

# Impact of Demographics on Customer Satisfaction in Online Banking

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## Abstract

The objective of this study is to examine the relationship between demographic characteristics (gender and age) and customer satisfaction on online banking service quality factors in Visakhapatnam city, Andhra Pradesh, India. Primary data were collected through structured questionnaire from a sample of 513 chosen on purposive method. The statistical package for social sciences was used for analysis of the collected data. Reliability test and KMO & Bartlett's tests of sphericity were used to test construct reliability and validity, and chi-square test was used to test the assumed hypothesis. The study found significant relationship between demographic factors (age and gender) and satisfaction on some online banking service quality factors and no impact for the remaining factors. Findings of the study may help a banker to identify the critical areas to pay attention to, for improving decision-making in marketing, and segmentation and targeting of customers to increase customer satisfaction in online banking.

**Keywords:** Online Banking, Demographic Characteristics of the Customers, Customer Satisfaction, Service Quality

## Introduction

Demographic profile helps in understanding the complex nature of social phenomena. An individual in a society is subject to various socio-personal restrictions and exposed to various stimuli in the environment, which in turn reflect in his/her personality and behavior in day-to-day life.

With customers' demand for more convenient and sophisticated products, increased internet-user population, online banking has evolved as one of the strategic tools of the banking industry. It refers to delivery of banking products and services to customers through internet. It enabled the bankers to enlarge their market share by saving time and cost and being free from geographical

constraints. However, success of information technology model depends on both its initial adoption and subsequent continued usage (Chiu et al., 2004). Customer satisfaction plays a significant role on customers' behavioral intention to adopt and continue usage of a new technological model (Guo, L, 2009). Satisfied customer derives benefits such as staying as a customer for longer period of time (Kotelnikov, V, 2001), buying more products and giving free marketing to the banks (Shaffer, R, 2008). Quality of service is considered an important parameter for customer satisfaction (Parasuraman et al., 1985). Service being not tangible, its quality requires to be defined in terms of attitude, interaction and perception of the customer (Pattanayak & Maddulety, 2011). It encompasses in its fold various attributes covering the whole gamut of acquisition/consumption experiences of customers.

It is documented in the earlier research that demographic characteristics have significant impact on customer perceptions regarding service quality, influence satisfaction, and repurchase intentions of the customer (Mittal et al., 2001, Cooil et al., 2007). Gender and age are identified as important factors, which have influence on adoption and satisfaction of customers (Tater et al., 2011, Akinci et al., 2004) with respect to online service quality.

Literature on associations between demographics and service quality revealed a picture of diversity in the results. The degree of association varies from one quality factor to other and from one service setting to another. The nature of service sector, geographical location viz., rural or urban, can have impact on the results. Thus, there is relevancy to study association between demographics and service quality factors in online banking on customers in a geographic location like Visakhapatnam. This city is a fast-developing urban area with dominant economic

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activity of people spread in manufacturing sector, port, and ancillary industry, educational institutions, and tourism.

Hence, this study attempts to analyze the association between demographic factors (gender and age) and customer satisfaction on various online banking service quality factors in Visakhapatnam city, Andhra Pradesh, India. Findings of the study may help the banker in segmentation of the market and targeting of the customer.

For this purpose, customer satisfaction was measured by using the factors reliability, responsiveness, website design, accessibility, ease of use, privacy and security, information quality, and empathy. Reliability is the ability of the internet banking to perform the promised service dependably and accurately (Jun, M. & Cai, S., 2001) and correct functioning of the site (Parasuraman et al., 2005). Responsiveness can be defined as quick response and the ability to get help if there is a problem or question (Parasuraman et al., 2005). Website design is the degree to which the website interface is visually appealing and well designed (Jun, M. & Cai, S., 2001). Access is the approachability and ease of contact of service (Jun, M. & Cai, S., 2001). Ease of use is the convenience of the customers to interact with the bank through the internet (Jun, M. & Cai, S., 2001). Information quality is providing the customers with updated and complete information they need through the banks' website (Jun, M. & Cai, S., 2001). Privacy is the degree to which the customer believes the site is safe from intrusion and personal information is protected (Parasuraman et al., 2005). Empathy is defined as providing caring, individualized attention to customers (Parasuraman et al., 2005).

## Review of Literature

Customer retention has been found to be a key determinant in the banking industry for long-term profitability as acquiring new customers is expensive and retaining existing customers is much cheaper and easier (Tong et al., 2012). Now, in the era of information technology, e-banking has become a strategic tool in the hands of global banking sector to attract and retain customers (Sharma, 2011). Internet has significantly influenced delivery channels of the banks by offering the benefits of time and cost savings and freedom from place. Internet banking is an internet portal through which customers can

use different kinds of banking services ranging from bill payment to making investments (Pikkarainen et al., 2004). Service quality is found to have influence on satisfaction and repurchase intentions of the customer (Mittal et al., 2001, Al-Hawari & Ward, 2006, Cooil et al., 2007, Musiime & Ramadhan, 2011). Customer satisfaction is the overall evaluation based on the total purchase and consumption experience with good or service over time (Anderson, E.W., et al., 1994). Service quality is defined as customer's comparison between service expectation and actual service performance (Parasuraman et al., 1985). Demographic characteristics have influence on customer perceptions regarding service quality (Mittal et al., 2001, Cooil et al., 2007). Gender and age are significant factors, which have influence on adoption of online banking (Tater et al., 2011). Nevertheless, in view of Rajasekhar et al., (2015), they do not show any effect on usage of online banking.

Gender of the customer is an important demographic factor. Prior researchers derived conflict results on the topic relationship between gender and customer satisfaction on online banking service quality. For example, Rashidi & Mansoori (2015) study found significant influence of gender on satisfaction of customer in online banking but Akinci et al., (2004) contradicted the same.

Age is another factor, which affects perceived usefulness, perceived ease of use (Kleijnen et al., 2004) and intention to use (Al-Jamal & Abu-Shanab, 2015) technology. Generally, older people are not comfortable with technology (Spacey et al., 2004) and mid-aged people are more interested to use internet banking when compared with younger or older people (Akinci et al., 2004; Laforet and Li, 2005). The age gap between online and non-online consumers is diminishing (Zhou et al., 2007). For age, previous researchers expressed mixed opinions regarding the role of age on customer satisfaction with respect to online banking service quality. Some accepted (Rashidi & Mansoori, 2015) while others contradicted (Akinci et al., 2004).

The literature review indicates that several studies have been conducted on issues related to effect of demographic factors on adoption and usage of online banking; however, few studies have attempted to study the influence of gender and age on customer satisfaction. It can also be observed from the literature that there were very few studies, which

have considered online banking service quality factors for assessing customer satisfaction. Hence, the present research fills the earlier gap in the literature.

## Theoretical Model and Research Hypotheses

The objective of this study is to examine the relationship between demographic characteristics (gender and age) and satisfaction of the customers in online banking in Visakhapatnam city, Andhra Pradesh, India. The hypotheses for the study are as follows:

H<sub>1</sub>. Demographic factor, gender, has significant influence on satisfaction of the customers in online banking.

H<sub>2</sub>. Demographic factor, age, has significant influence on satisfaction of the customers in online banking

## Methodology

The study is based on both primary and secondary data. Primary data were collected from online banking users of Visakhapatnam city with the help of structured questionnaire on demographic profile and online banking service quality factors. While constructing the questionnaire, validated questionnaires of Parasuraman et al., (2005), Jun & Cai (2001), Khan et al., (2009), and Gupta & Bansal (2012) have been used. The questionnaire was constructed with 37 statements with regard to eight online banking service quality factors viz., reliability (5), responsiveness (5), website design (4), access (4), ease of use (6), information quality (4), privacy and security (3), and empathy (6). The questions in the questionnaire were constructed on five-point Likert scale from 'Highly dissatisfied' to 'Highly satisfied'. A pilot study was conducted with 50 respondents before the final questionnaire was developed. The data were collected through distribution of questionnaires to the respondents. Purposive sampling method was used for choosing sample of 513 respondents. Secondary data were collected through books, journals, conference proceedings, government reports, unpublished theses, and internet sources.

## Statistical Analysis

Statistical package for social sciences is used for the analysis of the data. Reliability test (Chronbach's alpha coefficient) was used to find out the internal consistency of the questionnaire. KMO & Bartlett's Tests of Sphericity were used to measure sampling adequacy. Cross tabulation was used to know the customer satisfaction on online banking service quality factors on demographic lines. Non-parametric tests are most appropriate and technically correct tests to use with ordinal data and nominal data. Chi-square is the most popular non-parametric test of significance (Krishnaswami, O.P. & Ranghanatham, M., 2005) used to determine whether the association of variables is statistically significant. Hence, chi-square test was performed to examine the relationship between independent factors (gender and age) and dependent factors (reliability, responsiveness, website design, access, ease of use, information quality, privacy & security, and empathy). Here, each dependent factor is the average of score of its constructs.

## Results

### Demographic Profile of the Respondents

The demographic information of the respondents is shown in Table 1. In this study, the respondents comprised of 79.1% males and 20.9% females. About 37.5% of the respondents are in the age group of 18 years to 29 years and 27.7% are in the age group 40 years to 49 years. Majority of the respondents (63.9%) are married and 36.1% of them are unmarried. In terms of their education, 49.5% of the respondents have obtained a postgraduation degree and 47.4% have done their graduation. Government employees are 37.8% and 35.9% are employees of private sector. 29% are in the income group of Rs. 50,000/- and above per month and 24.8% are earning less than Rs. 20,000/- per month. From the data, it is observed that majority online banking users are male, young (between 18 years and 40 years) and married and most of them are postgraduates and graduates.

**Table 1: Demographic Profile of the Respondents**

Variable	Category	Frequency (No)	Percent (%)
Age (years)	18-29	192	37.4
	30-39	133	25.9
	40-49	142	27.7
	50 and above	46	9
Gender	Male	406	79.1
	Female	107	20.9
Marital status	Married	328	63.9
	Unmarried	185	36.1
Education	High school	2	0.4
	Intermediate	10	1.9
	Graduation	243	47.4
	Postgraduation	254	49.5
	Others	4	0.8
Occupation	Student	67	13.1
	Government employee	194	37.8
	Private employee	184	35.9
	Business	34	6.6
	Profession	34	6.6
Monthly income	Less Rs.20,000	127	24.8
	Rs.20,000-29,000	91	17.7
	Rs.30,000-39,000	77	15
	Rs.40,000-49,000	69	13.5
	Rs.50,000 & above	149	29

### Reliability and Exploratory Factor Analysis

Reliability value ( $>0.7$ ) is considered acceptable and reliable (Hair et al., 2006). The obtained alpha values for all the online banking service quality factors are above 0.7 and this indicates a high degree of reliability and internal consistency.

**Table 2: Reliability Coefficients**

Variables	Cronbach's Alpha
Reliability	0.843
Responsiveness	0.870
Website Design	0.839
Access	0.753
Ease of use	0.779
Information Quality	0.763
Privacy & security	0.893
Empathy	0.852

### KMO and Bartlett's Tests

To test sampling adequacy, the acceptable KMO index should be more than 0.5 and the level for the Bartlett's Test of Sphericity must be less than 0.05 (Coakes et al., 2008). The obtained KMO value is 0.911 ( $>0.5$ ) and Bartlett's Tests of Sphericity is significant at 0.000.

**Table 3: KMO and Bartlett's Tests**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy:		0.911
Bartlett's Test of Sphericity	Approx. Chi-Square	9,188.950
	df	351
	Sig.	.000

## Association between Demographic Factors and Satisfaction

Cross tabulation enumerated the customer satisfaction among demographic groups. Though the responses were elicited on 5-point Likert scale from 'Highly dissatisfied' to 'Highly satisfied', the percentages derived under the levels 'Satisfied' and 'highly satisfied' were clubbed and displayed to give a glimpse of satisfaction percentage

among each of the demographic groups for each of the constructs.

## Customer Satisfaction Based on Gender

Customer satisfaction towards online banking service quality factors in terms of gender of the customer is as follows:

**Table 4: Customer Satisfaction Based on Gender**

<i>Online banking service quality factors</i>	<i>Satisfaction</i>	
	<i>Male</i>	<i>Female</i>
<b>RELIABILITY</b>		
Proper functioning of the website	82.3%	76.6%
Service delivery at the promised time	78.6%	78.5%
Delivery of the service exactly as promised	71.7%	70.1%
Accuracy of transaction records	84.2%	88.8%
Number of services offering in online banking	76.1%	78.5%
<b>RESPONSIVENESS</b>		
Promptness in responding to enquiries	59.9%	65.4%
Promptness in responding to service requests	66.3%	68.2%
Promptness in responding to online/offline complaints	52.0%	57.9%
Effectiveness in solving customer problems arising in online	64.5%	67.3%
Bank employee willingness to help customer problems when contacted	64.3%	59.8%
<b>WEBSITE DESIGN</b>		
Visual attractiveness of the website	78.3%	80.4%
Organization of the website	81.5%	72.9%
Links of the pages in the website are accurate and problem free	69.2%	72.9%
Content font theme and size in the website	80.3%	79.4%
<b>ACCESS</b>		
Access to bank's website	82.5%	78.5%
Access to desired service in the bank's website	73.6%	71.0%
Access to policy statements in the bank's website	64.0%	53.3%
Access to notices in the bank's website	62.6%	53.3%
<b>EASE OF USE</b>		
Availability of desired language for transacting bank's website	72.2%	66.4%
Ease in accessing the required information from bank's website	69.2%	64.5%
Ease in understanding the information available in the website	81.3%	80.4%
Ease to search for what is needed	69.7%	78.5%
Ease of navigation from one page to another page	70.2%	82.2%
Ease in completing the transaction in the website	74.9%	76.6%

Online banking service quality factors	Satisfaction	
	Male	Female
<b>INFORMATION QUALITY</b>		
Accuracy of product/service information	81.8%	83.2%
Accuracy of policy statements in the bank's website	66.5%	73.8%
Accuracy of account statements in the bank's website	73.4%	57.0%
Accuracy of email statements and notices about your online transactions	77.6%	76.6%
<b>PRIVACY &amp; SECURITY</b>		
Privacy of the customer personal/account information	80.0%	83.2%
Security for financial transactions	82.3%	75.7%
Security settings of the bank	81.0%	75.7%
<b>EMPATHY</b>		
Customer awareness programmes	55.4%	62.6%
Terms and conditions of online banking	67.2%	70.1%
Guidance demo on the web site	61.6%	59.8%
Compensation for inconvenience/problem	47.5%	46.7%
Courtesy of bank employee in handling complaints	54.4%	57.9%
Customer relationship management	69.2%	67.3%

It is noticed from Table 4 that under the factor reliability, males are more satisfied for proper functioning of the website, delivery of the service exactly as promised, and females are more satisfied for accuracy of transaction records, number of services offering in online banking. It is further observed that males and females are equally satisfied with regard to service delivery at the promised time. Under the factor responsiveness, male satisfaction is more for bank employee's willingness to help solve customer problems when contacted and female satisfaction is dominated for promptness in responding to enquiries, promptness in responding to service requests, promptness in responding to online/offline complaints, and effectiveness in solving customer problems arising in online. For the factor website design, majority of the male customers are satisfied for organization of the website, content font theme and size in the website and majority female customers are satisfied for visual attractiveness of the website, in addition to links of the pages in the website are accurate and problem free. With respect to the factor access, male satisfaction is dominating over female satisfaction for all the variables viz., access to bank's website, access to desired service in the bank's website, access to policy statements in the bank's website, and access to notices in the bank's website. Under the factor ease of use, males are more satisfied for availability of desired language for transacting bank's website, ease in accessing the required information from bank's website,

and ease in understanding the information available in the website; females are more satisfied for ease to search for what is needed, ease of navigation from one page to another page, and ease in completing the transaction in the website. In case of information quality, male satisfaction is more for accuracy of account statements in the bank's website, accuracy of email statements and notices about your online transactions but female satisfaction is more for accuracy of product/service information and accuracy of policy statements in the bank's website. Under the factor privacy and security, male satisfaction is dominating for security for financial transactions and security settings of the bank but female satisfaction is more for privacy of the customer personal/account information. With regard to the factor empathy, guidance demo on the website, compensation for inconvenience/problem, and customer relationship management have more male satisfaction; for customer awareness programmes, terms and conditions of online banking, courtesy of bank employee in handling complaints, female satisfaction is dominating over male satisfaction.

### Customer Satisfaction Based on Age

Customer satisfaction towards online banking service quality factors in terms of age of the customer is as follows:

**Table 5: Customer Satisfaction Based On Age**

<i>Online banking service quality factors</i>	<i>Satisfaction</i>			
	<i>18-29 years</i>	<i>30-39 years</i>	<i>40-49 years</i>	<i>50 years and above</i>
<b>RELIABILITY</b>				
Proper functioning of the website	84.4%	87.2%	73.9%	71.7%
Service delivery at the promised time	73.4%	86.5%	76.8%	82.6%
Delivery of the service exactly as promised	68.8%	72.2%	73.9%	71.7%
Accuracy of transaction records	87.0%	86.5%	82.4%	82.6%
Number of services offering in online banking	69.8%	83.5%	80.3%	73.9%
<b>RESPONSIVENESS</b>				
Promptness in responding to enquiries	45.3%	59.4%	78.9%	76.1%
Promptness in responding to service requests	50.0%	69.2%	78.9%	91.3%
Promptness in responding to online/offline complaints	36.5%	57.1%	72.6%	52.1%
Effectiveness in solving customer problems arising in online	51.6%	69.2%	78.2%	69.6%
Bank employee willingness to help in customer problems when contacted	54.2%	66.2%	76.8%	52.2%
<b>WEBSITE DESIGN</b>				
Visual attractiveness of the website	74.5%	82.0%	81.0%	80.4%
Organization of the website	75.5%	84.2%	81.0%	80.4%
Links of the pages in the website are accurate and problem free	69.3%	69.2%	71.8%	69.6%
Content font theme and size in the website	74.0%	87.2%	82.4%	78.3%
<b>ACCESS</b>				
Access to bank's website	87.0%	85.0%	73.9%	73.9%
Access to desired service in the bank's website	65.6%	78.9%	74.6%	82.6%
Access to policy statements in the bank's website	58.9%	55.6%	71.8%	60.9%
Access to notices in the bank's website	59.9%	54.1%	71.8%	47.8%
<b>EASE OF USE</b>				
Availability of desired language for transacting bank's website	71.9%	78.9%	64.8%	63.0%
Ease in accessing the required information from bank's website	61.5%	70.7%	74.6%	69.6%
Ease in understanding the information available in the website	83.3%	81.2%	77.5%	82.6%
Ease to search for what is needed	64.6%	69.2%	85.2%	65.2%
Ease of navigation from one page to another page	63.5%	77.4%	81.0%	71.7%
Ease in completing the transaction in the website	73.4%	78.9%	74.6%	73.9%
<b>INFORMATION QUALITY</b>				
Accuracy of product/service information	79.2%	88.0%	82.4%	76.1%
Accuracy of policy statements in the bank's website	64.6%	66.2%	69.7%	82.6%
Accuracy of account statements in the bank's website	71.9%	61.7%	71.1%	82.6%
Accuracy of email statements and notices about your online transactions	81.3%	76.7%	81.7%	52.2%
<b>PRIVACY &amp; SECURITY</b>				
Privacy of the customer personal/account information	78.1%	85.7%	81.7%	71.7%
Security for financial transactions	79.2%	85.0%	81.7%	73.9%
Security settings of the bank	81.8%	82.7%	78.9%	67.4%

Online banking service quality factors	Satisfaction			
	18-29 years	30-39 years	40-49 years	50 years and above
<b>EMPATHY</b>				
Customer awareness programmes	55.7%	45.9%	70.4%	52.2%
Terms and conditions of online banking	65.6%	71.4%	68.3%	65.2%
Guidance demo on the web site	54.7%	58.6%	69.7%	69.6%
Compensation for inconvenience/problem	43.2%	39.1%	62.0%	43.5%
Courtesy of bank employee in handling complaints	53.6%	44.4%	67.6%	56.5%
Customer relationship management	61.5%	66.2%	78.2%	78.3%

From Table 5, it is observed that under the factor reliability, majority customers in the age group 30-39 years are satisfied with proper functioning of the website, service delivery at the promised time, and number of services offering in online banking. Most of the customers in the age group 18-29 years are satisfied for accuracy of transaction records and majority in the age group 40-49 years are satisfied for delivery of the service exactly as promised. Under the factor responsiveness, more customers in the age group 40-49 years are satisfied with promptness in responding to enquiries, promptness in responding to online/offline complaints, effectiveness in solving customer problems arising in online, and bank employee's willingness to help in customer problems when contacted; majority customers in the age group 50 years and above are satisfied for promptness in responding to service requests. In case of the factor website design, most of the customers in the age group 30-39 years are satisfied with visual attractiveness of the website, organization of the website, content font theme, and size in the website; whereas, customers in the age group 40-49 years have dominated in satisfaction with respect to links of the pages in the website are accurate and problem free. With regard to the factor access, majority in the age group 18-29 years are satisfied for access to website and majority in the age group 50 years and above are satisfied for access to desired service in the bank's website. For access to policy statements in the bank's website and access to notices in the bank's website, customers in the age group 40-49 years are dominating in satisfaction over the other age groups. In the factor ease of use, most of the customers in the age group 30-39 years are satisfied for availability of desired language for transacting bank's website, ease in completing the transaction in the website and most of the customers in the age group 40-49 years satisfied for ease in accessing the required information from bank's website, ease to search for what is needed,

and ease of navigation from one page to another page. However, for ease in understanding the information available in the website, customers in the age groups 18-29 years & 50 years and above have equal and dominated satisfaction. Under the factor information quality for accuracy of product/service information, customers in the age group 30-39 years are more satisfied. For accuracy of policy statements in the bank's website and accuracy of account statements in the bank's website, customers in the age group 50 years and above are dominating the other age group customers. Customers in the age groups 18-29 & 40-49 years have equal and more satisfaction for accuracy of email statements and notices about your online transactions. With regard to the factor privacy and security, customer satisfaction is more in the age group 30-39 years for all the variables, i.e., for privacy of the customer personal/account information, security for financial transactions, security settings of the bank. For the factor empathy, majority of the customers in the age group 40-49 years are satisfied for customer awareness programmes, compensation for inconvenience/problem, and courtesy of bank employee in handling complaints. For terms and conditions of online banking, most of the customers in the age group 30-39 years are satisfied. Moreover, most of the customers in the age groups 40-49 years & 50 years and above are equally satisfied for guidance demo on the website and customer relationship management.

### Relationship Between Gender and Customer Satisfaction in Online Banking

Analysis for the relationship between the demographic factor gender and satisfaction of the customers towards online banking service quality factors and its significance is as follows:

**Table 6: Relationship Between Gender and Customer Satisfaction In Online Banking**

Online banking service quality factors	Chi-square ( $\chi^2$ ) value	df	Significance	% of significance	H <sub>1</sub>
Reliability	1.838	4	0.766	No sig	Rejected
Responsiveness	.512	4	0.972	No sig	Rejected
Website design	11.180	4	0.025	5%	Accepted
Access	14.175	4	0.003	1%	Accepted
Ease of use	4.970	4	0.174	No sig	Rejected
Information quality	24.494	4	0.000	1%	Accepted
Privacy and security	7.893	4	0.096	No sig	Rejected
Empathy	.595	4	0.964	No sig	Rejected

The first hypothesis of the study is to understand whether there exists significant relationship between gender and customer satisfaction with regard to online banking service quality factors. From Table 6, it is clear to accept the hypothesis for the factors website design (significant at 5%), access (significant at 1%), and information quality (significant at 1%) as these are significantly associated with the gender of the customers. However, the factors reliability, responsiveness, ease of use, privacy and security, and empathy are not showing significant

relationship with gender of the customers; hence, hypothesis for these factors is rejected.

### Relationship between age and Online Banking Service Quality Factors

Analysis for the relationship between the demographic factor age and satisfaction of the customers towards online banking service quality factors and its significance is as follows:

**Table 7: Relationship Between Age and Customer Satisfaction in Online Banking**

Online banking service quality factors	Chi-square ( $\chi^2$ ) value	Df	Significance	% of significance	H <sub>2</sub>
Reliability	31.478	12	0.002	1%	Accepted
Responsiveness	55.343	12	0.000	1%	Accepted
Website design	45.406	12	0.000	1%	Accepted
Access	8.033	12	0.531	No sig	Rejected
Ease of use	7.058	12	0.631	No sig	Rejected
Information quality	22.815	12	0.029	5%	Accepted
Privacy and security	27.066	12	0.008	1%	Accepted
Empathy	45.710	12	0.000	1%	Accepted

The second hypothesis of the study is to determine whether there exists significant relationship between age of the customer and customer satisfaction with regard to online banking service quality factors. From Table 7, it is observed that the factors reliability (significant at 1%), responsiveness (significant at 1%), website design (significant at 1%), information quality (significant at 5%), privacy and security (significant at 1%), and empathy (significant at 1%) have significant association with the age of the customers. Therefore, hypothesis for all the factors is accepted except for the factors of access and ease of use, as these are not showing significant relation with age of the customers.

### Discussion

It is observed from the data that most of the males and females are satisfied with online banking service quality factors. Results of the study show much variation in satisfaction on gender-lines with respect to some of the variables. It is worth to note that females are concerned with functioning of the bank's website, security for financial transactions and security settings of the bank and are facing difficulty in accessing policy statements and notices in the bank's website, availability of language for transacting bank's website as female satisfaction is

showing lesser when compared to their male counterparts. Further, males are not happy with promptness of the bank in responding to enquiries, complaints, and ease of search and navigation in the website. They are thinking that banks are not reliable with regard to accuracy of the transaction records and policy statements in the bank's website. They felt customer awareness programmes conducted by the banks are not satisfactory. In this regard, banks may make an effort to understand sensitivities of gender on the above factors and incorporate necessary changes to meet the gender specific needs of customers.

In the similar way though majority customers in all age groups are satisfied with the online banking service quality factors, customer satisfaction for some variables is reported below average (<50%). Majority customers in the age group 18-29 years are not happy with regard to promptness of the bank in responding to enquiries, service requests, and complaints. Most of the customers in the age group 50 years and above felt access to notices in the bank's website is somehow troublesome. Large proportion of customers in the age group 30-39 years opined that customer awareness programmes conducted by banks, courtesy of bank employee in handlings complaints, compensation for causing any inconvenience/problem, and solving customer problems are not up to their expectation level. In this situation, the banks should aim to solve the problems of the customers to their satisfaction level.

Creating feedback related interface is a useful method. Taking feedback from the customers especially from those who are under the less satisfied category and knowing the causes of dissatisfaction may be useful to meet the needs of the customers.

Contribution of the study on association between gender and customer satisfaction in online banking with respect to website design, access and information quality concurs with findings of Rashidi & Mansoori (2015). The findings as regard to reliability, responsiveness, access, privacy & security, and empathy show that gender has no impact. It is consistent with the findings of the Nimako, et al. (2013).

In the similar way, age of the customers is found to have significant influence on the factors reliability, responsiveness, website design, information quality, privacy & security, and empathy, which concurs with study of Akinci et al. (2004). The factors access and ease

of use were found not having any association with the age of the customer, which is consistent with the findings of the Nimako, et al. (2013).

As some online banking service quality factors studied in this research have association with gender and age of the customers, based on customer satisfaction the banker should not ignore the demographics of the customers while framing and adopting new policies and strategies. By concentrating on the factors that have significant relation with gender and age of the customers, banks can take better decisions in segmentation of market and targeting of customers.

## Conclusions

The objective of this study is to examine relationship between demographic characteristics age, gender, and satisfaction of the customers in online banking. It has been concluded that there exists significant relationship between age, gender, and satisfaction of the customers on some online banking service quality factors and no impact for the remaining. An understanding of this relationship helps the banks to put their efforts and resources in the most effective and efficient way to increase the customer base in the long run and encourage new customers to adopt online banking.

## References

- Al-Hawari, M., & Ward, A. (2006). The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. *Marketing Intelligence & Planning*, 24(2), 127-147.
- Al-Jamal, N., & Abu-Shanab, E. (2015). E-government adoption in Jordan: The influence of age. Paper presented at 7th International Conference on Information Technology, Amman, Jordan.
- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66.
- Akinci, S., Aksoy, S., & Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. *International Journal of Bank Marketing* 22(3), 212-232.

- Arunachalam, L., & Sivasubramanian, M. (2007). The future of internet banking in India. *Academic Open Internet Journal*, 20. Retrieved from www.acad-journal.com.
- Awamleh, R., & Fernandes, C. (2005). Internet banking: An empirical investigation into the extent of adoption by banks and the determinants of customer satisfaction in the United Arab Emirates. *Journal of Internet Banking and Commerce*, 10(1), 1-12.
- Chiu, C. M., Hsu, M. H., Sun, S. Y., Lin, T. C., & Sun, P. C. (2004). Usability, quality, value and e-learning continuance decisions. *Computers & Education*, 45(2005), 399-416.
- Christine, T. D. (1996). The adoption of Information technology in customer services. *European Journal of Marketing*, 30(6), 52-69.
- Coakes, S. J., Steed, L., & Price, J. (2008). *SPSS Version 15.0 for Windows: Analysis without Anguish*. John Wiley and Sons, Australia.
- Coolil, B., Timothy, L. K., Lerzan, A., & Micheal, H. (2007). A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effect of customer characteristics. *Journal of Marketing*, 71(1), 67-83.
- Guo, L., Xiao, J. J., & Tang, C. (2009). Understanding the psychological process underlying customer satisfaction and retention in a relational service. *Journal of Business Research*, 62, 1152-1159.
- Gupta, K. K., & Bansal, I. (2012). Development of an instrument to measure internet banking service Quality in India. *Journal of Arts, Science & Commerce*, 3(2/2), 11-25.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey, Pearson Educational International.
- Huang, E. (2005). The acceptance of women-centric web-sites. *The Journal of Computer Information Systems*, 45(4), 75.
- Jun, M., & Cai, S. (2001). The key determinants of internet banking service quality: A content analysis. *International Journal of Bank Marketing*, 19(7), 276-291.
- Khan, M. S., Mahapatra, S. S., & Sreekumar (2009). Service Quality evaluation in internet banking: An empirical study in India. *International Journal of Indian Culture and Business Management*, 2(1), 30-46.
- Kleijnen, M., Wetzels, M., & Ruyter, K. D. (2004). Consumer acceptance of wireless finance. *Journal of Financial Services Marketing*, 8(3), 206-217.
- Kotler, P., & Keller, K. (2006). *Marketing management* (12<sup>th</sup> ed.). Prentice-Hall.
- Kotelinkov, V. (2001). Customer Satisfaction: The prime concern of your business and the critical component of its profitability. Retrieved from [http://www.1000ventures.com/business\\_guide/crosscutting/customer\\_satisfaction.html](http://www.1000ventures.com/business_guide/crosscutting/customer_satisfaction.html).
- Krishnaswami, O. P., & Ranghanatham, M. (2005). *Methodology of Research in Social Sciences*, (2<sup>nd</sup> ed.). Hyderabad, Himalaya Publishing House.
- Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. *International Journal of Bank Marketing*, 23(5), 362-380.
- Mehta, P. (2015). Online banking services and customer satisfaction: A comparative study of public and private banks in Udaipur city. *International Journal of Research in Business Management*, 3(7), 1-6.
- Mittal, V., Wagner, A., & Kamakura, W. A. (2001). Satisfaction repurchase intent and repurchase behaviour: Investigating the moderating effect of customer characteristics. *Journal of Marketing Research*, 38(1), 131-142.
- Musiime, A., & Ramadhan, M. (2011). Internet banking, consumer adoption and customer satisfaction. *African Journal of Marketing Management*, 3(10), 261-269.
- Nimako, S. G., Gyamfi, N. K., & Wandaogou, A. M. M. (2013). Customer satisfaction with internet banking service quality in the Ghanaian banking industry. *International Journal of Scientific & Technology Research*, 2(7), 165-175.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-234.
- Pattanayak, D., & Maddulety, K. (2011). Effect of TQM on customer satisfaction in Indian banking industry: A literature review. *European Journal of Business and Management*, 3(2), 1-12.

- Pikkarainen, T., Pikkarainen, K., Karjaluotto, H., & Pahnala, S (2004). Consumer acceptance of online banking: An extension of the technology acceptance model. *Internet Research*, 14(3), 224-235.
- Rainie, H., & Packel, D. (2001). *More online, doing more: 16 million newcomers gain Internet access in the last half of 2000 as women, minorities, and families with modest incomes continue to surge online*. Pew Internet & American Life Project.
- Rajasekhar. M., Anit, C., & Madhavi, N. (2015, March 23-24). *Impact of Service Quality of SBI's Internet Banking on its Customers in Rural India*. Paper presented at 3rd International Conference on Advances in Engineering Sciences & Applied Mathematics, London (UK).
- Rashidi, E., & Mansoori, M. (2015). Discussing the effects of Internet banking on customer satisfaction. *Indian Journal of Fundamental and Applied Life Sciences*, 5(S2), 182-187.
- Raza, S. S. (2011). Impact of user IT and Internet and Internet skills on online banking, Input to innovative banking strategies. *International Journal of Social Sciences and Humanity Studies*, 3(1), 477-486.
- Shaffer, R. (2008). Customer Satisfaction Benefits. Retrieved from <http://www.surevista.com/benefits-customer-satisfaction.html>
- Sharma, H. (2011). Bankers' perspectives on E-banking. *NJRIM*, 1(1), 71-85.
- Spacey, R., Goulding, A., & Murray, I. (2004). The power of influence: What affects public library staff's attitudes to the Internet? *Library Management*, 25(6/7), 270-276.
- Tater, B., Tanwar, M., & Murari, K. (2011). Customer adoption of banking technology in private Banks of India. *International Journal of Banking and Finance*, 8(3), 73-88.
- Tong, C., Wong, S. K. S., & Lui, K. P. H. (2012). The influence of service personalization, customer satisfaction and switching costs on e-loyalty. *International Journal of Economics and Finance*, 4(3), 105-114.
- Wang, Y. S., Wang, Y. M., Lin, H. H., & Tang, T. I. (2003). Determinants of user acceptance of Internet banking: An empirical study. *International Journal of Service Industry Management*, 14(5), 501-519.
- Zhou, L., Dai, L., & Zhang, D (2007). Online shopping acceptance model: A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8(1), 41-62.