

A Study on Customer Awareness and Factors Influencing the Overall Satisfaction Towards E-Banking Services with special reference to Virudhunagar District, Tamil Nadu, India

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Abstract--*The banking system is back bone of nation and growth of economy. The banking sector in India has the enormous growth due to technological growth and the concept of digital India. The growth of technology switch customer from traditional banking system into E-banking system. The E-banking services gave the lot of changes and innovation in the banking industry. The new system or scheme always faces the problem in the market. The main problem is whether the customer aware about the E-banking services, concept cash less economy and digital India concept. So the present study is to understand the customer awareness and factors influencing the overall satisfaction towards of E-banking services with special reference to the Virudhunagar district, Tamil Nadu, India. The research is accomplished from the 225 sample through structure questionnaire. The standard statistical tool like Descriptive statistics, Chi-Square test, ANOVA, correlation and factor analysis have been used to extract the result. The study revealed that the female, illiterate people need more awareness towards E-banking facilities. The factors like technical, Accessibility of banking, behavior of Customer and motivational factor influence the E-banking Services.*

Key words--*E-banking, Customer awareness, Customer Satisfaction, Facilities, Technology.*

I. INTRODUCTION

The Banking system is one of the crucial sectors of growth of every economy. In the percent scenario India is the fastest growing economy in the world. The Indian Banking Sector consists of public banks, Private Banks, Foreign Banks, Regional Rural Bank and Cooperative Banks. The above banking sectors were monitored and regulated by Reserve Bank of India. The innovative technology and growth of digital era influences the banking models and their functions. The lot of changes introduced in the banking system like transaction, payment and time saving factor. Government of India continually encourages the digital India concept. Government of India provides the 2% discount in the GST on business-to-Consumer while making the digital transaction. The new portal has been launched “Udyami Mitra” for the magnification of MSME enterprises in the nation through Small Industries Development Bank of India (SIDBI).

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In the past decade the growth of banking sector was very high because of technological growth and expectation of customer. Now days the all the banking sector mainly concentrates the customer retention rather than the new customer. Today the traditional way banking operation has been changed in to modern trends or Digital system. The customer expectation towards the banking operation is continually increased because of their life style and their work stress. Due to technological growth and demand the banking industries move towards digitization. In order to retain the customer and create a competitive advantage in the market the banking sector develops their facilities, services, key operations in the system and ease way of performing everything.

The technological growth and digitization will influence the banking system. In order to survive the world class competition the banks are transforming their structure form bricks into clicks (Chau, P & Lai, V, 2003). This will lead the E-Banking Concept. The E-Banking is nothing but provide the enhanced customer services at any point of time by easiest method. Due to the smart phone and internet the banking services are made user friendly. The transformation of E-banking has been favorable for banks as well as end user. This will lead the cashless economy.

The motivation behind this article is to scrutinize the factors the influence E-banking services and explore the Consumer awareness towards E-banking services.

II. THEORETICAL BACKGROUND

2.1 History of Banking in India

The banking Companies act 1949 defines the term banking, Banking is lending, investment of deposit of customer money and repayable on the request of customer through Demand Draft, Order and other form of negotiable instruments. It protects the customer money and provides the loan to the customer. In India the banking system was developed during the British period. In India, Bank of Bengal (Established in the year 1809), Bank of Bombay (Established in the year 1840), and Bank of Madras (Established in the year 1843) was established by British East India Company. The above three banks were merged and renamed as Imperial Bank and finally State Bank of India taken over in 1955. In the year 1935 Reserve Bank of India was established and Nationalized in the year of 1949. The RBI was created for regulate, Control and Monitor the Banks in India. The Banking sector of India as follows,

The history of Indian Banking System categorized in to four major phases. They are,

1. Early Phase-1786 to 1935
2. Pre-Nationalization Phase-1935 to 1969
3. Post-Nationalization Phase-1969 to 1990
4. Modern Phase-From 1990 to Present

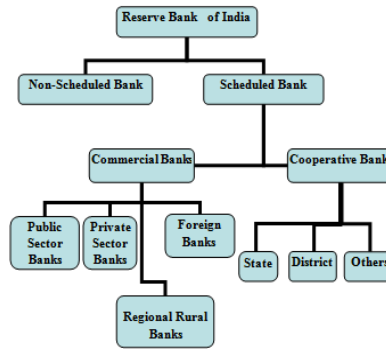


Fig:1

2.2 Functions of Banks

The banking sector mainly provides the liquidity for the economic growth of nation. It will act as a backbone of entire financial system. The functions of banks are categorized into two major forms. One is Primary and another one is Secondary functions. The primary functions are accepting Deposits and providing advances. The deposits are in the form of Saving, Current, fixed and recurring. The advances are in the form of loan, Over Draft, Cash credit, and discounting of bills.

Similarly the secondary functions are Agency and utility functions. Here the agency functions are in the form of Transfer of funds, Periodic Payments, Collection of Cheques and other portfolio management. The utility functions are nothing but Locker, underwriting, Drafts and others.

2.3 Recent Development in Banking Sector

The evolution of Digital India significantly develops the business in all sectors. Government of India took the lot of initiatives for technological growth and Digital India concept. The customer services enhanced through the internet and technology (Prakash, Amit 2017). The population of India was 130 Crore and 44.6 Crore People were using Smart phone as of 31-december-2018(Ravi Shankar Prasad, 2019). The 35 % of total population of the world were using internet (56 Crore people).

The banking sectors are the essential body of growth of economy in the world. The era of “Digital India” creates the massive changes in all sectors in India. These changes can be endorsed to different elements like policies, customer expectation etc. The development of information technology and innovative practices has provided the radical changes in growth and advancement in banking sector services. The collaboration of innovative techniques and banking sector will enhance the traditional way of doing services like cash transaction, security and time management. The Banking Industry continuously growing in the past couple of decades (Luxmy Vivekanandan, & Sanath Jayasena, 2012). The Mobile and Internet banking provides the lot of services to the business operators and customer (Ashok Bahadur Singh, 2012). Nowadays internet will change the business process and enhance the business in the global level in all kind of industry specifically rapid changes in banking services (Mavri, M & Ioannou, G, 2006). The growth of technology enhance and fulfill the customer expectation and their request like

easy access of account, Transfer or any payment, checking or maintaining the balance in the workplace or home itself (Aladwani, A, 2001)(Daniel, E,1999) (Prompattanapakdee, S, 2009)

The growth of internet and smart phone are the major contributors of “Digital India” concept. These developments create the cashless transaction in India very faster. The recent trends in banking sectors are,

1. Digitization
2. Mobile Banking
3. Unified payment Interface (UPI)
4. Biometrics
5. Cloud Banking
6. Wearables
7. Digital-Only Banks
8. Growth of Fintech Companies
9. Artificial Intelligence Robot
10. Block Chain

2.4 E-Banking

The growth of internet and telecommunication network enhances the banking services. After the drastic development in the Information technology and telecommunication the end users services are simplified. The Electronic Banking is also called as E-Banking or Internet Banking or Online Banking. The Customer can transfer and access their account at anytime and anywhere in the world without interference of bank, Time, original authentication (Thulani, D et al, 2009). In the recent decades internet become a most powerful tool for all the business operation (American Banker, 2000). The devolvement in the communication field enhances the every customer to access their accounts and make their transaction simple manner (Prakash and Malik, 2008). The E-banking services reduce the customer work and easily manage their request in the bank (Nitsure, R. R., 2003). The development of E-Banking services reduces the physical approach of bank (Liu, 2008). The E-banking services rapidly growing due to customer satisfaction and Customer retention (Bauer et al, 2005) (Mols etal ,1999)

2.4.1. Features of E-Banking

The rapid development of new invention in the information technology and communication field E-banking services is made as 24/7 availability. The technological development and innovation provides the enormous features and function in the E-Banking system. The major features of E-Banking systems are,

1. Account Details and Verification of Balance
2. 24/7 Services
3. Transaction History
4. Fund Transfer (Same Bank, NEFT, RTGS, IMPS)
5. Add or Remove Payee
6. Bulk Remittance

7. Checking the full transaction history for the required period of time
8. Online payments
9. Mobile Banking
10. Utility payments
11. SMS alerts
12. Transaction Limit
13. Secured Transaction (Example One Time Password(OTP))
14. Customized Login
15. Loan /Deposit/Pension View
16. Tax Payments
17. Cheque inquiry and Cheque Book Request
18. Request Services (Like Locker facility , Mutual Fund, Demat Account, Attested Bank Statement Etc)
19. Customize Profile (Like change of Password, PIN, Transaction Limit, Activate and deactivate the Account, Register for Mobile banking Etc)
20. Security Restriction

The above features are common for all the banking system. In order to retain and satisfy the customer the bankers provide or simplify the function much easier. The growth and developments of E-Banking services facilitates the cashless economy in India. The cashless economy has lot of advantages like reduction in the crime, Time saving, Convenience, reduction of currency production cost etc.

2.5 Customer Awareness

The customer awareness is an important tool for making the business success. It's nothing but knowing the complete information about the products and services before they access. The customer has a freedom choose the best thing for them at Right time, Right place and Right quality. The business environment and economy of the nation rapidly changed due to the innovation and new invention in the technology (Qureshi, T etal, 2008). Understanding of Customer expectation is the prime objective for every business industry. The new innovation in the technology will increase the consumer expectation and perception (Zanoon et al, 2013). The awareness and knowledge of consumer are the imperative factor for every new innovation and services for the business industry. (Polatoglu and Ekin , 2001).

The approach of E-banking depends upon the skill level of customer in the computer and technology. The skill level will influence the usage of E-Banking system like protection of their personal account, security and privacy (Laforet, S & Li, X, 2005). Those who are interested in the usage of new technology and adoption of technology always prefer the E-Banking services (Benamati & Serva, 2007). Earlier days the success rate of every banking system is services and schemes provided to the customer. But nowadays the bankers face the lot challenges in the market. The awareness of products and services is very crucial part rather than the schemes and services. The major challenges of E-Banking system are awareness and Skill level in the computer and technology. This article explores the customer awareness towards E-Banking Services.

III. REVIEW OF LITERATURE

The banking structure is rapidly changed in the last decade with impact of internet and technology (Kevin B, 2001). The latest feature of banking is E-banking and Mobile Banking which has provided lot of facility to the customer (Divya Singhal and V. Padhmanabhan, 2008). The growth of internet changes the banking structure and improves the services (Chauhan.V and Vipin Choudhary.V, 2015). The internet will reduce the paper work, operation cost of the bank and customer physical access time (Liu, 2008).

The interest level of consumer only influences the E-Banking rather than the skill level (Brown et al 2003). The ATM. Mobile banking and E-banking are same preference for customer when they use each other (Calisir, Gumussoy, 2008). Nowadays the customer use various mode of channel for their payment process. (Hyytinen & Takalo ,2009).

Bankers must provide or conduct the awareness program for promotes their new innovation in the banking services which will motivate the customer to use those services easily (Muthaiyah et al, 2011). The factor influences the customer in the E-Banking system are security in services, user friendly, Privacy, Protection, facility of bankers (Teoh etal 2013).

The knowledge of consumer has the imperative factor in the E-Banking Services. The Quality, usability, user friendly, value, performance, reputation, serviceability are the important factors for the any new innovation (Wilson and Sasse 2004). The awareness of the product and services in the market Highly affect the purchase decision of consumer. The banker always promote their product by creating and conducting awareness program for retain the customer (Colgate et al, 2003)

The consumers always think security provision in the E-Banking system (Rayport and Jaworski 2004). The Security and privacy is the indispensable factor in the E-Banking System. Nowadays the lots of security measure has been taken in the banking services like OTP to mobile phone, SMS alert, E-signature for secure the end user form the hackers and fraudulent activities(Lian & Lin, 2008).

The customer perception towards the E-Banking services are the important for the growth of E-Banking System (Zeithaml and, Bitner, 2003). The perceived risk and tolerance influence the customer purchase and usage of new technology decision. (Chan, et al, 2004). The behavioral intention of customer expressed in terms interest and familiarity in the new technology (Gardner et al, 2004). The usage of new technology and skill level in the new technology has decided the consumer attitude (Hernandez and Mazzon, 2007). The trust is most important factor when new technology in the field of E-banking (Wierzbicki, 2008). The developments in the information technology and communication field are depending the user perceived risk and trust (Baraghani Sara Naimi, 2007).

The new launch and invention in the field of information technology and telecommunication have enormous changes in the industry specifically banking industry. The customer and bankers identifies the new mode of access for their demands (Krishna Reddy, 2015).

3.1 Research Gap

The banking industry in India provides the various facilities to the customer after the digital India concept. In order to create a cashless economy the banking systems are continually doing their investigation in various aspects. Due to the development of technology the services and facilities are increased in the banking system. But the banker faces lot of difficulties to reach the customer or customer not accessing their facilities. The consumers not have the much awareness about the facilities and services provided by the bankers. In order to survive the competitive world the bankers continually motivate and create the awareness about their services. The objective of the present study is to analyze the customer awareness and factors influencing the overall satisfaction towards the E-Banking services in Virudhunagar district.

3.2 Objective of the Study

This study explores the customer awareness and factors influencing the overall satisfaction towards the E-Banking services in Virudhunagar district, Tamil Nadu, India. The objective of the study analyzed from the following results,

1. To understand the demographic profile of the respondents.
2. To identify the level of customer awareness towards E-banking.
3. To analyze the overall satisfaction of E-banking Services.
4. To portrait the issues of customer in the E-banking Services.

IV. RESEARCH METHODOLOGY

The research design is framed to analyze the research problem of the study. The descriptive research designs were used to explore the research problem. Here the primary data and secondary data have been used for the analysis. The primary data is collected from the respondent by means of structured questionnaire. The convenient sampling has been used for the select the 225 sample from the population. The collected data were analyzed using various statistical tools.

V. DATA ANALYSIS AND INTERPRETATION

5.1 Analysis of Demographic profile

The data were analyzed and interpreted with the help of statistical tools. Here, first the demographic profile can be analyzed as follows.

Table 1: Demographic Profile of Respondent

| Demographic Profile Respondent | | Frequency | Percent | Cumulative Percent |
|-----------------------------------|----------------------------------|------------------|---------|--------------------|
| Gender | Male | 131 | 58.20% | 58.2 |
| | Female | 94 | 41.80% | 100.0 |
| | Total | 225 | 100 | |
| Age Group | Below 20 years | 23 | 10.20% | 10.20% |
| | 20-30years | 87 | 38.70% | 48.90% |
| | 30-40years | 57 | 25.30% | 74.20% |
| | 40- 50 years | 35 | 15.60% | 89.80% |
| | Above 50 years | 23 | 10.20% | 100.00% |
| | Total | 225 | 100 | |
| Occupation of the Customer | Business | 59 | 26.20% | 26.20% |
| | Government employed | 48 | 21.31% | 47.51% |
| | Retired | 15 | 6.70% | 54.21% |
| | Private sector | 88 | 39.10% | 93.31% |
| | Others | 15 | 6.70% | 100.01% |
| | Total | 225 | 100 | |
| | Educational Qualification | Higher secondary | 41 | 18.20% |
| Graduate | | 133 | 59.10% | 77.30% |
| Post graduate | | 51 | 22.70% | 100.00% |
| Total | | 225 | 100 | |
| Income Level | Below Rs 25,000 | 95 | 42.20% | 42.22% |
| | Rs25,000 to 50,000 | 73 | 32.40% | 74.66% |

| | | | | |
|--|---------------------|-----|--------|---------|
| | Rs50,00 to 1,00,000 | 34 | 15.10% | 89.77% |
| | Above Rs 1,00,00 | 23 | 10.20% | 100.00% |
| | Total | 225 | 100 | |

The Table No.1 shows the overall respondent of the analysis in the form of Gender, Age group, Occupation details, Income level and Educational Qualification. In gender 58.2% are male; highest respondents in the age group belongs to re 20-30 years (54.7%); in occupation the business and private respondents are 48.9 & and 29.8 respectively, the graduate are the highest respondents (59.1%) in the educational qualification and finally the income level of respondents belongs to 25000 to 50000.

5.2 General Awareness Demographic profile respondents in the E-Banking Services

The general awareness about the E-Banking services is analyzed from the respondents.

Table 2: General Awareness of respondents in the E-Banking Services

| Demographic Profile Respondent | | Total Respondent | Do you have the awareness about E-Banking Services? | | | |
|--------------------------------|---------------------|------------------|---|-------|-----------|-------|
| | | | Yes | | NO | |
| | | | Frequency | % | Frequency | % |
| Gender | Male | 131 | 102 | 77.86 | 29 | 22.14 |
| | Female | 94 | 40 | 42.55 | 54 | 57.45 |
| | Total | 225 | | 0.00 | | 0.00 |
| Age Group | Below 20 years | 23 | 9 | 39.13 | 14 | 60.87 |
| | 20-30years | 87 | 65 | 74.71 | 22 | 25.29 |
| | 30-40years | 57 | 38 | 66.67 | 19 | 33.33 |
| | 40- 50 years | 35 | 15 | 42.86 | 20 | 57.14 |
| | Above 50 years | 23 | 8 | 34.78 | 15 | 65.22 |
| | Total | 225 | | 0.00 | | 0.00 |
| Occupation of the Customer | business | 59 | 37 | 62.71 | 22 | 37.29 |
| | Government employed | 48 | 28 | 58.33 | 20 | 41.67 |
| | Retired | 15 | 4 | 26.67 | 11 | 73.33 |
| | Private sector | 88 | 72 | 81.82 | 16 | 18.18 |

| | | | | | | |
|----------------------------------|---------------------|-----|-----|-------|----|-------|
| | Others | 15 | 6 | 40.00 | 9 | 60.00 |
| | Total | 225 | | 0.00 | | 0.00 |
| Educational Qualification | Higher secondary | 41 | 15 | 36.59 | 26 | 63.41 |
| | Graduate | 133 | 105 | 78.95 | 28 | 21.05 |
| | Post graduate | 51 | 42 | 82.35 | 9 | 17.65 |
| | Total | 225 | | 0.00 | | 0.00 |
| | | | | | | |
| Income Level | Below Rs 25,000 | 95 | 42 | 44.21 | 53 | 55.79 |
| | Rs25,000 to 50,000 | 73 | 51 | 69.86 | 22 | 30.14 |
| | Rs50,00 to 1,00,000 | 34 | 26 | 76.47 | 8 | 23.53 |
| | Above Rs 1,00,00 | 23 | 20 | 86.96 | 3 | 13.04 |
| | Total | 225 | | | | |

Form Table No. 5.2 describes the awareness of E-Banking services of demographic profile customer. In Gender the male customers (77.86 %) have more awareness when compared to the female customer (42.55%). The age group belongs to 20-30 (74.71 %) and 30-40 (66.67 %) have the more awareness rather than other groups. The occupation wise the private sector (81.82 %) and business (62.71 %) people having more awareness in E-banking services. In the view of educational qualification the people who were completed the graduation (78.95) having more awareness. Similarly the people who were earning more the 50000 per month (86.96% and 76.47%) are having the more awareness in the E-Banking services.

5.3 Chi Square Test

The relationship of age, income, and occupation with respect to usage of E-Banking will be analyzed using chi square test.

5.3.1 Income Verses Usage frequency of E-Banking Services

H₀₁: There is no connection between income of respondent and usage of E-banking Services.

H_{A1}: There is strong connection between income of respondent and usage of E-banking Services.

Table 3: Income level and Usage of E-Banking

| Chi-Square Tests | | | |
|--|---------------------|--------------|------------------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | 32.270 ^a | 12 | .001 |
| Likelihood Ratio | 33.533 | 12 | .001 |
| Linear-by-Linear Association | 4.406 | 1 | .036 |
| Symmetric Measures | | Value | Approx. Sig. |
| Nominal by | Phi | .379 | .001 |
| Nominal | Cramer's V | .219 | .001 |
| N of Valid Cases | | 225 | |
| a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .82. | | | |

From the table No.5.3.1, it clearly states that the P value of Chi square test having significant value is 0.001. The significant value is less than the 0.05 and therefore we conclude there is strong connection between income and usage of E-Banking system.

5.3.2 Gender Verses E-Banking Services

The genders with E-Banking services were analyzed by using chi square test.

H₀₂: There is no association between gender of respondent and usage of E-banking Services.

H_{A2}: There is association between gender of respondent and usage of E-banking Services.

Table 4: Gender versus E-Banking

| Chi-Square Tests | | | |
|------------------------------------|-------------------|-----------|------------------------------|
| | Value | df | Asymp. Sig. (2-sided) |
| Pearson Chi-Square | .025 ^a | 1 | .875 |
| Continuity Correction ^b | .000 | 1 | 1.000 |
| Likelihood Ratio | .025 | 1 | .875 |
| Fisher's Exact Test | | | |

| | | | |
|--|------------|-------|--------------|
| Linear-by-Linear Association | .025 | 1 | .875 |
| Symmetric Measures | | Value | Approx. Sig. |
| Nominal by Nominal | Phi | .010 | .875 |
| | Cramer's V | .010 | .875 |
| N of Valid Cases | 225 | | |
| a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.55. | | | |
| b. Computed only for a 2x2 table | | | |

From the table No.5.3.2, the P-value is greater than the Significant value, therefore we accept the H_{02} . There is no association between gender and E-Banking services.

5.4 Reliability of Facility over E-Banking

Table 5: Cronbach's Alpha Reliability Statistics

| Reliability Statistics | | |
|--------------------------------|--|----------------------------------|
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .917 | .917 | 8 |
| Facility of E-Banking Services | | Cronbach's Alpha if Item Deleted |
| SMS Alert | | .905 |
| Balance Enquiry | | .903 |
| Mobile Banking Facility | | .905 |
| Fund Transfer | | .899 |
| Payment of Bills | | .903 |
| Foreign Exchange Transfer | | .917 |

| | |
|-----------------|------|
| Online Trading | .914 |
| Online Shopping | .904 |

Table No.5.4 describes the reliability statistics of different facility offer by the E-banking services. The Cronbach's Alpha over the internal consistence is normally acceptable if the alpha value is greater than 0.7. If alpha value lies in between 0.8 to 0.9 the consistency is good. At the same time the value greater than 0.9 the consistence is excellent. Here the table value is 0.917 which is greater than the 0.9. Except the facility fund transfer all other value is greater than the 0.9

Table 6: Mean and Standard Deviation of Facility

| Facility of E-Banking Services | Mean | Std. Deviation |
|--------------------------------|------|----------------|
| SMS Alert | 3.65 | 1.560 |
| Balance Enquiry | 3.65 | 1.501 |
| Mobile Banking Facility | 3.43 | 1.588 |
| Fund Transfer | 3.42 | 1.428 |
| Payment of Bills | 3.41 | 1.571 |
| Foreign Exchange Transfer | 2.47 | 1.326 |
| Online Trading | 2.79 | 1.439 |
| Online Shopping | 3.78 | 1.547 |

The table 5.4.1 shows the mean and standard deviation of the facility offer by the E-Banking services.

5.5 Rating of facility offer by the E-Banking

Table 7: Customer Rating of E-Banking Facility

| Facility of E-Banking Services | Total Score | Customer Rating |
|--------------------------------|-------------|-----------------|
| SMS Alert | 658 | I |
| Mobile Banking Facility | 664 | II |
| Fund Transfer | 852 | III |
| Payment of Bills | 876 | IV |

| | | |
|---------------------------|------|------|
| Balance Enquiry | 895 | V |
| Online Shopping | 953 | VI |
| Online Trading | 1156 | VII |
| Foreign Exchange Transfer | 1250 | VIII |

The table no 5.5 gives the customer rating of E-Banking services. In this table we clearly understand that, SMS Alert is most favorite facility for the customer while making any operation in the banking therefore it is rated as I. The Mobile banking is the second preference of customer. The third position is fund Transfer facility. Similarly the least rating of facility will be the foreign exchange transfer.

5.6 Correlation

5.6 Relationship between E-Banking Facilities

Table 8: Relationship between E-Banking Facilities

| Correlations of E-Banking Facility | | | | | | | | | |
|------------------------------------|---------------------|-----------|-----------------|----------------|---------------|------------------|---------------------------|----------------|-----------------|
| | | SMS Alert | Balance Enquiry | Mobile Banking | Fund Transfer | Payment of Bills | Foreign Exchange Transfer | Online Trading | Online Shopping |
| SMS Alert | Pearson Correlation | 1 | .704** | .591** | .684** | .646** | .354** | .398** | .739** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Balance Enquiry | Pearson Correlation | .704** | 1 | .576** | .749** | .684** | .458** | .445** | .646** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Mobile Banking | Pearson Correlation | .591** | .576** | 1 | .716** | .594** | .544** | .535** | .563** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .000 | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Fund Transfer | Pearson Correlation | .684** | .749** | .716** | 1 | .660** | .534** | .522** | .660** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .000 | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Payment of Bills | Pearson Correlation | .646** | .684** | .594** | .660** | 1 | .441** | .571** | .638** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .000 | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Online Shopping | Pearson Correlation | .354** | .458** | .544** | .534** | .441** | 1 | .605** | .417** |
| | Sig. (2-tailed) | | | | | | | | |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |

| | | | | | | | | | |
|--|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | | .000 | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Online Trading | Pearson Correlation | .398** | .445** | .535** | .522** | .571** | .605** | 1 | .528** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | | .000 |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| Online Shopping | Pearson Correlation | .739** | .646** | .563** | .660** | .638** | .417** | .528** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | |
| | N | 225 | 225 | 225 | 225 | 225 | 225 | 225 | 225 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | |

The correlations between facilities of E-Banking services are described by using table No 5.6.1.

The SMS Alert having strong relationship with online Shopping (0.739) and least relationship with Foreign Exchange Transfer (0.354).

The Balance Enquiry has high positive relationship with fund Transfer (0.749) and low positive relationship with online trading (0.445).

The Mobile banking facility has good relationship with Fund transfer (0.716) and least relationship with online trading (0.535).

The Fund Transfer has strong positive correlation with Balance enquiry (0.749) and it has low relationship value with online trading (0.522).

The Payment of Bills has strong relationship with balance enquiry (0.684) and is has least relationship with foreign Exchange transfer (0.441).

The Foreign Exchange transfer has good positive correlation with online trading (0.445) and least relationship with SMS Alert (0.354).

The Online Trading shows the superior relationship with foreign exchange transfer (0.605) and lower relationship with SMS Alert (0.398).

The final facility of E-Banking is online shopping which has good relationship with SMS alert (0.739) and least relationship with foreign exchange transfer (0.417).

5.7 ANOVA

The analysis of variance tests the variance among the groups.

H₀₃: There is no significant mean difference exists between Age group of the customer and their perception towards Facility of E-Banking Services

H_{A3}: There is a significant mean difference exists between Age group of the customer and their perception towards Facility of E-Banking Services

Table 9: Age Group Vs Facilities of E-Banking Services

| ANOVA | | | | | | |
|---------------------------|----------------|----------------|-----|-------------|-------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| SMS Alert | Between Groups | 29.755 | 4 | 7.439 | 3.175 | .015 |
| | Within Groups | 515.508 | 220 | 2.343 | | |
| | Total | 545.262 | 224 | | | |
| Balance Enquiry | Between Groups | 8.905 | 4 | 2.226 | .987 | .415 |
| | Within Groups | 496.055 | 220 | 2.255 | | |
| | Total | 504.960 | 224 | | | |
| Mobile Banking | Between Groups | 24.245 | 4 | 6.061 | 2.465 | .046 |
| | Within Groups | 540.937 | 220 | 2.459 | | |
| | Total | 565.182 | 224 | | | |
| Fund Transfer | Between Groups | 11.277 | 4 | 2.819 | 1.392 | .238 |
| | Within Groups | 445.611 | 220 | 2.026 | | |
| | Total | 456.889 | 224 | | | |
| Payment of Bills | Between Groups | 34.350 | 4 | 8.587 | 3.646 | .007 |
| | Within Groups | 518.210 | 220 | 2.356 | | |
| | Total | 552.560 | 224 | | | |
| Foreign Exchange Transfer | Between Groups | 5.862 | 4 | 1.465 | .831 | .507 |
| | Within Groups | 388.138 | 220 | 1.764 | | |
| | Total | 394.000 | 224 | | | |
| Online Trading | Between Groups | 26.699 | 4 | 6.675 | 3.360 | .011 |
| | Within Groups | 437.061 | 220 | 1.987 | | |
| | Total | 463.760 | 224 | | | |
| Online Shopping | Between Groups | 9.356 | 4 | 2.339 | .976 | .421 |
| | Within Groups | 526.973 | 220 | 2.395 | | |
| | Total | 536.329 | 224 | | | |

From the table No 5.7 condenses the one-way ANOVA with descriptive statistics. The P value of the facilities offer by the E-Banking services of SMS Alert, Mobile Banking, Payment of Bills and Online Trading are significant at 5% Level because P value of above facilities are less than 0.05. From the result the alternative hypothesis accepted for 5 % level of significance.

5.8 Factor Analysis

The factors which influence the E-Banking Services were analyzed through factor Analysis.

Table 10: KMO and Bartlett's Test

| KMO and Bartlett's Test | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .729 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2.915E3 |
| | df | 190 |
| | Sig. | .000 |

Table 11: Total variance explained for factor influencing E-Banking

| Total Variance Explained | | | | | | | |
|---------------------------------|----------------------------|----------------------|---------------------|--|----------------------|---------------------|--|
| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings^a |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total |
| 1 | 4.659 | 23.295 | 23.295 | 4.659 | 23.295 | 23.295 | 4.136 |
| 2 | 3.178 | 15.891 | 39.186 | 3.178 | 15.891 | 39.186 | 3.506 |
| 3 | 2.698 | 13.490 | 52.676 | 2.698 | 13.490 | 52.676 | 2.488 |
| 4 | 2.321 | 11.603 | 64.279 | 2.321 | 11.603 | 64.279 | 2.204 |
| 5 | 1.290 | 6.451 | 70.730 | 1.290 | 6.451 | 70.730 | 2.349 |
| 6 | 1.118 | 5.592 | 76.322 | 1.118 | 5.592 | 76.322 | 2.218 |
| 7 | .907 | 4.535 | 80.857 | | | | |
| 8 | .617 | 3.086 | 83.943 | | | | |
| 9 | .604 | 3.020 | 86.962 | | | | |
| 10 | .502 | 2.509 | 89.471 | | | | |
| 11 | .397 | 1.986 | 91.458 | | | | |
| 12 | .339 | 1.695 | 93.152 | | | | |
| 13 | .252 | 1.262 | 94.415 | | | | |
| 14 | .239 | 1.194 | 95.609 | | | | |

| | | | | | | | |
|---|------|-------|---------|--|--|--|--|
| 15 | .224 | 1.119 | 96.727 | | | | |
| 16 | .173 | .863 | 97.590 | | | | |
| 17 | .150 | .748 | 98.338 | | | | |
| 18 | .123 | .613 | 98.951 | | | | |
| 19 | .115 | .576 | 99.528 | | | | |
| 20 | .094 | .472 | 100.000 | | | | |
| Extraction Method: Principal Component Analysis. | | | | | | | |
| a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance. | | | | | | | |

Table 12: Communalities for factor influencing E-Banking

| Communalities | | |
|---------------|---------|------------|
| | Initial | Extraction |
| MF1 | 1.000 | .681 |
| MF2 | 1.000 | .854 |
| MF3 | 1.000 | .913 |
| MF4 | 1.000 | .617 |
| MF5 | 1.000 | .936 |
| A1 | 1.000 | .811 |
| A2 | 1.000 | .676 |
| A3 | 1.000 | .735 |
| A4 | 1.000 | .794 |
| A5 | 1.000 | .888 |
| T1 | 1.000 | .727 |
| T2 | 1.000 | .550 |
| T3 | 1.000 | .727 |
| T4 | 1.000 | .890 |
| T5 | 1.000 | .736 |
| B1 | 1.000 | .840 |
| B2 | 1.000 | .885 |
| B3 | 1.000 | .662 |

| | | |
|--|-------|------|
| B4 | 1.000 | .593 |
| B5 | 1.000 | .749 |
| Extraction Method: Principal Component Analysis. | | |

From the table No 5.8.1, The KMO value is 0.729 and significant level is .000. Therefore the factors identified in the analysis are more satisfactory. Usually the KMO value above 0.5 is satisfactory. The table no 5.8.2 describes the variance of factors and their Rotation Sums of Squared Loadings.

The first factor having the variance of 23.295 % based on the factors identified. The motivational factor influences the usage of banking services. The customer prefers the services based on their experience and skill level of the specific application. From the above discussion the first factor is “Motivational Factor” always influence the E-Banking System.

The variance of second factor is 15.891 %. The quality of application and simple procedure in process will influence the end-user to access the technological innovation. Easy way of accessing and convenient in operation can will motivate customer to use the specific features. From this discussion it’s observed that the “Accessibility” will be another factor.

The third factor is having the variance of 13.490 %. The technological changes always change the mindset of the customer. But the knowledge and skill level of consumer will be crucial part in the new invention and adoption of technology. From the above analysis the “Technical factor” will also influence the customer.

The fourth variance value is 11.603 %. The factor like cashless economy, flexibility in the services, offers and frequent access are the most important for customer. These are the behavioral factor of Consumer. The final factor is “Customer Behavior”

VI. RESULT AND DISCUSSION

In this article the following results are arrived in the E-Banking services. In general the male have the highest awareness compared to female customer. The gender never influences the E-banking services providers. The security reason and general fear over transaction may be the reason for the female customer not using the E-banking services.

The age group between 20-40 people highly uses the E-Banking services. Similarly the most of the graduates are using the E-Banking service. Likewise the private employees, Business people are the majority users of E-banking. From the above results the education system and literate ratio will influence the adoption of new technological services.

The people who earn more than 25000 always prefer the E-banking services. The income level of the customer has the strong relationship towards the usage of E-banking services. Nowadays the people have lack of time for shopping and even fulfilling their basic needs which leads the online shopping and usage of new technology for various basic services.

The customer always evaluates when they use or adopt the any new services. Here the SMS Alert and mobile banking are the first two positions in the customer mind. Because of security reason and 24/7 access these two has the highest values. The alert message will confirm the each and every transaction. Nowadays every one using the smart phones and they use the phone for various useful activities in daily which will highly enable the E-banking services.

The facilities of E-Banking services are highly correlated with each other. The SMS Alert ,Balance Enquiry ,Mobile banking, Fund Transfer ,Payment of Bills ,Foreign Exchange transfer ,Online Trading ,online shopping are facilities of E-Banking Services. In this the SMS Alert, Mobile Banking, Fund Transfer and Online Shopping are the most favorable facilities for customer.

The motivational factor, Accessibility, Technological factors, and behavioral factor customer always influence the customer to prefer the E-banking services.

VII. CONCLUSION

The technological growth like latest innovation in the telecommunication industry, Internet of things, smart phone, advanced technology and modern business era significantly the change the life style of human being in the world. The life style of each and every people rapidly growing due to technological changes and gave the lot of changes for their daily activities. Likewise the above changes highly influence the some business sectors like Banking, E-Commerce etc.

The Indian Banking Sector took lot of initiative in E-banking services. Nowadays the customer physical visit of bank drastically reduced. So the banking sectors also made the lot of changes in their services and retain the customer in the competition world. This article reveals the factor influencing the E-banking services and customer awareness towards the E-banking services in virudhunagar district. The general awareness about E-banking services for female and illiterate people is less. The bankers have to take necessary steps to crate the awareness to the illiterate people. The Bankers and government should conduct the lot campaign programme in various areas specifically in the rural areas for explaining the E-banking services, E-banking features, facilities and importance of cashless economy. Digital India concept will succeed when the every people should have great awareness about each and every process.

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