perform all the banking related activities such as money transfer, past transactional information, cash withdrawals and deposits etc with a just one click of a mouse. Clients can easily check the account balance every day just by visiting the website of their bank. This provides the place and time utility to people provided if one has Internet access. Online banking also eliminates unnecessary waste, which an organization incurs in the form of office supplies. This facet has also helped in meeting the social concerns. However, using internet for money transaction is never been free from risk. More importantly, security is always been an issue with Internet transactions. Despite several counter measures taken by the banks in the form of information encryption, firewalls, encoding etc but still reluctance prevails in relaying totally at online banking especially in developing countries like India. This led to the foundation of this study. The core purpose of this research study was to figure out the most critical factors having an impact on consumer perception towards online banking in India with the help of Technology Acceptance Model (TAM)(Davis and Venkatesh, 1996; Davis et al., 1989).Online banking was introduced in the 80's but its growth across the globe took place in the 90's. Europe has been and still is the leader in Online banking technology and usage (Schneider, 2001). In Hyderabad city, many of banks introduce online banking. By introducing online banking, its help to build reputation and increasing the customers towards banks. Online banking, also known as internet banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The online banking system will typically connect to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking services. To access a financial institution's online banking facility, a customer with internet

Correspondence:
Rambabu Lavuri
Dept. Of Business
Management,
Osmania University,
Hyderabadan), India

access will need to register with the institution for the service, and set up a password and other credentials for customer verification. The credentials for online banking is normally not the same as for telephone or mobile banking. Financial institutions now routinely allocate customers numbers, whether or not customers have indicated an intention to access their online banking facility. Customer numbers are normally not the same as account numbers, because a number of customer accounts can be linked to the one customer number. Technically, the customer number can be linked to any account with the financial institution that the customer controls, though the financial institution may limit the range of accounts that may be accessed to, say, cheque, savings, loan, credit card and similar accounts.

2. Review of Literature

Technology has always been a major driver of bringing changes and making things easier in timely manner. Technological breakthroughs have brought major changes especially from the last century. Internet is just one of the contributions of technology that has reshaped almost every aspect of our lives. Technology also changed banking of today from traditional banking to online banking. There can be different factors that influence the use of online banking. Adoption of online banking services can be increased by the availability of quality internet connections like broadband (**Al-Somali et al., 2009**). But certain barriers exist that hinders the acceptance of online banking which differ from environment to environment. As according to the study of **Laforet and Li (2005)** perception of risks as well as computer and technological skills are the main factors causing obstruction in online banking acceptance.

Internet banking services has not only reduced the operating costs to the banks but it also helped in increasing the customer satisfaction and customer retention (**Polatoglu and Ekin, 2001**), **Safeena (2010)** determined the consumer attitude on internet banking adoption. Finding shows that perceived usefulness, perceived ease of use, consumer awareness and perceived risk are the important determinants of online banking adoption and have strong and positive effect on customers to accept the online banking system. **Rao, K. Rama Mohana and Lakew, Tekeste Berhanu (2011**) examines the service quality perceptions of customers of public sector and private sector banks in the city of Visakhapatnam, India. The study reveals that the Reliability and Assurance dimensions of service quality scored the highest ratings while the Tangibles dimension got the lowest score. Moreover, the study found a strong dissimilarity in service quality perceptions between customers of private sector and public sector banks.

Dharma lingam, S. Anand Kannan. V. (2012) evaluated the service quality in retail banking in the Tamil Nadu, based on different levels of customers' perception regarding service quality. Data are collected from Three Private Banks, i.e. ICICI, AXIS and HDFC Bank. Sample size of this research is 240. The result indicates that customers' perception is highest in the tangibles area and lowest in the Product Variety area.

Bahl, Sarita, (2013) determined that security and privacy issues are the big issue in e-banking. If security and privacy issues resolved, the future of electronic banking can be very prosperous.

Qureshi, Zafar and Khan (2008) conducted a study to know the Customer Acceptance of Online Banking in Pakistan and found that perceived usefulness, and security and privacy are the predictor of customer acceptance.

3. Objective

The main objective of this study is to examine the perception level of customers HDFC bank in Hyderabad. In addition, the study's objective was accomplished through the following objectives:

- To study the Socio -economic structure of demographical respondents of HDFC bank
- To study the perception level of customers towards E-banking services of HDFC bank
- To analyse the motivational factors influenced on customer perception towards HDFC bank
- To identify the problems faced customers towards E-banking services of HDFCB bank

4. Testing Of Hypothesis

The following are the hypothesis designed with above objectives

- **HO[1] :** There is no significant impact of source of information on demographic variables
- **HO[2] :** There is no significant impact of E-banking services on demographic variables
- **HO[3] :** There is no significant impact of demographic variables by problem faced via online service
- **HO[4] :** There is no significant impact of by motivational factor on demographic variables

5. Methodology

The study is concerned with the customer perception towards online banking services of HDFC bank based on that, 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 162.The data analysed by using percentage method, ANOVAs 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 different branches of banking industry in selected area. For understanding the influence of E - banking determinants on the customer's perception level towards selected banks. The researcher decided to select a sample size of 140 respondents from different branches of banking industries 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, and ANOVAs was used.

7. Results and Discussion

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

Table.1

Age		
	No of Responses	**Percentage**
Below 20 years	24	16.7
21-30 years	49	30.2
31-40 years	58	35.8
41-50years	17	10.5
Above 50 years	4	6.8
Gender		
Male	110	67.9
Female	52	32.1
Education		
SSC	19	11.7
Intermediate	31	19.1
Degree	38	23.5
PG degree	50	30.9
M.Phil/ Ph.D	24	14.8
Occupation		
Student	54	33.3
Govt employee	28	17.3
Private employee	60	37.3
Business	20	12.4
Income for month (in rupees)		
Below Rs.10,000	8	4.9

Rs.10,001-20,000	37	22.8
Rs.20,001-30,000	53	32.7
Rs.30,001-40,000	25	15.4
Above Rs.40,001	39	24.1
Total	**162**	**100.0**

Author's findings

The descriptive analysis of all the 162 demographical variables is exhibits in the Table 1, from that more than 35% of respondents are belonged to the age group of 31-40 years and 30% of respondents in the group of 21-30 years, followed by 68% of the respondents belonged male and 32% of respondents belonged female, and 30% of respondents studied PG and with followed 23% of respondents studied degree, 37% of respondents working as a Private Employees, 33% are the students, and 32% of

respondents earned Rs.20,001-30,000 for month and 24% of respondents earned above Rs.40,001 respectively.

Anovas
ANOVA is conducted in order to understand there is any significant difference in perception of the respondents towards E-Banking services of HDFC bank, and their opinion on the Source of information, Online banking services, motivational factors and problems faced by the customer through online service with respect of the demographically has been considered for the study is explained in the table.

- **HO^I :There is no significant impact of source of information on demographic variables**

Table.2: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Age in years	Between Groups	31.114	8	3.889	3.436	.001
	Within Groups	156.206	154	1.132		
	Total	187.320	162			
Gender	Between Groups	7.359	8	.920	5.319	.000
	Within Groups	23.866	154	.173		
	Total	31.224	162			
Education	Between Groups	82.396	8	10.300	10.225	.000
	Within Groups	139.005	154	1.007		
	Total	221.401	162			
Occupation	Between Groups	56.606	8	7.076	4.848	.000
	Within Groups	201.394	154	1.459		
	Total	258.000	162			
Income status	Between Groups	15.195	8	1.899	1.323	.003
	Within Groups	198.111	154	1.436		
	Total	213.306	162			

Author's findings

In order to understand whether there is any significant difference in opinion of respondents towards source of information towards e -banking service of HDFC bank, 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 source of information towards e -banking service of HDFC bank, and the **Between groups** variation 31.114 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 156.206 is due to difference within individual samples. The table also lists the F statistic 3.436, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.001 is less 0.05, so its indicating that null hypothesis can be rejected. So

age is influence on the source of information towards e -banking service. And followed with demographics like Gender, Education, Occupation and income status of between groups variations are 7.359, 82.396, 56.606, 15.195, and their Within group variations are 23.866, 139.005, 201.394, 198.111. Followed with significant level are 0.00, 0.00, 0.02 and 0.003. This is less than 0.05. so its indicating that null hypothesis can be rejected. So all the demographic variables are influenced by the source of information towards e -banking service of HDFC bank.

- **HO^2 : There is no significant impact of E-banking services on demographic variables**

Table.3: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
age in years	Between Groups	38.366	5	7.673	7.264	.000
	Within Groups	148.954	157	1.056		
	Total	187.320	162			
Gender	Between Groups	3.185	5	.637	3.203	.003
	Within Groups	28.039	157	.199		
	Total	31.224	162			
Education	Between Groups	51.827	5	10.365	8.619	.000
	Within Groups	169.574	157	1.203		
	Total	221.401	162			
Occupation	Between Groups	31.683	5	6.337	3.948	.002
	Within Groups	226.317	157	1.605		
	Total	258.000	162			
Income	Between Groups	76.666	5	15.333	15.823	.000
	Within Groups	136.640	157	.969		
	Total	213.306	162			

Author's findings

In order to understand whether there is any significant difference in opinion of respondents towards e -banking service of HDFC bank, 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 HDFC bank, and the **between groups** variation 38.366 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 187.320 is due to difference within individual samples. The table also lists the F statistic 7.264, 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 3.185, 51.827, 31.683, 76.666, and their Within group variations are 28.039, 169.574, 226.314, 136.640.followed with significant level are 0.03, 0.00, 0.02 and 0.000, 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 of HDFC bank.

- **HO³ : There is no significant impact of demographic variables by problem faced via online service**

Table.4: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
age in years	Between Groups	43.169	6	7.195	6.988	.000
	Within Groups	144.151	156	1.030		
	Total	187.320	162			
Gender	Between Groups	9.134	6	1.522	9.648	.000
	Within Groups	22.090	156	.158		
	Total	31.224	162			
Education	Between Groups	64.873	6	10.812	9.671	.011
	Within Groups	156.528	156	1.118		
	Total	221.401	162			
Occupation	Between Groups	164.586	6	27.431	41.111	.000
	Within Groups	93.414	156	.667		
	Total	258.000	162			
Income status	Between Groups	73.231	6	12.205	12.199	.000
	Within Groups	140.075	156	1.001		
	Total	213.306	162			

In order to understand whether there is any significant difference in opinion of respondents towards problems faced towards e -banking service of HDFC bank, 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 problems faced towards e -banking service of HDFC bank, and the **Between groups** variation 43.169 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 144.151 is due to difference within individual samples. The table also lists the F statistic 6.988, 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 problems faced towards e -banking service. And followed with demographics like Gender, Education, Occupation and income status of between groups variations are 9.134,64.873, 164.586, 73.231, and their Within group variations are 22.090, 156.528, 93.414,140.075. Followed with significant level are 0.00, 0.11, 0.00 and 0.000, all are less than 0.05.exepet education (0.011) is more than 0.05, so null accepted. Finally remaining demographical variables indicating that null hypothesis can be rejected. so l the demographic variables are influenced by the problems faced towards E -banking service of HDFC bank.

- **HO⁴ : There is no significant impact of by motivational factor on demographic variables**

Table.5: ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
age in years	Between Groups	21.907	7	3.130	2.630	.014
	Within Groups	165.413	155	1.190		
	Total	187.320	162			
Gender	Between Groups	6.638	7	.948	5.361	.000
	Within Groups	24.586	155	.177		
	Total	31.224	162			
Education	Between Groups	17.734	7	2.533	1.729	.107
	Within Groups	203.667	155	1.465		
	Total	221.401	162			
Occupation	Between Groups	25.922	7	3.703	2.218	.000
	Within Groups	232.078	155	1.670		
	Total	258.000	162			
Income	Between Groups	22.966	7	3.281	2.396	.024
	Within Groups	190.340	155	1.369		

	Total	213.306	162			

In order to understand whether there is any significant difference in opinion of respondents towards motivational factors of e - banking service of HDFC bank, 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 motivational factors of e -banking service of HDFC bank, and the **Between groups** variation 21.907 is due to interaction in samples between groups. If sample means are the close to each other. The **Within** variation 165.413 is due to difference within individual samples. The table also lists the F 2.630, which is calculated by dividing the Between Groups Mean square by the Within Groups Mean Square. The Significance level of 0.014 is more than 0.05, so its indicating that null hypothesis can be accepted. so age is no influence by the motivational factors of e -banking service. And followed with demographics like Gender, Education, Occupation and income status of between groups variations are 6.638, 17.734, 25.922, 22.966, and their Within with significant level are 0.00, 0.107, 0.00 and 0.024. Gender and occupation significant level are less than 0.05. So its indicating that null hypothesis can be rejected, and education (0.011), income status significant level is more than 0.05, so null accepted. Finally demographical variables like age, gender and occupation significant level indicating that null hypothesis can be rejected. so these demographic variables are influenced by the motivational factors of E -banking service of HDFC bank.

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 online banking of HDFC.

Conclusion
Now days, E-banking services have become a major weapon for survival of banking industries. The major theme of the research was to study consumer perception on E-banking services towards HDFC bank in the Hyderabad city. There are four major objective and data collected with through questionnaire. It was analysed by the percentages and ANOVAs. As per the results 35% respondents from the 31-40 years group and 30% respondents from the 21-30 years group, followed with that 68% of the respondents belonged male and 32% of respondents belonged female, and 30% of respondents studied PG and with followed 23% of respondents studied degree, 37% of respondents working as a Private Employees, 33% are the students, and 32% of respondents earned Rs.20,001-30,000 for month and 24% of respondents earned above Rs.40,001 respectively. The results of the ANOVAs from the HO^1 found that there is a significant impact on demographical variable except income status by the source of information of HDFC E- banking services, followed with that HO^2 found that there is a significant impact of E-banking services on demographical variables respondents, HO^3 found that there is a significant impact of demographical variable except education by the problems towards E- banking services, finally HO^4 results indicated that there is significant impact of motivational factor on age group, gender and occupation, except Education and income status of respondents.

Reference
1. Ajzen I., and Fishbein M, (1975), "Beliefs, Attitude, Intention, and Behavior: An Introduction to Theory and Research", MA, USA: Addison-Wesley.
2. Ajzen, I. (1991), "The Theory of Planned Behavior " Organizational Behavior and Human Decision Processes 50, 179-211
3. Al-Somali, S.A., Gholami, R. and Clegg B., (2009), "An investigation into the acceptance of online banking in Saudi Arabia", Technovation, Vol. 29, pp. 130–141.
4. Casalo, L.V., Flavian, C. and Guinaliu, M., (2007), "The role of security, privacy, usability and reputation in the development of online banking", Online Information Review, Vol. 31 No. 5, pp. 583-603.
5. Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. (1989), "User acceptance of computer
6. Deng, Z., Lu, Y., Chen, Z. (2007), "Exploring Chinese User Adoption of Mobile Banking", Proceedings of the Sixth Wuhan International Conference on E-Business held from 26 to 27 May, 2007, China.
7. Deng, Z., Lu, Y., Deng, S., and Zhang, J. (2010), "Exploring user adoption of mobile banking:an empirical study in China, International Journal of Information Technology and Management, Vol 9, Issue 3, pp. 289-301.
8. Dr. B. Mathivanan, S. Kavitha (2015) "A Study on Consumer Perception towards E-Banking Services of ICICI Bank", International Journal of innovative research and development, Vol 4 Issue 12.
9. Dr. Uday Singh Rajput (2015), "Customer Perception on E-Banking Service", Pacific Business Review International, Volume 8, Issue 4, October 2015.
10. Eriksson, K., Kerem, K. and Nilsson. D., (2005), "Customer acceptance of internet banking in Estonia", International Journal of Bank Marketing, Vol. 23 No. 2, pp. 200-216. *from:http://www.dailytimes.com.pk/default.asp?page=2006%5C04%5C25%5Cstory_25-4-2006_pg5_2* from:http://www.dailytimes.com.pk/default.asp?page=2010%5C03%5C19%5Cstory_19-3-2010_pg5_16
11. Hussain, A. (2010), "45% growth in online banking in Pakistan", Retrieved on October 08, 2010
12. Igbaria, M., Iivari, J. and Maragahh, H. (1995), "Why do individuals use computer technology? A Finnish case study", Information & Management, Vol. 29, pp. 227-38.
13. Karjaluoto, H., Matilla, M. and Pento, T., (2002), "Factors underlying attitude formation toward online banking in Finland", International Journal of Bank Marketing, Vol. 20 No. 6, pp. 261-272.
14. Laforet, S. and Li, X., (2005), "Consumers' attitudes towards online and mobile banking in China" International Journal of Bank Marketing, Vol. 23 No. 5, pp. 362-380.
15. LI, C.F. (2009), "Extending the Technology Acceptance Model to Investigate the Factors Affecting the User Satisfaction in Internet Banking", Proceedings of the Business and Information held from 06 to 08 July, 2009, Malaysia.
16. Manzano, J.A., Navarre, C.L., Mafe, C.R. and Sanz-Blas, S., (2009), "Key drivers of internet banking services use", Online Information Review, Vol. 33 No. 4, pp. 672-695.
17. Nauman Zahid, Asif Mujtaba, Adnan Riaz (2010), "Consumer Acceptance of Online Banking", Euro Journals, Inc., Issue 27.
18. Petrus Guriting, P. and Ndubisi, N.O., (2006), "Borneo online banking: evaluating customer perceptions and behavioural intention", Management Research News, Vol. 29 No. 1/2, pp. 6- 15.
19. Pikkarainen, T., Pikkarainen, K., Karjaluoto, H. and Pahnila, S., (2004), "Consumer acceptance of online banking: an extension of the technology acceptance model", Internet Research, Vol. 14 No. 3, pp. 224–235.
20. Polatoglu, V.N. and Ekin, S., (2001), "An empirical investigation of the Turkish consumers acceptance of internet banking services", International Journal of Bank Marketing, Vol. 19 No. 4, pp. 156-165
21. Poon, W.C., (2008), "Users' adoption of e-banking services: the Malaysian perspective", Journal of Business & Industrial Marketing, Vol. 23 No. 1, pp. 59–69.

22. Qureshi, T. M., Zafar, M.K., and Khan, M.B. (2008), " Customer Acceptance of Online Banking in Developing Economies ", Journal of Internet Banking and Commerce, Vol. 13, Iss.1, pp. 2-9

23. Rao K Srinivasa (2008), "Innovations in Banking: A Tool for Inclusive Growth", The Indian Banker, Vol, 3, No. 12.

24. SBP, (2010) "Number of online branches reached 6,700 in 2009" " Retrieved on May 14, 2010

25. Singh, A.M., (2004), "Trends in South African Internet banking", Aslib Proceedings: New Information Perspectives, Vol. 56 No.3, pp. 187-196.

26. Technology: a comparison of two theoretical models", Management Science, Vol. 35 No. 8, pp. 982-1003

27. Teo, T.S.H., Lim, V.K.G. and Lai, R.Y.C. (1999), "Intrinsic and extrinsic motivation in Internet usage", Omega International Journal of Management Science, Vol. 27, pp. 25-37.

28. Wang, Y.S., Wang, Y.M., Lin, H.H. and Tang, T.I., (2003), "Determinants of user acceptance of Internet banking: an empirical study", International Journal of Service Industry Management, Vol. 14 No. 5, pp. 501-519.

29. Yaghoubi, N.M., and Bahmani, E. (2010), "Factors Affecting the Adoption of Online Banking An Integration of Technology Acceptance Model and Theory of Planned Behavior ", International Journal of Business and Management Vol. 5, No. 9, pp. 159-165.