



## E-Banking & Customer Satisfaction- An Overview

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**Abstract:** For the strong and stable economic development E-Banking has become the pre requisite for the today's technological world. All the technological innovations are the result of introduction of digital technology. Information and communication technology has led to change the dimensions of banking sector. E-banking is the automation of traditional banking products and services. The objective of this research is to understand and examine the E-Banking and role of E-Banking in satisfying the customers. In this research the researcher aims to analyze the theoretical analysis on E-Banking, its products and services and customer satisfaction. This paper presents an intensive summary review of research by various foreign and Indian authors about E-banking, E-Banking products and services provided by banks and customer satisfaction. The study seeks to draw conclusion about general overview about E-Banking. Study also seeks to find out draw reliable conclusion to identify influencing factors of customer satisfaction regarding E-banking. To assess the results based on review nationally and internationally, study was undertaken on the sample unit, respondent size and the location of the investigation regarding E-Banking, the most influencing factors of E-Banking for customer satisfaction. The findings of numerous research studies revealed that the adoption of E-Banking is influenced by factors including efficiency, reliability, and responsiveness, assurance, security, privacy, communication, tangibles and empathy, and website design. These variables influence how satisfied customers are with the E-Banking products and services. According to a study, there is work to be done in the areas of technical functionality, responsiveness of banks when customers encounter issues using E-Banking services and connectivity, hang or crash of banks websites due to weaknesses in the bank's electronic service delivery system, etc. for increased customer satisfaction.

**Index Terms** - E-Banking, Internet Banking, Mobile Banking, Debit (ATM) & Credit Cards, NEFT, RTGS, Customer satisfaction

### 1. INTRODUCTION

The development of any countries economy is depends upon the strong monetary establishment. The backbone of this monetary establishment is strong and stable banking sector. The strength and development of the country is linked with the effectiveness of such banking sector.

Today introduction of Information and communication technology has covered each and every phase of market and banking sector is not exception to this. Today we cannot imagine banking without Information and communication technology. Technology is the 3<sup>rd</sup> revolutionary wave followed by agricultural and industrial revolution. Due to this revolutionary wave mean of conviction of banking products and services has totally changed. As a result it helped to improve the service quality rendered by banking sector. Banking industry is the service industry and it aim to focus on customers. The success of banking industry is depends upon the service quality provided to the customers.

E-Banking is the banking service provided to the customer using information and communication technologies. The use and adoption of information and communication technology has helped to eliminate the constraint of place, time and communication. The introduction and development of E-banking around the globe has made the financial transaction convenient and customer friendly. E-Banking also proved to be helpful in reduction of operational expenses of the banks and helped the banks to provide numerous E-Services using Information and Communication technology. E-banking helped to shrink the geographical frontiers along with the reduction in the time consumption for financial transactions to make the banking business global in true sense. E-Banking proved truly "Value Added" to acquire and retain the customers by providing customers the value added services globally with reduced tedious paper work and reduces physically being present in long queue at banks. Thus E-banking services proved to be improved services at reduced cost and improved efficiency of bank. If the services provided by the bank are satisfactory according to the customer's expectation, it helps to reduce the operating cost of the bank as well as helps to increase customer base.

### 2. OBJECTIVES

- 1) To know the concept of E-Banking and various products and services of E-Banking.
- 2) The study aims to highlight the level of customers understanding regarding E-Banking.
- 3) The study intends to understand the factors influencing customer satisfaction in E-Banking.
- 4) The study also aims to examine the relationship between factors influencing customer satisfaction and E-Banking.

### 3. CONCEPT OF E-BANKING

E-Banking is also known as Online Banking & Virtual Banking. E-banking or Electronic Banking is process or method that allows its customers to use banking product or services using internet. With the use of E-banking customers can access information via internet using mobile, desktop, laptop etc. **Flavian** in 2004 and **Gan & Clemes**<sup>1</sup> in 2006 opined that the development of internet as advanced

and substitute mean for dispersal of services has become pre requisite to gain advantage with the emergence of globalization and stiff competition.

**Vaishali Narolia, S. K.**<sup>2</sup> in (2015) defined E-Banking as “It encompasses the wide technological innovations that have taken place in banking from transferring funds online, making online payments for almost all the service, managing account balances to making a railway, airway and hotel bookings. It has removed the barriers of ‘Brick and mortar’ model of banking”.

**Havsi, F.**<sup>3</sup> in 2013 defined “E-Banking is the acme of information technology usage, to omit time and place limitation.”

**Daniel. E** in 1999<sup>4</sup> opined that E- Banking as transfer of banks information to its consumer by the banks through various mediums by using various terminals like computer, mobile phones, via browser and software, telephones or digital television.

**Khan. H F**<sup>5</sup> in 2021 opined that E-banking is apportionment of distant banking services by recognized and sanctioned banks or its agents to its customers through various mediums direct authority of the banks or under contract management. E-Banking is action or operation in which accounts of the customers are acquired and operated to do numerous transactions through internet, personal computers, mobile devices and various web based applications.

According to **RBI**<sup>6</sup> Report 2013 in Electronic Banking System, customers can use services in 3 levels: Informatory, connection and transaction, these banking services offered through INTERNET.

E-Banking is the use of Information and Communication Technology by the banks for providing banking services to the customers. It is the mode of delivering banking services to the customers using digital devices such as personal computers, laptops, tablets, internet, mobile phones etc. Use of E-Banking services made it possible to operate bank accounts from anywhere any time without visiting to the bank. Thus it helps to reduce the limitation of time and place. Various transactions such as balance enquiry, obtaining transaction records from bank, cash withdrawal and cash deposit, payment of utility bills, shopping at E-commerce site and payment of bill, trading of securities etc. can be done using E-banking platforms with convenience and reliability.

#### 4. E-BANKING PRODUCTS & SERVICES

As banking sector is service sector, services provided by the various types of banks are identical. Only the difference can be made is the way of providing these services. E-Banking proves to be successful for this purpose. As compare to traditional banking system E-Banking provides various improved services for the ease and convenience of the customers. Various researchers have studied about these products and services. **Priyanka. S**<sup>7</sup> in 2014 studied some of the services provided by banks using technology are Electronic Fund Transfer (EFT), Real Time Gross Settlement (RTGS), Electronic Clearance System (ECS), ATM, Internet banking, Debit & credit card etc. Conversely **Jain M**<sup>8</sup> in 2017 studied Core Banking Solution (CBS), Electronic Fund Transfer (EFT), National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Electronic Clearance System (ECS), ATM, Internet banking, Debit & credit card, Mobile banking, MICR, Bank.Net etc.

##### 4.1 Internet Banking

**Arunchalam**<sup>9</sup> opined that Internet Banking is use of internet service provider and personal computer for using account by the customer. **Ongakausuwan & Tantichattan**<sup>10</sup> in 2002 proposes that Internet banking is beneficial for the banks in many ways like cost saving, enhanced clientele, personalized electronic services, wide spread marketing, advanced services, developed non-core banking business etc. they also stated that adoption and acceptance of internet banking services by customers are mainly depends on customers attitude and perception. Adoption and acceptance is also depends on factors like types of service provided, access of internet and experience, delivery time of service etc.

Internet Banking is use of banks website to access the various E-Banking services provided by the bank. Various services using Internet Banking includes general banking functions as well as utility functions.

##### 4.2 Mobile Banking

“Mobile Banking refers to provision and availment of banking and financial services with the help of mobile 7 telecommunication devices. The scope of offered services may include facilities to conduct bank & stock market transactions, to administer account & to access customized information”<sup>11</sup>.

Mobile Banking is the E-Banking service that is used by its customer to do banking transaction using mobile phone. Mobile banking is use of mobile and tablet to perform financial transactions out of various E-Banking services like internet banking, mobile banking, NEFT, RTGS etc. It is the most convenient and most acceptable E-Banking service available 24\*7.

Table 1 Total Mobile Banking Transactions

Sr. No.	Year	Volume in Million
1.	2017	1509.29
2.	2018	4555.08
3.	2019	11997.77
4.	2020	21477.97
5.	2021	43533.37

Source- rbi.org.in (RBI data warehouse)

The table above demonstrates the tremendous rise in mobile banking transaction volume over the previous five years. In 2018 and 2019, the overall number of mobile banking transactions increased by 202% and 163%, respectively. Also included in the results are increases of 79% in 2020 and 102% in 2021. The value of mobile banking transactions increased as a result of more transactions. According to the study, the amount of transactions using mobile banking is continuously rising. The maximum number of transactions was found in the above table, which was for 2021. The least rise in mobile banking transactions was observed during the third year of the study. It is more than double in the first few years of the study, but later on, this trend starts to drop.

### 4.3 Automated Teller Machine

**Rose P.S.**<sup>12</sup> in 1999 defined ATM as “An ATM combines a computer terminal, record keeping system and cash vault in one unit, permitting customers to enter the bank’s book keeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank’s computerized records, 24 hours a day”. **Jain Megha A.**<sup>13</sup> defined ATM “As a computerized machine built to provide the clients of banks with facility to have access their bank account for withdrawing cash from ATMs as well to accept deposit from the bank customers in form of currency notes or cheque and allow the customer to transfer money from his or her account to materialize the deals and to carry out all these banking functions only through the machines thereby allowing the customer to carry transactions without visiting bank branch in person.” ATM card is nothing but the plastic card having magnetic strip. Magnetic strip consist of individuals information. When the card is entered into ATM machine, machine encodes the information of that magnetic strip and connects the customer to the bank for the safe and secure monetary transaction of the customer through ATM. For ATM transaction PIN (Personal Identification Number) is the requisite.

Table 2 Number of ATM’s under NFS Network

<i>Year</i>	<i>Numbers (in thousand)</i>
December 2021	254
June 2021	252
December 2020	251
June 2020	249
December 2019	246
June 2019	245
December 2018	239
June/Aug 2018	238

Source- statista.com

The report demonstrates that National Financial Switch (NFS) is steadily improving banking sector and customer convenience. The aforementioned data shows a rise in the percentage of ATMs. Dec 2018, June 2019, Dec 2019, June 2020, Dec 2020, June 2021, and Dec 2021, respectively, show an increase of 0.42%, 2.51%, 0.41%, 1.22%, 0.8%, 0.4%, and 0.79%. According to the survey, National Financial Switch (NFS) is continually working to make banking clients in India more convenient. Since the study’s inception, an increase in the number of automated teller machines has been seen.

### 4.4 Credit Card

**Meidan & Davos**<sup>14</sup> (1994) in their study found out that use of credit card depends upon factors like convenience, indication of prestige, sense of security, economy and shopping abroad. **Gan,L., Maysami,R.C. & Koh,H.C.**<sup>15</sup> in (2008) found out that credit card usage id affected by income and gender of the holder. Some other factors are also found out like “credit card leads to over-spending”, “saving as payment source”, “unreasonable interest rates”, & “Credit card as status symbol”.

Credit cards are a thin, rectangular piece of plastic or metal issued by a financial institution or bank with the intention of borrowing money to pay for goods and services. To maintain a credit card, you must regularly or in whole repay the borrowed amount, plus interest and fees.

Table 3 Volume of Transactions using Credit Card

<i>Sr. No.</i>	<i>Year</i>	<i>Volume of Transactions (in Lakhs)</i>
1.	2020-21	17,641
2.	2019-20	21,773
3.	2018-19	17,626
4.	2017-18	14,052
5.	2016-17	10,871

Source- rbi.org.in (RBI data warehouse) RBI annual report 2020-2021

According to the aforementioned table, the volume of credit card transactions increased by 29% in 2017–18. The rise was 25% in 2018–19 and 24% in 2019–20, respectively. While the overall amount of credit card transactions shrank by 19% in 2020–21.

It is evident from the above table that there was a huge increase in the amount of credit card transactions. However, it decreased in 2020–2021. The years 2017–2018 saw the fewest credit card transactions, while 2019–2020 saw the greatest.

### 4.5 Electronic Fund Transfer (EFT)

**Section 205.3 (b) of Electronic Fund Transfer (EFT) Act 1978** defined EFT as “EFT is a transfer of funds is initiated through an electronic terminal, telephone, computer (including on-line banking) or magnetic tape for the purpose of ordering, instructing or

authorizing a financial institution to debit or credit a consumers account. EFTs include, but are not limited to point-of-sale (POS) transfers; Automated Teller Machine (ATM) transfers; direct deposit or withdrawal of funds; transfer initiated by telephone; and transfer resulting from debit card transactions, whether or not initiated through an electronic terminal.”

#### 4.5.1 NEFT

“NEFT system” means the National Electronic Fund Transfer system established by these Regulations for carrying out interbank funds transfers within India, and providing for settlement of payment obligations arising out of such funds transfers, among the participating banks.<sup>16</sup>

The NEFT system allows money to be transferred from one NEFT-enabled account to another. The Reserve Bank of India developed, acquired, operated, and managed the NEFT system. The internet is used for this fund transmission. The widely used centralized payment system is NEFT. It enables fund transfers within India and is accessible round-the-clock, twenty-four hours a day. Within 30 minutes of the sender initiating payment, the funds are transferred.

Table 4 Volume of NEFT Transaction

Sr. No.	Year	Volume of Transactions (in Lakhs)
1.	2020-21	30,928
2.	2019-20	27,445
3.	2018-19	23,189
4.	2017-18	19,464
5.	2016-17	16,221

Source- rbi.org.in (RBI data warehouse) RBI annual report 2020-2021

The data explains the rise in NEFT transaction volume as a percentage. In 2017–18, it increased by 20%; in 2018–19, by 19%; in 2019–20, by 18%; and in 2020–21, by 13%. The fewest NEFT transactions (16,221) and the greatest (30,928) are both registered in 2016–17.

The study came to the conclusion that the total number of NEFT transactions is consistently rising. Over the past five years, NEFT transactions have increased.

#### 4.5.2 RTGS

High-value banks employ the real-time gross settlement (RTGS) system for financial transfers and settlements. The Reserve Bank of India is responsible for organizing and maintaining this fund settlement. Using RTGS, money may be transferred quickly and in real time within the nation.

High value financial transactions are settled utilizing RTGS. The funds are transferred via RTGS as soon as the customer processes the transaction, making it the fastest and quickest method of fund transfer. It does not accept transactions with future value dates. Without any waiting time, monies are sent one to one using RTGS. Both low value and high value transactions can use this mechanism.

Table 4 Volume of RTGS Transaction

Sr. No.	Year	Year	Interbank	Customer
1.	2017	3.84	117.09	120.936
2.	2018	3.42	131.145	134.56
3.	2019	2.88	145.34	148.22
4.	2020	1.98	144.47	146.46
5.	2021	1.55	197.17	198.75

Source- rbi.org.in (RBI data warehouse)

The information just presented justifies growth of 11% in 2018 and 10% in 2019. In 2020, the percentage of RTGS transactions is expected to decrease to 1.15%. Once more, in 2021, the growth is recorded at 36%.

The research also reveals that 98% of RTGS transactions are customer-related, while only 2% of all transactions are interbank.

It is evident from the preceding table that customers account for the majority of RTGS transactions. RTGS transactions between banks make up a relatively small portion. The most RTGS transactions are carried out in 2021, while the fewest are carried out in 2017.

### 5. Concept of Customer Satisfaction

Customer is said to be the king of market. Customer is the Centre of all types of businesses. The reinforcement and extension of business firm depends upon customer. Customer enjoys bundle of services furnished by firms. These bundles of services are aimed to increase customer base of the firm. Modern business has shifted its focus from product to customer. Customer satisfaction is assessed on the basis of product and services and to satisfy customer expectation.

**Oliver**<sup>17</sup> in 1980 defined customer satisfaction as “an evaluation judgment prior to making a choice, about any particular purchase decision”. **Kotler, P. & Keller K.L.**<sup>18</sup> in 2006 defined “Satisfaction is a person’s feeling of pleasure or disappointment resulting from comparing a product’s performance (outcome) in relation to his or her expectation”. **Hill**<sup>19</sup> in 2017 defined “Customer satisfaction is a measure of how your organization’s total product performs in relation to an asset of customer requirements. Explaining how to measure customer satisfaction in any industry and what affects the accuracy of those results. Indeed, there are two main factors; one of them is by asking the right questions, the other is asking the right people.”

**Boulding**<sup>20</sup> (1993) classified satisfaction into “The transaction specific satisfaction and the cumulative satisfaction.” **Boshoff and Gray**<sup>21</sup> (2004) proposed the transaction specific satisfaction as satisfaction gained by customers own experience and own appraisal, it is attitude of customer related to particular service used first time. **Johnson et al**<sup>22</sup> (1995) explained cumulative satisfaction as the

satisfaction gained over period of time. As the satisfaction gained over period of time it is based on repeated experience of the customer.

Customer satisfaction is the fulfillment of customers' expectations in terms of psychological and emotional needs of customers. As each and every customer has different perception, liking, disliking, attitude etc. Customer satisfaction is the key of success of business. Success of any business is totally dependent on the customer. Banking sector's success is also totally depending on customer satisfaction. All the banks provides same types of E-banking services to the customers thus to be competitive in the market the factors such as convenience, easy accessibility, privacy, Security & Assurance, Design and content, Speed, Fees & Charges, Reliability & Responsiveness affects the customer satisfaction. There is close relationship between E-banking services and factor affecting customer satisfaction. When the banks strive to give improved services to the customers, it helps them to enhance their performance as a result banks get competitive advantage.

## 5. LITRATURE REVIEW

### E-Banking & Customer Satisfaction

Research conducted by Various Researchers-

Locus of E-Banking is dependent on customers, their needs, requirements, demand and expectations. The success of banking depends on these factors. These factors are real challenge in front of banking sector but with the evolution of E-Banking it has become possible to assess the needs, requirements, demand and expectation of the customers. E-banking made it possible to remove barriers of time, space, convenience; accessibility etc. thus optimum customer satisfaction can be achieved by the banks.

**1) Research conducted by Andreea,D.M. & Cristina,D<sup>23</sup>** aimed to study **E-banking and Customer Satisfaction with Banking Services** at Ovidius University of Constanta, Constanta, Romania in 2016. Sample of the study consists of total 643 bank customers using E-Banking services in Constanta country. Random sampling method was applied. The data of the study primarily collected using structured questionnaire from the respondents. The collected primary and secondary data were analyzed by using various statistical techniques such as correlation, ANOVA, Tukey Post hoc test and a like were used.

The study aim **i) To grasp the importance of E-Banking within the general satisfaction of customers with regard to banking services. ii) To identify the influence of five categories of customer satisfaction determinants with banking services in the South East Romania region. iii) To assess customer satisfaction with banking services. iv) To find out the impact of E-banking services have on the general level of customer satisfaction.**

The research conducted revealed that overall customer satisfaction with banking services and customer satisfaction with E-Banking services are strongly correlated. The research results also indicated that the assessment of the satisfaction with e-banking services does not differ based either on gender, or on residence environment (rural/urban) but it differs based on age. It was revealed that there are statistically significant differences in the satisfaction with E-Banking services between professional groups, as well as between income groups.

From the study it was suggested that bank should take measure to include all type of customers in their customer base and include enhanced services and efficiency.

It was also suggested that bank should continuously include enhanced services in the series of E-Services and proper feedback system should be adopted by bank.

**2) Khatoon,S.& Zhengliang.X. &Hamid Hussain.<sup>24</sup>** Conducted study **The Mediating Effect of Customer Satisfaction on the Relationship between Electronic Banking Service Quality and Customer Purchase Intention: Evidence from the Qatar Banking Sector** at Qatar. Sample of the study consists of customer and employees working in different banks in Qatar. 235 bank customers and employees were selected for the study. Convenience sampling method was applied. The data of this study was primarily collected through close ended questionnaires. The collected primary and secondary data were analyzed by using various statistical techniques such as correlation and regression analysis.

The study undertook **i) to investigate the relationship between the dimensions of E-banking service quality and customer purchasing intentions with the mediating role of customer satisfaction. ii) To find the determinants of customer purchase intentions and the usage of E-banking services among Qatari citizens in the banking sector.**

Results show that the E-banking series quality is the prime indicator of customer satisfaction that motivates the customer. The customer satisfaction plays a vital role as a mediator and the predictor of customer purchase intention, especially in the banking sector. The results of the study revealed that reliability, efficiency, responsiveness, communication, security, and privacy have a significant and positive impact on customer purchasing intentions. From the study it was found out that Customer purchasing intentions are significantly increased when the customers are satisfied with E-banking service quality.

It is suggested to develop new services to fulfill the expectations of consumers to provide comprehensive feedback and an overview of the E-banking service quality by understanding service quality, customer satisfaction, and customer purchase intentions which have practical implications for the banking industry. It is also implied to strategically plan the future while adapting and tailoring e-service quality to their customers by adopting latest technological advancements.

**3) In their study The Effect of Electronic Banking on Customer Satisfaction in Nigeria, EKIEENABOR, E. & AKPOGUMA B. & ARILESERE M.S.<sup>25</sup>** studies **The Effect of Electronic Banking on Customer Satisfaction in Nigeria**. Sample of the study consists of customers of first bank of Nigeria Plc,Edo State. 100 corporate and individual bank customers were selected for the study. Convenience sampling method was applied. Structured questionnaire was used for recording the responses of respondents. Data collected was analyzed using the simple percentages while the Pearson's Chi-square techniques, SPSS version 20 Software. etc.

The objective of the study was **i) To investigate the significant relationship between service outages and customers' patronage of e-banking services. ii) To investigate the significant relationship between Poor interconnectivity and customers' patronage of e-banking services iii) To investigate the significant relationship between E-Banking and customer satisfaction.**

From the study it was found out that there is a significant relationship between service outages and customers' patronage of electronic banking services. It was also found out that there is a significant relationship between electronic banking and customers' satisfaction. It was concluded that e-banking has become necessary and survival weapon in banking industry.

It is recommended by the researcher that much needs to be done in the area of creating awareness about the availability of internet banking products and services, how they operate and their benefits. Banks should improve their service delivery to justify the benefits of electronic banking products and services to build confidence.

**4) Areeba Toor, Mudassir Husnain, Talha Hussain, Shoaib Ali & Adnan Shahid<sup>26</sup>** conducted study at Pakistan to study **The Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan**. Sample of the study consists of various Banks in Pakistan. 264 bank customers were selected for the study. Convenience sampling method was applied. Correlation and Multiple Regression model will be applied to determine the significance level of the variables for the customer satisfaction in e-banking individually as well as in SERVQUAL model as a whole.

This research work intends **i)** to investigate the impact of E-banking variables on customer satisfaction in Pakistan. **ii)** To find out the chief service quality dimensions in determining satisfaction of e-banking customers in Pakistan. **iii)** To give the relative weightage of dimensions of service quality model in determining satisfaction of e-banking customers in Pakistan.

From the study it has been observed that customers are fairly satisfied with the e-banking services in Pakistan in terms of service quality. Major finding of the study include there is relationship of each independent variable with the dependent variable when studied individually. When all service quality dimensions taken as predictor of customer satisfaction, Reliability, responsiveness, assurance has produced the most significant results. On other hand tangibles and empathy relatively have not produced significant results in e-banking in Pakistan. The findings also lead to conclude that in Pakistan, people evaluate E-Banking service quality majorly on three key dimensions out of five of the SERVQUAL model: Responsiveness, Reliability and Assurance. E-Banking in Pakistan has not still attained the usability as in the developed countries.

From the study it was suggested that other service quality factors which affect customer satisfaction can also be added for further research. There is still room to create more awareness among the banking customers in order to ensure full espousal of e-banking in Pakistan. It was also suggested that Bank specific research i.e. private and public or local and foreign banks may generate more clear results regarding customer satisfaction in e-banking sector in Pakistan.

**5) Shouvik Sanyal & Hisam, M.W. & Moinuddin Ahmad<sup>27</sup>** conducted a research Dhofar Region of Sultanate of Oman to study **Customer Satisfaction on E-Banking Services in Public and Private Sector Banks – A Comparative Analysis in Dhofar Region of Sultanate of Oman**. Sample of the study consists of 2 Leading Banks available in Oman. One is National Bank of Oman (public sector bank) and another is Bank of Muscat (private sector bank) bank customers were selected for the study. Stratified sampling method was applied. The data collected through the questionnaire based on SERVQUAL was analyzed by employing mathematical and statistical tools like percentage, mean scores, standard deviation, regression analysis and t – test.

The study is aim **i)** To examine the impact of services quality dimensions on customer satisfaction in E- Banking. **ii)** To make a comparative analysis of customer satisfaction on banking services of public and private banks.

The main findings of the study indicate that customers are fairly satisfied on all service quality dimensions as that all the service quality dimensions have strong impact on customer satisfaction. It is found that there is significant difference between customer satisfaction of public and private sector banks. The results reveal that customers of public sector banks in Oman are more satisfied than private sector banks.

It is suggested that banking service must increase customers' confidence and trust by provide appropriate service to each customer. Banks are needed to focus on employee relations and customer service to achieve goals through cutting edge CRM systems to win the competition.

**6) To explore Customer Satisfaction towards Online Banking With Reference To Greater Visakhapatnam City** the researchers **Merugu, P. & Vaddadi, K.M.<sup>28</sup>** took the Sample of the study consists of total 200 customers from various banks using Online Banking services in Visakhapatnam City. Convenience sampling method was applied. The data of this study was primarily collected through survey research questionnaire. The collected primary and secondary data were analyzed by using various statistical techniques such as chi square, factor analysis cross tabulation, and frequency tables to interpret the data.

The objectives of the study was **i)** To explore the factors influencing customer satisfaction when using Online banking services of selected retail banks in Visakhapatnam city. **ii)** To identify the problems faced by customers when banking online. **iii)** To put forward few recommendations in order to improve the customer satisfaction for continue usage of the online banking service.

From the study it was found out that website design, service reliability, responsiveness of bankers, customer service, and security contributed significantly in influencing online customer satisfaction whereas factors leading to dissatisfaction are bankers' responsiveness and communication. Result also showed that user-friendly interface, transaction transparency ease of use, information access, confirmation and safety and security are the major factors causing satisfaction among customers using online banking services & bankers' responses in terms of availability to receive the complaint and Connectivity to different banking information search sites are the major problematic factors leading to dissatisfaction among online banking customers.

It was suggested by the researcher that online security system should be upgraded; awareness should be created regarding E-Banking.

**7) The research was conducted by Sadaf Firdous.<sup>29</sup> (2018).** at the Jamia Milia Islamia, New Delhi, India. Under the guidance of Dr. Rahela Farooqi in 2018 to study **the Impact of E-Banking Service Quality on Customer Satisfaction: A Comparative Study of Private and Public Sector Banks**. Sample of the study consists of 3 leading public sector banks and 3 leading private sector banks from Delhi-NCR. Total 510 E-Banking customers were selected for the study. Judgmental sampling method was applied. The collected primary and secondary data were analyzed by using various statistical techniques such as chi-square test, ANOVA, 't' test, multi group analysis, structural equation Modeling, Latent Variable Modeling, Missing value analysis and the like.

The study aim **i)** To identify the various dimensions of E-Banking service quality. **ii)** To study the relationship between the customer satisfaction and the various E-banking service quality dimensions. **iii)** To make a comparative analysis of the impact of E-banking service quality on customer satisfaction in Private and Public sector banks. **iv)** To study the influence of demographic variables on customer satisfaction in Private and Public sector banks.

The major findings of the above study was revealed that dimensions like efficiency, System Availability, Fulfillment, Privacy, Website Design, Contact, and Responsiveness have significant relationship with the customer satisfaction. It was found out that responsiveness, efficiency & website design are the major dimensions of E-Banking service quality. Study also supported the

significant relationship between navigation and the visual appearance, easy to use website, technical functioning of the electronic medium of services, etc.

Study suggests that the banking practitioners need to be well advised and informed about the constructs of service quality in e-banking and should pay special attention to website design and efficiency. It was also suggested to improve the channels of communication. The managers should assure the fulfillment of requested services and improve the delivery of all offered services within the mentioned time frame.

## 6. CONCLUSION

According to the report, the introduction and adoption of E-Banking in the banking industry has a huge impact. The delivery of differentiated services, the creation of new IT infrastructure, the management of customer relationships by providing customers with value-added content, and ultimately the retention and expansion of relationships with the customer have all changed how the banking sector operates in some ways. E-Banking goods and services are intimately tied to customer satisfaction. Thus, in the banking industry today, E-Banking has evolved into a weapon of survival. We can see from the data provided above about internet banking, mobile banking, debit and credit card services, NEFT, and RTGS that customer adoption of E-Banking is growing significantly. Bank consumers now use E-Banking services and products.

According to studies, there is a significant correlation between E-Banking services and total customer satisfaction. The quality of the banks' provided electronic banking services is the main determinant of client happiness. The banking industry's mediator and forecaster is the consumer. According to studies, a number of variables influence and determine the degree of customer happiness, and these variables have a significant impact on customer satisfaction. Efficiency, reliability, responsiveness, assurance, security, privacy, communication, tangibles and empathy, and website design are some of these elements (user-friendly interface). According to the findings of numerous researches, when a bank adopts E-Banking services, customer satisfaction is increased compared to using the traditional E-Banking methodology. According to studies, there is a significant correlation between E-Banking services and total client happiness. Customer satisfaction is primarily measured by the effectiveness of the E-banking services offered by According to the findings of numerous studies; private sector banks offer E-Banking services more quickly and accurately than public sector banks. Market leaders are banks that consistently offer persuading and helpful services. Findings from studies on e-banking indicate that technical functionality, responsiveness of banks in situations where customers encounter issues using e-banking services and connectivity, hanging or collapsing of banks' websites due to flaws in the bank's electronic service delivery system, etc. are some of the areas on which banks should concentrate to improve offerings to their customers.

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