

---

## DETERMINING ASSOCIATION BETWEEN AGE, OCCUPATION AND USAGE OF ONLINE BANKING SERVICES AMONG CUSTOMERS

**Hiteksha Joshi Upadhyay**

Assistant professor at NRIBM, GLS University, Ahmedabad  
hitekshajoshi@gmail.com; hiteksha.joshi@glsuniversity.ac.in

**Payal Rajani & Saloni Surani**

PGDM, NRIBM, GLS University, Ahmedabad

---

DOI# 10.23862/kiit-parikalpana/2017/v13/i2/164519

---

### ABSTRACT

*Banking is a customer oriented service industry, therefore the customer is the focus and customer services is the differentiating factors. Customer in India and specifically in urban area, no longer want to wait in long queues and spend hours in banking transection. So this paper shows awareness and perception of customers regarding SSBT (Self Service Banking Technology). To conduct this descriptive research, response of 300 respondents is take through questionnaire from Ahmedabad city. Analysis of respondent's response done through SPSS software and chi square test is used to determine association.*

**Key words:** Indian Banking Industry, SSBT, Satisfaction, technology

### Introduction

Tremendous Progress in the field of information technology has reduced the world to a global village and it has caused unprecedented changes in the banking world. The Banking industry like many other financial services industries facing a rapid changing market, new technologies, Competition, uncertainties, more demanding customers and changing climate has presented noticeable set of challenges. Bank have started recognizing that business depends on client services and contentment of customers and this is

compelling them to improve customer service and build up relationship with customer.

### Literature review

Internet and Mobile Association of India, (2006) Noted banking transactions are performed majorly through ATMs i.e. 53% and only 23% of the online users do their banking transactions through Internet Banking. It was also found that people prefer face to face meet with the bank employees and get their transactions processed instead of online banking because of reasons like lack of knowledge,

security issues and less user friendly channels.

Gerrard, Cunningham, and Devlin, (2006) Studied the goal of marketing campaigns is to attract more males as well as more internet users who have used internet services before, educated public, and high income groups. There are reasons why people do not using online services like firstly that it is risky and secondly, they feel these services are not needed. The other drawbacks of not using Online service is unreachability, lack of understanding, pricing, lack of IT knowledge.

Sohail & Shanmugharn, (2003) Identified the factors that affected the use of Internet banking some of them are awareness, convenience, trust on the bank, accessible, adopting new changes, etc. more adoption to internet banking have been witnessed in Malaysia and there are lots of chances of increase in usage of online services.

Bradley & Stewart, (2002) As per the research conducted by Bradley and Stewart, it shows that the major issue hindering in retail banking is Internet Banking. Internet Banking is not a standalone strategy i.e. clicks only rather it is a multi-channel strategy i.e. bricks & clicks. With the help of more accessibility of internet banking, banks can achieve competitive advantage through their services.

Bandyopadhyay, (2004) Concluded it is seen that in the past three years credit card industry is been growing at 3.1% compounded annually. In India 0.6% of

the consumption expenditure is through credit cards. The countries in USA and Asia Pacific region shows higher usage of credit card usage.

Eriksson & Nilsson, (2007) Proved that every coin has two sides, similarly, internet banking also have its pros and cons. On one side internet banking is a multi-channel context which is useful to the users and on the other side users are not satisfied with the service providers and the distribution channels. Nevertheless, buyers are satisfied with face to face meets which cannot be fulfilled through internet banking. One can be satisfied with internet banking but it does not guarantee that the user will be loyal to this service.

Jazeela, (2005) Conducted on perceptions of banking products and services by Jazeela, in urban areas of Kerela shows that due to rigid systems of book keeping, accounting and legal bank customers are dissatisfied. Moving to or adopting any new technology by Indian banks is very slow. Banks are adopting electronic innovation but are not fully adopted. Due to lack of availability of fund, there are problems in automation of banking functions.

Akinci, Aksoy, & Atilgan, (2004) Conducted a study that revealed the differences between attitudes and demographic profiles of users as well as non-users. The users of internet banking were more techno savvy, convenient & middle aged. While the people who don't use internet banking are dragged towards

traditional banking structure, less adaptability to changes, lack of confidence in internet banking. The preferences of consumers play an important role in banking channels.

Lee & Schumann, (2005) stated there are lots of difference between online users and non-users in terms of attitudes, beliefs, convenience, risk taking ability, etc. the people who wanted quick & better services always preferred online services whereas, non-users receive lower services at better rates.

Goldfinger, (2001) Discussed the major issue that came across was the safety and security of banks as well as consumers. The consumers hesitated to use online services as they felt it is less secured and their personal data can be misused. On the other side the banks had unauthorized access in their systems and also cost of adopting new security tools was high. To minimize the flaw in the banking systems, they are updating their security techniques like smart card, digital signatures, biometrics, etc.

Kimball & Gregor, (1995) Identified that branch banking are useful in retaining existing customers as well as attracting new customers for the banks. ATM is the first alternative channel which is a part of self-service banking channel. It is convenient to customers 24/7. The other channel used by customers is telephone banking in which the customers were able to connect

to an automated channel of their bank by giving a phone call.

Eriksson & Nilsson, (2007) Explored banks started offering various other banking channels because of development of technology and as a result of this the self service banking technology has replaced the face to face interaction between both, i.e; banks and the customers.

Zeithaml & Gilly, (1987) Observed that the adoption of self service banking technology depends on various factors like age, gender, marital status. This study has linked age and adoption of self service banking technology from which it is found that the adoption of self service banking technology is more among youngsters.

Thornton & White, (2001) they made comparison between seven different channels namely ATM, EFT, Cheque, Human Teller, Credit Card, Telephone and Internet from which it was found that convenience, knowledge, service, internet are the factors on which the usage of distribution channel depends on. The usage of ATM, EFT and telephone was increased due to increase in understanding, alertness and availability of internet.

Daniel, (1999) Founded that “ease of use” is the most important factor for customers in order to accept electronic banking. She also found out the reasons for low acceptance of electronic banking which were risk involved in electronic banking,

security and internet availability. So according to her the customers will not adopt electronic banking until and unless it is safe and secure.

Lee & Lee, (2000) Reveled that very less people have adopted the technology for direct bill payments. Due to increase in education and income, customers have started adopting new technologies. In the research conducted before, customers response was positive as they find it easy and useful.

Polatoglu & Ekin, (2001) Conducted research and identified the factors to determine the satisfaction level of customers in which it was seen that the cost saving factor is the reason behind satisfaction of customers. It is easy for the customers to use self-service banking technology due to higher knowledge and skills. Even the availibility of resources was also a factor on which the adoption of these services is dependent.

Leblanc, (1990) Analyzed the perceptions of users and non-users towards ATM's. In this study, author identified various factors that attracted ATM users such as 24/7 availability, prompt, easy to use and less cost. Customers find ATM service complex, difficult to understand, less secure and risky so they avoid using it.

### **Research Methodology**

#### **Objective**

To Study the usage pattern of technology-enabled banking self-services and relation between Gender and Usage of Online

Services such as ATMs, internet banking, Tele-banking and mobile banking by bank customers.

#### **Scope of the study**

This study aims to determine the consumer satisfaction and commitment through Self-service banking technology. Focus is placed on the bank service fields which includes services provided by bank like ATM, online banking, mobile banking etc. and the usage pattern of these services.

**Research Type:** Descriptive

**Sample Size:** 300

**Sampling Method:** Convenience Sampling adopted.

**Research Instrument:** Questionnaire

#### **Data analysis and Interpretation**

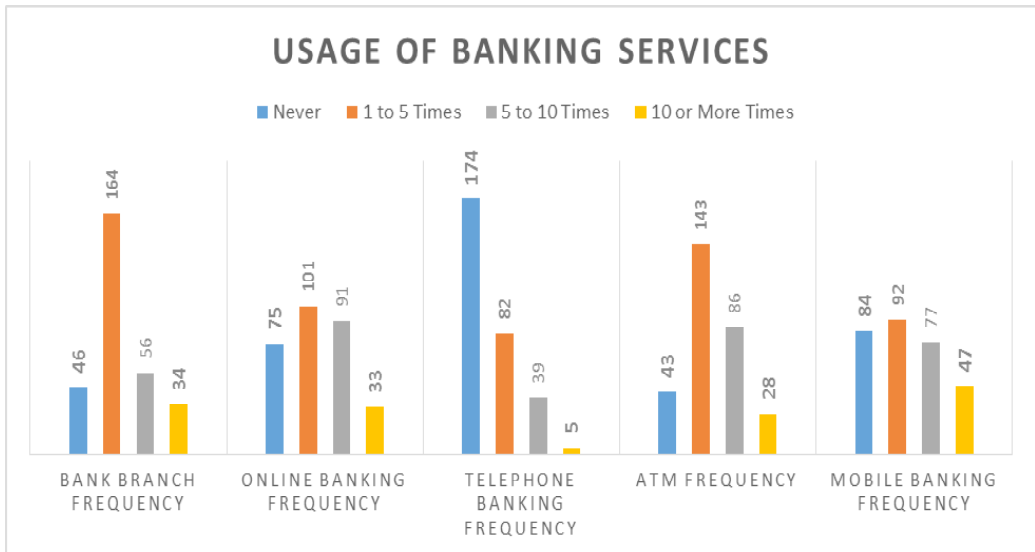
Data is collected through questionnaire filled by 300 respondents and detailed classification of the respondents in terms of services usages is as follows:

Mode of banking services used be respondents:

- 28% of the respondents used Bank Branch service.
- 22% of the respondents used Online Banking services.
- 3% of the respondents used Telephone Banking service.
- 30% of the respondents used ATM service.
- 17% of the respondents used Mobile Banking service.

**Table:1 Usage of Banking Services**

Usage of Banking Services	Bank Branch Frequency	Online Banking Frequency	Telephone Banking Frequency	ATM Frequency	Mobile Banking Frequency
Never	46	75	174	43	84
1 to 5 Times	164	101	82	143	92
5 to 10 Times	56	91	39	86	77
10 or More Times	34	33	5	28	47
Total	300	300	300	300	300



From the data collected and presented in table:1 it is observed that:

74% of the respondents use online services and only 26% of the respondents do not use online services. Telephone banking is hardly used by customers. Most preferred banking service among customers is mobile banking and frequency of mobile banking is highest in a month in comparison of all other banking

services. We can also conclude that ATM services is also behind mobile banking which shows mobile banking is highly convenience and user friendly.

**Hypothesis**

Ho: There is no significant relation between Gender and Usage of Online Services.

H1: There is no significant relation between Gender and Usage of Online Services.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.308 <sup>a</sup>	3	.063
Likelihood Ratio	7.321	3	.062
Linear-by-Linear Association	3.458	1	.063
N of Valid Cases	300		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.74.			

**INTERPRETATION:**

As the Pearson Chi-Square value is 0.063 which is more than the significance value 0.05. So, we accept the Null Hypothesis and reject the Alternate Hypothesis. So, we can conclude that there is no relation

between Gender and Usage of Online Services.

**Ho:** There is no significant relation between Occupation and Usage of Online Services.

**H1:** There is significant relation between Occupation and Usage of Online Services.

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.877 <sup>a</sup>	12	.006
Likelihood Ratio	26.405	12	.009
Linear-by-Linear Association	.036	1	.850
N of Valid Cases	298		
a. 2 cells (10.0%) have expected count less than 5. The minimum expected count is 2.88.			

**Annexure****Table:1 Type of Bank**

Types of Bank	Frequency	Percent
Public Bank	177	59
Private Bank	159	53
Cooperative Bank	67	22.3
Foreign Bank	34	11.3

**Table:2 User’s Frequency of Type of Account**

Type of Account	Frequency	Percent
Savings Account	272	90.7
Current Account	90	30
Salary Account	59	19.7
Loan Account	37	12.3

**Table :3 Bank Branch**

	Bank Branch Frequency	Percent	Valid Percent	Cumulative Percent
Never	46	15.3	15.3	15.3
1 to 5 Times	164	54.7	54.7	70
5 to 10 Times	56	18.7	18.7	88.7
10 or More Times	34	11.3	11.3	100
Total	300	100	100	

**Table: 4 Online Banking**

Online Banking	Online Banking Frequency	Percent	Valid Percent	Cumulative Percent
Never	75	25	25	25
1 to 5 Times	101	33.7	33.7	58.7
5 to 10 Times	91	30.3	30.3	89
10 Times or More	33	11	11	100
Total	300	100	100	

**Table : 5 Telephone Banking**

Telephone Banking	Telephone Banking Frequency	Percent	Valid Percent	Cumulative Percent
Never	174	58	58	58
1 to 5 Times	82	27.3	27.3	85.3
5 to 10 Times	39	13	13	98.3
10 Times or More	5	1.7	1.7	100
Total	300	100	100	

ATM	ATM Frequency	Percent	Valid Percent	Cumulative Percent
Never	43	14.3	14.3	14.3
1 to 5 Times	143	47.7	47.7	62
5 to 10 Times	86	28.7	28.7	90.7
10 Times or More	28	9.3	9.3	100
Total	300	100	100	

Mobile Banking	Mobile Banking Frequency	Percent	Valid Percent	Cumulative Percent
Never	84	28	28	28
1 to 5 Times	92	30.7	30.7	58.7
5 to 10 Times	77	25.7	25.7	84.3
10 Times or More	47	15.7	15.7	100
Total	300	100	100	

### **INTERPRETATION:**

As the Pearson Chi-Square value is 0.006 which is less than the significance value 0.05. So, we accept the Alternate Hypothesis and reject the Null Hypothesis. So, we can say that there is relation between time duration of Occupation and Usage of Online Services.

### **Conclusion**

Demonetization is a major factor because of which the usage of online banking services like ATM's, Online Banking, Mobile Banking, Tele-Banking is growing rapidly. Branch banking is progressively being replaced by Self - Service Banking Technology. The Self - Service Banking

Technology services are provided by banks with the help of automated channels like ATM, internet banking, mobile banking and tele banking. The acceptance of automated banking among people is growing day by day. The consumers are preferring to do more of their day-to-day banking activities using ATMs, online banking, or mobile banking without the aid of branch personnel. Consumers want to be able to do more banking themselves at their own convenience.

From our study we want to conclude that gender and online banking services aren't associated in any way. Whereas occupation and usage of banking services



has association. Timing of occupation leads the costumers to use online banking services.

## References

Akinci, S., Aksoy, S., & Atilgan, E. (2004). "Adoption of Internet banking among sophisticated consumer segments in an advanced developing country. *The International Journal of Bank Marketing*, Vol. 22, No. 3, pp. 212-232: .

Bandyopadhyay, T. (2004). Credit Card Industry . *Indian Journal of Marketing*, June, pp.25-29:.

Bradley, L., & Stewart, K. (2002). "A Delphi study of the drivers and inhibitors of internet banking". *International Journal of Bank Marketing*, Vol. 20, No. 6, pp. 250-260.

Daniel, E. (1999). Provision of Electronic Banking in the UK and the Republic of Ireland. *International Journal of Bank Marketing*, Vol. 17, No.2, pp.72-82: .

Eriksson, K., & Nilsson, D. (2007). "Determinants of the continued use of self-service technology: The case of Internet banking". *Technovation*, Vol. 27, pp. 159-167: .

Eriksson, K., & Nilsson, D. (2007). Determinants of the continued use of selfservice technology: The case of Internet banking. *Technovation*, Vol. 27, pp. 159-167:.

Gerrard, P., Cunningham, J. B., , & and Devlin, J. F. (2006). "Why consumers are

not using Internet banking: A qualitative study". *Journal of Services Marketing*,, Vol.20, No.3,pp. 160-168:.

Goldfinger, C. (. (2001, MAY 10). *www.fininter.net*. Retrieved from Internet banking issues: [www.fininter.net/retailbanking/internet/I~sues/paper/draft.htm](http://www.fininter.net/retailbanking/internet/I~sues/paper/draft.htm):

(2006). *Internet and Mobile Association of India* . IAMAI Report.

Jazeela, M. (2005). *Customer perceptions of banking products and services in Kerala with reference to spec\$ customer segments in the urban area*,. Kerela: Department of Applied Economics; PhD thesis, , CUSAT:.

Kimball, R., & Gregor, W. (1995). How distribution is transforming retail banking: changes leading banks are making. *Journal of Retail Banking Services*, Vol. 17, No. 3, pp. 1-9: .

Leblanc, G. (1990). Customer motivation: use and non-use of automated banking. *International Journal of Bank Marketing*, Vol. 8, No. 4, pp. 36-40: .

Lee, E. J., & Schumann, D. (2005). "Segmenting the non-adopter category in the diffusion of internet banking". *International Journal of Bank Marketing*, Vol. 23, No. 5, pp. 414-437:

Lee, E., & Lee, J. (2000). Haven't adopted electronic financial services yet? The acceptance and diffusion of electronic banking technologies. *Financial Counseling and Planning*, , Vol. 11, No. 1, pp. 49-60: .

Polatoglu, V., & 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:.

Sohail, M., & Shanmugharn. (2003). "E-banking and customer preferences in Malaysia: an empirical investigation". *Information Sciences*, Vol. 150, pp. 207-217:.

Thornton, J., & White, L. (2001). Customer orientations and usage of financial distribution channels. *The Journal of Service Marketing*, Vol. 15, No. 3, pp. 168-185: .

Zeithaml, V., & Gilly, M. (1987). Characteristics affecting the acceptance of retailing technologies: a comparison of elderly and non-elderly consumers. *Journal of Retailing*, Vol. 63, No. 1, pp. 49-68: .

