Measuring Internet Banking Service Quality from Customer Perspective: A Comparative Study of Public and Private Banks

Dr. Sanjeev Kumar

Associate Professor, Haryana School of Business, Guru Jambheshwar University of Science and Technology, Hisar (Haryana) INDIA Email id- sanjeev.aseem@gmail.com

Radha Garg

Research Scholar, Haryana School of Business, Guru Jambheshwar University of Science and Technology, Hisar (Haryana) INDIA Email id- gargradha87@gmail.com

ABSTRACT

Removing the traditional barriers of time and place, the Internet banking has provided the virtual world for completing banking transactions. And this has not only expanded the business horizon of banking opportunities but reduced cost of operations tremendously. Hence, the present paper aims to measure the experience of net banking users with intent to devise the ways to spread the net banking usage. The research aims to study the influence of type of bank on experience of Internet banking users in India. The study was conducted on net banking users of Haryana and NCR regions through random sampling. The respondents were largely from public bank and private sectors bank. Public bank includes SBI, SBP, PNB and whereas the private bank include Axis bank, HDFC Bank and ICICI Bank. In all 750 respondents were contacted, only 255 were patient enough to completely fill up the questionnaire. Out of these, 106 respondents were form public banks and 149 were from private bank. The study finds that private bank net users were more satisfied with dimension like ease of use, accessibility, customer contact whereas public banks have gained success to win the trust and security of their customers which is one of the strongest reason for the net savvy people to use Internet banking. Thus on the basis of results, it can be recommended that banks are require to give a special stress on security of transaction, easiness of operation and easy access for customer contacts. Since, customer preferences were found varying with change in income, education and occupation, so, it clearly can form a basis for segmenting the market on these characteristics.

INTRODUCTION

Since the new millennium, internet banking has experienced explosive growth in many countries and has transformed traditional banking practices (Lichtenstein et al., 2006; Alam and Musa, 2009). This tremendous development in field of information technology has reduced the world to a global village (Turan et al., 2010). Removing the traditional barriers of time and place, the Internet banking has provided the virtual world for completing banking transactions. And this has not only expanded the business horizon of banking opportunities but reduced cost of operations tremendously. Recently the banks are extending their presence in rural areas to lure more customers and show them the advantages of internet making by educating into the new system (Krishnas, 2009). Pikkarainen, et al. (2004) define Internet banking as an internet portal, through which people can use various kinds of banking services ranging from bill payment to making investments (Prema, 2008; Shah, 2011). It means that Internet banking not only provide time value through its fast services but also give opportunity to done financial transaction more conveniently. Hence, there are lots of benefits to the customers as well as to bankers.

Now, bankers see Internet banking as a strategic opportunity that can reduce transaction costs, improve customer services with unique value proposition, increase market size, and improve cross-selling opportunities (Li et al., 1999; Nath et al., 2001; Furst et al. 2002; Fox, 2005; Brown and Molla, 2005; Jayawardhena and foley, 2000; Parisa, 2006; Pikkarainen et al., 2006; Sughanti et al., 2001) According to IAMAI survey (2006), assuming teller cost at Re 1 per transaction, ATM transaction costs is Re 0.45, phone banking is Re 0.35, debit cards costs Re 0.20 and Internet banking costs only Re 0.10 per transaction (Prema, 2008). Hence, it's win-win situation because Net banking and phone banking reduce the operating costs for banks as well. In many countries internet banking gained wider acceptance for providing an innovative and value added products and services to their customers. Similarly, the Indian banking industry also moved towards utilizing internet resources for commercial purpose through net banking in order to create a unique value proposition and make their banking services competitive at the global level too (Vinayak et al., 2011; Prema, 2008). But, on the other hand, there are various studies which reveal that despite of all this benefits, numbers of internet banking users are comparatively less in India as customers are still not familiarized and hesitate in using net banking services (Ravi et al., 2007; Aladwani, 2001; Suganthi et al., 2001). Hence, the researchers dwell upon the experience of net banking users with intent to devise the ways to spread the net banking usage.

Present Scenario of Internet banking

With India embracing internet banking, the dreams of financial inclusion have grown bolder (1). In 2006, about 10% of the customers regularly do online banking globally, whereas this figure is barely, less than 1% in India (2). A survey of Asian internet user's (2003), reveals that South Korea have the largest number of Internet users (5.3 million) followed by China (2.5 million) and Taiwan (1.7 million) (3). According to the ViziSense report 2011, HDFC is leading bank in online banking in India followed by ICICI Bank and State Bank of India. Moreover, this report also revealed a remarkable fact that the online banking category has grown more rapidly than the growth of active internet user in India. Meaning thereby that increasing number of Internet users are turning Online banking users too. The online banking category has grown by over 35% over during the last year and a significant percentage of these users are from non-metros (4). According to Internet and Mobile Association of India (2006), Mumbai city tops in online banking (5).

In 2010, SBI has 110 million account holders of which 4.16 million customers are registered for online banking ⁽⁶⁾ whereas ICICI bank has 20 million registered users for internet banking

(7) and HDFC bank have only 1.8 million internet banking service users (8). According to Industry estimates, only 7-15% of a bank customer's base sign up for net banking and of these registered customers, 30-40% uses net banking frequently (7). Therefore, Internet banking has a huge potential of making bank more profitable and the banking services more convenient for customers (3, 9).

REVIEW OF LITERATUTRE

The development of internet banking has been started in the early 1980s when Reserve Bank of India (RBI) set up two committees in quick succession to accelerate the pace of automation of operations in the banking sector. ICICI bank is the first bank who provide I-banking for a limited range of services such as access to account information, correspondence and, recently, funds transfer between its branches (Khan et al., 2009) and recently in India every bank has the internet banking facility. Li et al. (1999) found that knowledge of the internet channel, convenience, experience, perceived accessibility and utility are key influences on online consumer behavior. Out of these, convenience has increasingly been linked to online consumer choices (Nath et al., 2001; Lichtenstein and Williamson, 2006). But Tat et al. (2008) claims that trust was found to be the strongest predictor of intention to continue using Internet banking, followed by compatibility and ease of use.

As regard to people resistance, there are various factor which influence the consumer adoption of Internet banking. Sathye (1999) found that security concerns and lack of awareness about Internet banking and its benefits stand out as being the obstacles to the adoption of Internet banking in Australia. Zhao et al. (2009) observed a significant relationship between trust and perceived risk and that both are crucial in explaining the internet banking usage intention Lichtenstein et al. (2006) highlight increasing risk acceptance by consumers in regard to internet-based services and the growing importance of offering deep levels of consumer support for such services. The study done by Mittal et al. (2008) profiling the users and non users of internet banking revealed that Internet banking users were mid aged male, more technology-oriented, well awaked about the internet banking and convenience minded on one side. On the other side, it found non uses to be younger or older, more traditional oriented, less familiar about internet banking and having lack of confidence of using this innovative service (Vinayak et al., 2011).

From customers perspectives towards internet banking services, Khan et al. (2009) claimed that customers are satisfied with quality of service on four dimensions such as reliability, accessibility, privacy/security, responsiveness and fulfillment, but least satisfied with the 'user-friendliness' dimension whereas, According to Sohail et al. (2008) users of internet banking services have been more satisfied with protection of banking information, personal information and feeling a sense of security. Website speed, web site content and design, navigation, interactivity and security all influence user

satisfaction Jayawardhena and Foley (2000). Recently the banks are extending their presence in rural areas to lure more customers and show them the advantages of internet making by educating into the new system (Krishnas, 2009). Because, Adapa et al. (2009) illustrated that level of education and level of income within the demographic characteristics were significantly and positively associated to consumers' frequency of internet banking usage whereas demographic characteristics such as age, gender, ethnicity, occupation and social dimensions systematically do not relate to the frequency of internet banking usage.

A thorough review of literature has been undertaken to determine the service quality of internet banking all over the world, which reveals that though there are many studies to address the different aspect of Internet banking throughout the world but no study could be traced of Internet banking service quality measurement in public and private bank. Hence, all this paved the way to present study.

OBJECTIVE OF THE STUDY

This research was conducted with a view to study the experience of customers towards internet banking services in India. To achieve this aim, the following objectives were framed.

- To compare the perception of customer in public and private bank regarding their experience of net banking services.
- 2. To determine whether choice of banks are affected by the demographics of users.

RESEARCHMETHODOLOGY

The present study focused on the net banking users of Haryana and NCR to know the experience of internet banking services. For this purpose, an online questionnaire survey was carried out to collect the data from target population during January-March, 2012. For collecting data, simple random sampling has been used thru the mail- id of net banking users, taken from banks. The respondents were largely from public bank and private bank. Public bank includes State Bank of India, State Bank of Patiyala, Punjab National Bank whereas the private bank includes Axis bank, Housing Development Finance Corporation Ltd. (HDFC) Bank and Industrial Credit and Investment Corporation of India (ICICI) Bank. In all 750 respondents were contacted, only 255 were patient enough to completely fill up the questionnaire. Out of these, 106 respondents were form public banks and 149 were from private bank. Before conducting a full-fledge survey, the developed questionnaire was pre-tested on 70 respondents via personal interview and revised again with the help of suggested change. The data has been collected through structured questionnaire on 5 point likert scale. The attribute and dimension were designed with the help literature review (Khan et al. 2009, Amin et al., 2008; Wang et al. 2003). A comprehensive questionnaire was constructed covering 28 variables related to the internet banking. Apart from the demographic profile of respondents, different aspects of internet banking services were addressed. The one way analysis of variance has been applied to analyze the dependent variables from the point of view of type of bank.

Table-1: Demographics profile of Respondents

Demographic Variables	Categories		Type of Bank	
	_	Public	Private	Total
Gender	Male	67 (42.1%)	92 (57.9%)	159(100%)
	Female	39 (40.6%)	57 (59.3%)	96 (100%)
	Total	106	149	
Age	Less than 25 years	34 (56.7%)	26 (43.3%)	60 (100%)
	25-35years	52 (34.4%)	99 (65.6%)	151 (100%)
	More than 36 years	20 (45.5%)	24 (54.5%)	44 (100%)
	Total	106	149	
Monthly Income	Less than Rs 25000	40 (52.4%)	40 (47.6%)	84 (100%)
	Rs. 25000-50000	50 (39.1%)	78 (60.9%)	128 (100%)
	Rs. 51000-75000	10 (43.5%)	13 (56.5%)	23 (100%)
	Above Rs. 75000	2 (10.0%)	18 (90.0%)	20 (100%)
	Total	106	149	
Education	Under graduate	13 (72.2%)	5 (27.8%)	18 (100%)
	College Graduate	29 (40.8%)	42 (59.2%)	71 (100%)
	Post graduate	64 (38.5%)	102 (61.5%)	166 (100%)
	Total	106	149	
Occupation	Self-employed	11 (33.3%)	22 (66.7%)	33 (100%)
	Private service	50 (35.0%)	93 (65.0%)	143 (100%)
	Government service	30 (55.6%)	24 (44.4%)	54 (100%)
	Others	15 (60.0%)	10 (40%)	25 (100%)
	Total	106	149	255 (100%)

(Source: Primary Data)

As per the table 1, The profile of internet banking users reveals that the majority internet banking users are young male of 25-35 age group, who are private & government employees, having post graduate degree and earning monthly income of more than Rs. 25,000 in both public and private sector banks, meaning thereby that the sample size have nearly equal distribution of respondents within each category of demographic profile across public and private sector banks.

RESULTS AND DISSCUSSION

Comparison of Customer Experience of Public and Private Sector Banks

As discussed in the research methodology, the scale consisting of 28 dependent variables to analyzed the

perception of net banking users. All these variables were compared on the basis type of bank with the help of Mean value and ANOVA table. The scale of the variable was also put on reliability analysis as per table-2.

Table-2 Reliability Statistics

Cronbach's Alpha	N of Items
.923	28

(Source: Primary Data)

To check the reliability of scale Cronbach's alpha coefficient was used, the Cronbach's alpha score is 0.923 which is well above the recommended level of 0.70, indicating high reliability of the generated scale.

Table-3: Summary of ANOVA & Mean Scores for the Dependent Variables on the Basis of Gender

SN	N. Dependent Variable		f Bank	F-value	Sig.	
			Private			
1	The bank's internet site provides accurate and reliable information	4.28	4.02	4.718	*0.03	
	about transactions and products.					
2	The terminology and language use in internet banking site is easily	4.01	4.10	.681	0.41	
	understandable and clear.					
3	The bank's site performs the service correctly.	3.38	3.86	2.996	*0.04	
4	The web pages and links of bank website are functioning properly.	4.12	3.92	.854	**0.01	
5	The transactions done on this portal site are reliable and credible.	3.98	4.13	.639	0.80	
6	The transactions are done easily and accurately on bank site.	4.06	4.28	7.94	*0.02	
7	The internet banking website is visually appealing.	3.47	3.63	0.06	0.94	
8	The bank's site is easy to navigate and simple to use.	3.54	4.25	9.41	**0.00	
9	The web page loaded quickly on bank's site.	3.55	3.63	1.037	0.30	
10	The bank provides the updated technology regularly for i-banking.	3.61	3.97	4.30	*0.04	
11	The web page does not freeze after you have put in all your information.	3.50	3.61	0.09	.926	
12	The bank is easy to approach and contact in case of internet site uses.	3.33	3.58	11.00	**0.00	
13	The bank provides 24*7 hours online services to their customer.	3.29	3.59	6.03	**0.01	
14	The bank authority care to listen to your queries and meet your personal needs	. 2.84	3.33	.687	*.003	
15	The bank site has provide time saving through online transactions.	3.85	3.92	1.14	0.28	
16	You can rely on bank for not misusing your information.	3.83	3.83	4.826	*0.02	
17	You can rely on the personal information remaining in the register.	3.89	3.67	.046	*0.04	
18	The bank site provides financial security and confidentiality.	4.00	3.92	.080	0.77	
19	The bank site provides financial security and confidentiality.	4.04	4.03	0.10	0.75	
20	The bank site's provides easy options for cancelling the transactions in case of any problem.	3.27	3.33	.685	0.40	
21	It is easy to find information regarding policy and notice statement on the bank's sites.	3.75	3.60	0.01	0.91	
2	The internet bank sites help to manage banking activities more efficiently.	3.92	3.98	.431	0.52	
3	The bank takes care of issues regarding faulty transaction and compensate	3.65	3.12	8.54	**0.00	
٥	for the problems they create.	5.05	3.12	0.54	0.00	
24	The customer service representative is easy to contact in case of any problem.	3.32	3.67	4.22	*0.04	
5	The contact personnel have required knowledge and skills to solve	3.53	3.73	3.562	*0.03	
٥	the problem.	5.55	5.75	3.302	0.05	
26	The bank is willing to help customers, provide appropriate information	3.45	3.89	7.546	**0.00	
J	and prompt service.	J.7J	5.07	1.JTU	0.00	
27	The bank's site provides a confirmation of the service ordered quickly.	3.80	4.02	3.398	*0.04	
28	The bank sites provides a commitmation of the service ordered quickly. The bank sites provide appropriate statements concerning the completion	4.10	4.02	1.614	0.20	
20	of transactions.	7.10	7.1/	1.014	0.20	
	of transactions.					

^{**} Significant at 1% level

(Source: Primary Data)

^{*} Significant at 5% level

As per the table 3, the results of ANOVA state that there is significant difference in the views of public and private net banking users (Pd"0.03) on 'Accurate and reliable information about transactions and product'. This is also evident from the significant variations in the mean scores (i.e. Public, $\bar{x} = 4.28$ and Private $\bar{x} = 4.02$), meaning thereby that in terms of accuracy and reliability, the net banking users of public bank is more satisfied in comparison of private banks. Internet banking users of different banks (Pd"0.41) (Table 3) do not vary in their views on the variable that 'Terminology and language use in internet banking site is easily understandable'. This result is also endorsed by the mean scores (i.e. Public, $\bar{x} = 4.01$ and Private $\bar{x} = 4.10$).

The variable 'Bank's site performs the service correctly' has a significant difference in perception of public and private net banking users (Pd" 0.04) (Table 4). Hence, the mean score also show high variation in their perception (i.e. Pubic, $\bar{x}=3.38$ and Private $\bar{x}=3.86$). It indicates that private bank's website is more responsive and performs better in comparison to public banks when it comes to the performing service correctly. The net banking users have also different perception regarding 'Accuracy of web page and various links of websites' (Pd"0.01). The mean score of table shows that the users of public bank are more satisfied with this variable in comparison of private banking users (i.e. Public, $\bar{x}=4.12$ and Private $\bar{x}=3.92$).

The perception of internet banking users does not vary on 'Reliability and credibility this portal site' as the table value is greater than significant value (Pd"0.80), as also evident from the mean table that there is no significant variation in the mean value of public and private internet banking users (*i.e.* Pubic, $ox\bar{x}=3.98$ and Private $\bar{x}=4.13$). 'Transactions are done easily and accurately on bank site' have significantly differed on the perception of net banking users (Pd"0.02). Furthermore, the mean table indicates that users of private banking users have more faith on reliability and credibility of portal site in comparison of public banking users (*i.e.* Public, $\bar{x}=4.06$ and Private $\bar{x}=4.28$).

The type of bank has not a significantly varying influence of 'Visually appealing of internet banking website' $(Pd"\ 0.94)$. It is also evident form minimal variations in the mean scores (i.e. Pubic, $\bar{x}=3.47$ and Private $\bar{x}=3.63$), meaning thereby that on this variable, the both category of net banking users had nearly same perception and websites of both types of banks are equally appealing. The parameter that 'Bank's site is easy to navigate and simple to use' has varying perception of net banking users $(Pd"\ 0.00)$. As per the mean table of this variable, the private banking users have more acceptance than public banks user's counterparts. It means that the private banks websites are easier to navigate and use (i.e. Public, $\bar{x}=3.54$ and Private $\bar{x}=4.25$).

The results of Anova shows that the net banking users of both type of bank had not significantly varying influence on the issue that 'Web page loaded quickly on bank's site' (*Pd*"

0.30) and mean value also expound the same results (*i.e. Pubic*, $\bar{x}=3.55$ and Private $\bar{x}=3.63$) meaning thereby that the speed of website is largely depends on speed of Internet service providers rather than bank websites. The category of banking users were significantly varying on variable that bank provides the updated technology regularly for i-banking (Pd" 0.04). Moreover, the mean table signifies that users of private banks were perform betters in terms of updated technology as compared to public sector banks (*i.e. Pubic*, $\bar{x}=3.61$ and Private $\bar{x}=3.97$).

Table 3 exhibits that there is no significant variation in the perception of public and private net banking users on variable that 'Web page does not freeze after you have put in all your information' (Pd"0.926). The mean table indicates that the users of both type of bank were satisfied with functioning of web pages of bank sites (*i.e. Pubic*, $\bar{x} = 3.50$ and Private $\bar{x} = 3.61$). But, perception of both type of bank significantly varies on parameter that 'Easy to approach and contact in case of internet site uses' (Pd"0.00). The mean score shows that the users of private banks are more satisfied in comparison to users of public sector banks on ease of contact (*i.e. Pubic*, $\bar{x} = 3.33$ and Private $\bar{x} = 3.58$).

Table 3 highlights' that there is significant variation on variable 'Bank provides 24*7 hours online services to their customer' between public and private net banking users (Pd" 0.001). The mean score of this variable depicts that the private net banking users can access net banking facility any time more quickly as compared to public net banking users (*i.e. Pubic*, $\bar{x} = 3.29$ and Private $\bar{x} = 3.59$). The perception of net banking users also shows a significant difference on parameter 'bank authority care to listen to your queries and meet your personal needs' (Pd" 0.003). Further, the mean table reveals that the private banks deals in caring fashion with their net banking customer queries and problems in comparison to net banking users of public banks (*i.e. Pubic*, $\bar{x} = 2.84$ and Private $\bar{x} = 3.33$).

The results of Anova table shows that the perception of net banking does not significant difference on 'bank site has provide time saving through online transactions' (Pd" 0.28) and mean table also shows a minimal variation in perception of net banking users of both type of bank (i.e. Pubic, $\bar{x} = 3.85$ and Private $\bar{x} = 3.92$) as it is the strongest reason for users to use internet banking. The variable 'Rely on bank for not misusing your information' shows a surprising finding that although the mean value of net banking users of both type of banks on this variable are equal (i.e. Pubic, $\bar{x} = 3.83$ and *Private* $\bar{x} = 3.83$), but still, Anova table shows a significant difference between the perception of both type of net banking users (Pd" 0.02). There cannot be a specific reason for it as it can be happen by chance also. But it clearly indicates the users of both type of banks have a strong faith on their banks for not misusing the information.

The variable 'Rely on the personal information remaining in the register' give more clear insight of users trust and security on banks and shows a significant variation in perception (Pd'' 0.04). The mean value of this variable reveals that the users of public sector banks rely more on their banks regarding their personal information as compared to private sector bank (*i.e.* Pubic, $\bar{x} = 3.89$ and Private $\bar{x} = 3.67$). It indicates that public sector have gained more trust security from their customers in comparison to private sector banks. The same results also can be evident by the variable 'bank site provides financial security and confidentiality' \bar{x} *i.e.* Pubic, $\bar{x} = 4.00$ and Private $\bar{x} = 3.92$). Though it does not show a significant difference (Pd'' 0.80), but, it consistent with the previous findings.

The perception of net banking users does not have a significant variation on variable 'Bank site provides financial security and confidentiality' (Pd''' 0.75) as the table shows a nearly same mean value in perception of both types of net banking users (i.e. Pubic, $\bar{x} = 4.04$ and Private $\bar{x} = 4.03$). Likewise, the variable 'Bank site's provides easy options for cancelling the transactions in case of any problem' also does not shows a significant difference between perception of users of public and private banks (Pd'' 0.40) with a mean score value (i.e. Pubic, $\bar{x} = 3.27$ and Private $\bar{x} = 3.33$).

Tables 3 disclose that perception of public and private banking users does not vary on 'Easy to find information regarding policy and notice statement on the bank's sites' (Pd''.91). It also can be determined by the mean score value of both type of banks (*i.e.* Pubic, $\bar{x} = 3.75$ and Private $\bar{x} = 3.60$). The net banking users also have almost same perception on variable 'Internet bank sites help to manage banking activities more efficiently' (*i.e.* Pubic, $\bar{x} = 3.92$ and Private $\bar{x} = 3.98$) as there is no significant difference on this variable as per Anova table (Pd''.52).

The type of bank also significantly influence the perception of internet banking users on the attribute that 'Bank takes care of issues regarding faulty transaction and compensate for the problems they create' (Pd''.00) with significant variation in the mean score (i.e. Pubic, $\bar{x} = 3.65$ and Private $\bar{x} = 3.12$). It also again support the previous finding that public net banking users have more satisfied with their banks in terms of trust and security than private banks user's counterparts. The Anova table state that the users of both type of banks have significant variation in the opinion on the issue that 'Customer service representative is easy to contact' (Pd''.04). As mean score indicates that the private net banking has higher positive perception in case of customer contact in comparison to net banking users' public banks (i.e. Pubic, $\bar{x} = 3.32$ and Private $\bar{x} = 3.67$)

Table 4 exhibits a significant variation on both variable 'contact personnel have required knowledge and skills to solve the problem' (Pd''.03, Pubic, $\bar{x}=3.53$ and Private $\bar{x}=3.73$ and willing to help customers, provide appropriate information and prompt service (Pd''.00, Pubic, $\bar{x}=3.45$ and Private $\bar{x}=3.89$). The mean table of both variables evident the previous results that the private net banking users have more faith on their bank in terms of customer contact rather than public net

banking users meaning thereby that the private bank perform better in the field of customer contact than the public sector banks.

'Bank's site provides a confirmation of the service ordered quickly' have significantly differed on the perception of net banking users (Pd".04). As per the mean table of this variable, the public net banking users have lesser acceptance to this variable in comparison to net banking users of private banks (i.e. Pubic, $\bar{x} = 3.80$ and Private $\bar{x} = 4.02$). The results of Anova table indicates that there is no significant association between perception of net banking users of public and private banks on the attribute that 'Bank sites provide appropriate statements concerning the completion of transactions' (Pd" .20) as the both type of net banking users have almost same mean score (i.e. Pubic, $\bar{x} = 4.10$ and Private $\bar{x} = 4.17$). But, it shows that the net banking users of both type of banks are strongly agree with the fact that their banks provide the appropriate the statement concerning the completion of transactions which a symbol of strong faith of users on their

Choice of Bank across Demographic Characteristics

As per the various studies there is significant association between net banking usage and age, gender, educational level and income, (Adapa, 2009; Gan et al., 2006; Kolodinsky et al., 2004; and Wan et al., 2005). Hence, it is very important to know whether choices of banks are affected by the demographics of users or not. For achieving this objective, the cross tab has been used.

Table 4a: Distribution of Gender category across Public and Private Banks

		Type o	Total	
		Public	Private	
Gender of	Male	67(63.2%)	92(61.7%)	159(62.4%)
respondent	Female	39(36.8%)	57(38.3%)	96(37.6%)
Total	106(100.0%)	149(100.0%)	255(100.0%)	

Table-4b: Chi-square test

Test	Value	df A svi	mp. Sig. (2-s	sided)
	Chi-Squa	0.056	1	0.812
· · ·	-			

(Source: Primary Data)

As per the table 4a & 4b, it is clearly evident that majority of respondents of net banking users are from male category (62.4%), but most of them are using private net banking services. However, the chi-square table shows that there is no significant relationship between type of bank across male and female meaning thereby that the choice of bank doesn't influence from the gender of respondents.

The above table presents a significant variation in distribution of respondents across various income categories which reveals that majority of the respondents who belongs to category of less than Rs. 25,000 prefer to use the public net banking facilities. With the increased level of income, the net banking users were inclined towards the private net banking

facilities that clearly segment the target customer for both type banks. The chi square table confirms significant relationship between various income categories across type of bank meaning thereby that that income level of respondents has a strong influence on the choice of a particular type of bank.

The above table reveals that majority of respondents are highly educated with having the degree of graduate and post graduate in both public and private bank. But a careful look at the table reveals that within the category of undergraduate,

majority of respondents were using public net banking facility whereas in graduate and post graduate category, most of the respondents were shifting towards private net banking facility with a significant variation as per the chi-square table too.

The table 7 showed very interesting insights that majority respondent of self-employed and private employee prefers to use private net banking facilities whereas most of the government employee and 'others' were using public net banking services. The reason for the same may be that the

5 (3.4%)

42 (28.2%)

110 (68.4%)

149 (100.0%)

18 (7.1%)

71 (27.8%)

166 (75.1%)

255(100.0%)

		Туре	of bank	Total	
		Public	Private		
Monthly income of respondent	Less than Rs. 25000	44 (41.5%)	40 (26.8%)	84 (32.9%)	
	Rs. 25,000-50,000	50 (47.2%)	78 (52.3%)	128 (50.2%)	
	Rs. 51,000-75,000	10 (9.4%)	13 (8.7%)	23 (9.0%)	
	More than Rs. 75,000	2(1.9%)	18 (12.1%)	20 (7.8%)	
T-4-1		106 (100 00/)	149(100.0%)	255 (100.0%)	
Total Table- 4b: Chi-square test		106 (100.0%)	149(100.078)	233 (100.076)	
		100 (100.0%)	149(100.078)	233 (100.076)	
	Value	df	Asymp. Sig. (2-sided)	233 (100.076)	
Table- 4b: Chi-square test Test	Value 12.614		, ,	233 (100.076)	
Table- 4b: Chi-square test		df	Asymp. Sig. (2-sided)	233 (100.076)	
Table- 4b: Chi-square test Test Pearson Chi-Square		df	Asymp. Sig. (2-sided)	233 (100.076)	
Table- 4b: Chi-square test Test Pearson Chi-Square	12.614	df 3	Asymp. Sig. (2-sided) 0.006	233 (100.076)	
Table-4b: Chi-square test Test Pearson Chi-Square (Source: Primary Data)	12.614	df 3	Asymp. Sig. (2-sided) 0.006	Total	

Table- 5b: Chi-square test	Table-	5b:	Chi-so	ıuare	test
----------------------------	--------	-----	--------	-------	------

Education qualification

of respondent

Total

Test	Value	df	Asymp. Sig. (2-sided)	
Pearson Chi-Square	8.555	3	0.036	
/G = 1				

13(12.3%)

29 (27.4%)

72 (60.3%)

106 (100.0%)

(Source: Primary Data)

Table 7a: Distribution of Occupational Category across Public and Private Ranks

Under graduate

College graduate

Post graduate

_		_	Type of bank	Total
			Public	Private
Occupation of respondent	Self-employed	11 (10.4%)	22 (14.8%)	33 (12.9%)
	Private employee	50 (47.2%)	93 (62.4%)	143(56.1%)
	Government employee	30 (28.3%)	24 (16.1%)	54 (21.2%)
	Others	15 (14.1%)	10 (6.7%)	20 (9.8%)
Total		106 (100.0%)	149 (100.0%)	255 (100.0%)

Test	Value	at	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.335	4	0.023

(Source: Primary Data)

government employee has to rely on public banks account to receive their monthly salary which also can be used for transfer fund through net banking. This significant variation can also be evident from the chi-square test which clearly shows a significant relationship between distribution of occupational category across public and private sector banks.

CONCLUSION

The research reveals that in terms of accuracy and reliability, the net banking users of public bank is more satisfied in comparison to private banks yet, in totality the net banking users of private banks were more satisfied on majority dimensions of service quality parameters. The private bank's website was found more responsive and performing better in comparison to public banks. When it comes to the 'performing service correctly', 'reliability and credibility of portal site' and 'updated technology' private banks again were scoring higher. The private banking users had more acceptance than public banks user's counterparts in case of easy to navigate and use of websites. The mean score of table depicts that the private net banking users had easy and fast access to net banking facility any time and their queries were dealt more properly in comparison to public banks and also private banks perform better in the field of customer contact than the public sector banks.

On the other hand, the net banking users of public sector banks rely more on their banks regarding their personal information as compared to private sector bank. Public net banking users were more satisfied with their banks in terms of trust and security than private banks. Overall, it can be said that private bank were satisfying their customer more in ease of use, accessibility, customer contact, whereas public banks have gained success in winning the trust and security of their customers which is one of the strongest for the net savvy people to use Internet banking.

Overall analysis of perception of respondents towards variables of internet banking service quality, presents with few insights that can help design better business, marketing and product strategy for service providers and other stakeholders. As far as business strategy is concerned, there is lot of scope for internet banking as a product which needs to be harnessed well, because majority of respondent were satisfied with internet banking facilities. While designing communication and marketing strategy banks are require to give a special stress on security of transaction, easiness of operation and easy access for customer contacts. Since, customer preferences were found varying with change in income, education and occupation, so, it clearly can form a basis for segmenting the market on these variables. Public banks need to look into the fact that private banks were found scoring heavily on majority of dimensions as compared to public sector banks. This is call upon a special attention on the part of public banks to wake up as majority of respondents were shifting towards private sector banks and private banks were more preferred destination for internet banking facilities.

REFERENCES

- "Pursuing a world of mobile wallets", 15 December, 2011 http://m.timesofindia.com/PDATOI/articleshow/11121880.cms, assessed on 29th March, 2012.
- "Banks on people, connect via Net route", 24 November, 2006 http://m.economictimes.com/PDAET/articleshow/ 548623.cms, assessed on 13th March, 2012.
- "Online banking surges ahead in Asia" 24 January, 2006 http://articles.economictimes.indiatimes.com/2003-24/news/27538009_1_online.banking-internet-users-china-and-taiwan, assessed on 13th April, 2012.
- "HDFC Bank ranks No.1 online followed by ICICI Bank and SBI", http://www.pluggd.in/best-online-banking-experience-in-india-297/, assessed on 05th April, 2012.
- "Mumbai city tops in online banking", 9 March, 2006 http://articles.economictimes.indiatimes.com/2006-03-09/news/27442741_1_bank accounts-online-banking-internet-and-mobile-association, assessed on 13th April, 2012.
- "HDFC's net banking is not accessible from other websites" Aug 19, 2010 http://m.timesofindia.com/PDATOI/articleshow/6334485.cms, assessed on 25th March, 2012.
- "Western Union, SBI tie up for direct cash-account transfer facility" http://articles.economictimes.indiatimes.com/2010-07-22/news/27623500_1_sbi-tie-western-union-online-banking, assessed on 28th March, 2012.
- "Online credit card dealings may dip after new PIN systems", 4 August, 2009 http://m.economictimes.com/PDAET/articleshow/4855408.cms, assessed on 12th April, 2012.
- "How mobile and internet banking is making life easier for millions", http://articles.economictimes.indiatimes.com/2011-09-26/news/30204360_1_mobile-banking-internet-banking-transfer-funds, assessed on 20th March, 2012.
- Adapa, S., Rindfleish, J., Cooksey, R. and Valenzuela, F. (2009), "An Empirical Investigation of Frequency of Internet Banking Usage by Australian Consumers", *ANZMAC*, www.duplication.net.au/ANZMAC09/papers/ANZMAC2009-549.pdf, assessed on 1^{1th} April, 2012.
- Aladwani, A. (2001), "Online banking a field of survey of drivers, development, challenges and expectations", *International Journal of Information Management*, Vol. 21 (3), pp. 213-225.
- Alam, S. S. and Musa, R. (2009), "Corporate Customers' Adoption of Internet Banking: Case of Klang Valley Business Firm in Malaysia", *International Journal of Business and Management*, Vol. 4 (4), pp. 13-21.

- Amin, M. and Isa, Z. (2008), "An examination of the relationship between service quality perception and customer satisfaction A SEM approach towards Malaysian Islamic banking", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 1 (3), pp. 191-209.
- Brown, I. and Molla, A. (2005), "Determinant of internet and cell phone banking in South Africa", *Journal of Internet Banking and Commerce*, Vol. 10 (1), http://www.arraydev.com/commerce/JIBC/2005-02/brown.HTM, accessed on 1st May, 2012.
- Fox, S., (2005), "Online Banking Jumps 47% in 2 Years", *Pew Internet and American Life Project*, http://www.pewinternet.org/Reports/2005/Online-Banking-2005/Data-Memo/Findings.aspx, assessed on 12th April, 2012.
- Furst, K., Lang, W. W. and Nolle, D. E. (2002), "Internet Banking", *Journal of Financial Services Research*, Vol. 22 (1), pp. 93-117.
- Gan, C., Clemes, M., Limsombunchai, V., and Weng, A. (2006), "A Logit Analysis of Electronic Banking in New Zealand", *International Journal of Bank Marketing*, Vol. 24 (6), pp. 360-383.
- IAMAI's Report on Online Banking (2006), http://www.iamai.in/ Research.aspx?Fileid=r8_home.htm&rid=8, assessed on 28th March, 2012.
- Jayawardhan, C. and Foley, P. (2000), "Changes in banking sector- the case of inherent banking in UK", *Journal of Internet Research: Networking and policy*, Vol. 10 (1), pp. 19-30.
- Khan, M. S., Mahapatra, S. S. and Kumar, S. (2009), "Service quality evaluation in internet banking: an empirical study in India", *International Journal of Indian Culture and Business Management*, Vol. 2 (1), pp. 30-46.
- Kolodinsky, J. M., Hogarth, J. M., and Hilgert, M. (2004), "The Adoption of Electronic Banking Technologies by US Consumers", *The International Journal of Bank Marketing* Vol. 22 (4), pp. 238-259.
- Krishnas (2009), "Online Banking in India- Part 1", http://www.thinkplaninvest.com/2009/03/online-banking-in-india-part-1/, assessed on 23th March, 2012.
- Li, H., Kuo, C. and Russell M. G. (1999), "The Impact of Perceived Channel Utilities, Shopping Orientations, and Demographics on the Consumer's Online Buying Behavior", *Journal of Computer-Mediated Communication*, Vol. 5 (2), http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.1999.tb00336.x/full, assessed on 24th April, 2012.
- Lichtenstein, S. and Williamson, K. (2006), "Understanding consumer adoption of internet banking: an

- interpretive study in the Australian banking context", *Journal of Electronic Commerce Research*, Vol. 7 (2), pp. 51-66.
- Mittal, R. K., Ghandhi, M. (2008), "E-banking and its adoption by its customers: An exploratory study", in Vinayak, R. and Jindal, P. (2011), "Mapping the reason of nonadopters resistance to Internet banking" *The Indian Journal of Commerce*, Vol. 64 (3), pp. 81-91.
- Nath, R., Schrick, P. and Parzinger, M. (2001), "Bankers' Perspectives on Internet Banking", *E-Service Journal*, Vol. 1 (1), pp. 21-36.
- Parisa, A. (2006), "Adoption of e-Banking Services by Iranian Customers", Unpublished thesis of Master of Science, Lulea University of Technology, Division of Industrial Marketing and E-Commerce.
- Pikkarainen, K., Pikkarainen, T. and Karjaluoto, H. and Pahnila, S. (2006), "The measurement of end user computing satisfaction of online banking services: an empirical evidence from Finalnd", *International Journal of Bank Marketing*, Vol. 24 (3), pp. 158-172.
- Prema, C. (2008), "Factors Influencing Consumer Adoption of Internet Banking in India", http://presidencybusinessschool.org/download/Factors_influencing_consumer_adoptionof_internet_banking%20_in_India.pdf, assessed on 25th March, 2012
- Ravi, V., Carr, M. and Sagar, N. V. (2007), "Profiling of internet banking users in India using Intelligence Technique", *Journal of Service Research*, Vol. 6 (2), pp. 61-73.
- Sathye, M. (1999), "Adoption of Internet banking by Australian consumers: an empirical investigation", *International Journal of Bank Marketing*, Vol. 17 (7), pp. 324-334.
- Shah, A. (2011), "Market research on factors affecting customer adoption of Internet banking", *International Journal of Business and Management Tomorrow*, Vol. 1 (1), pp. 1-19.
- Sohail, S. and Shaikh, M. N. (2008), "Internet banking and quality of service Perspectives from a developing nation in the Middle East", *Online Information Review*, Vol. 32 (1), pp. 58-72.
- Suganthi, B. and Balachandran, A. (2000), "Internet banking patronage: an empirical investigation of Malaysia", *Journal of Internet Banking and Commerce*", Vol. 6
 (1), http://www.arraydev.com/commerce/JIBC/
 0103_01.htm, assessed on 16th April, 2012
- Tat, H. H., Nor K. M., Yang E. T., Hney, K. J., Ming, L. Y. and Yong, T. L. (2008), "Predictors of Intention To Continue Using Internet Banking Services: An Empirical Study of Current Users", *International*

- *Journal of Business and Information*, Vol. 3 (2), pp. 233-244.
- Traun, M. S. and Sharma, H. (2010), "Barriers in E-banking adoption", Paper presented and published in proceedings of IInd annual conference of Haryana School of Business, GJUS&T, Hisar, pp. 146-155.
- Vinayak, R. and Jindal, P. (2011), "Mapping the reason of non-adopters resistance to Internet banking" *The Indian Journal of Commerce*, Vol. 64 (3), pp. 81-91.
- Wan, W. W., Luk, C., and Chow, C. W. "Customers' Adoption of Banking Channels in Hong Kong (2005)",

- *International Journal of Bank Marketing*, Vol. 1 (2/3), pp. 255-272.
- Wang, S. Y., Wang, Y. M. and Lin, H. H. (2003), "Determinants of user acceptance of Internet banking: an empirical study", *International Journal of Service Industry Management*, Vol. 14 (5), pp. 501-519.
- Zhao, A. L., Lewis, N. K., Lioyd, S. H. and Ward, P. (2009), "Adoption of internet banking services in China: is it all about trust?" *International Journal of Bank Marketing*, Vol. 28 (1), pp. 7-26.