

## **International Journal of Research Publication and Reviews**

Journal homepage: www.ijrpr.com ISSN 2582-7421

# A Study on Role of it (Information Technology) in Banking Sector

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#### ABSTRACT

The study focuses to examine the relationship between new technology implantation in Banking sector and customers. How they are aware about the technologies and how they are using it. The study covers the service offered by banks to the customers by the use of technology. The study also gives an idea of rendering secure, e-banking services at a lower cost, without compromising with the quality thereby resulting in the widening of customer base. This project is an analytical study based on random sampling to ascertain the usage and satisfaction level and customers attitude towards these channels.

## **1.1 INTRODUCTION**

Information technology in banking sector refers to the use of sophisticated information and communication technologies together with computer science to enable banks to offer better services to its customers in a secure, reliable and affordable manner and sustain competitive advantage over other banks. The banking sector has embraced the use of technology to serve its client's faster and also to do more with less. Information technology architecture is an integrated framework for acquiring and evolving IT to achieve strategic goals. The banking industry in India is in the Midst of an information technology revolution. A combination of regulatory and competitive reasons has led to increasing importance of total banking automation on this industry. Information technology has basically been used under different avenues in banking. One is communication and connectivity and another one is business process reengineering. Information technology enables difficult product development. Better market infrastructure, implementation of reliable techniques for control of risk and helps the financial intermediaries to reach geographically distant and diversified markets.

#### **1.2 STATEMENT OF THE PROBLEM**

The study focuses to examine the relationship between new technology implantation in banking sector and customers and also the study focuses how they are aware about the technologies and how they are using it. The study covers the service offered by banks to the customers by the use of technology. More specifically latest technological delivery channels, namely ATM/Debit card, Credit card, internet banking, mobile banking etc. As been taken up for the purpose of study. Today's bank customers are already deeply immersed in a digital lifestyle. Whether ordering a cheque book or checking their account balance, consumers are generally choosing banks that interact with them online and through their mobile devices.

#### **1.3 OBJECTIVES OF THE STUDY**

The main objectives of this study are, to study about the future perspective and awareness of internet banking among Indian customers. To determine the technology in banks used by customers. To study the role of Information Technology on banks and to know the satisfaction level of banking customer.

## 1.4 SCOPE OF THE STUDY

The Banking sector is considered to as the backbone of the Indian economy and offers various career opportunities to students from all fields: science, commerce humanities. The Sector is in the huge need for manpower as government of India is taking banking to remote areas also by opening new branches. It is also considered one of the socially respectable and secure job. In India, there are multiple examination for bank jobs conducted by IBPS, State Bank of India and Reserve Bank of India (twice in a year). It is one of the lucrative careers especially for the people who are looking job in government sector.

#### **1.5 RESEARCH METHODOLOGY**

The present study is based on Primary data. Primary sources of data collection have been adopted for the study through well-structured comprehensive questionnaire. The Area of study is confined to Coimbatore City. Nature of Population are from peoples on both urban and rural areas. Banking customers

are the samples. The Sample size of the study will be 100 respondents. Data collected through Questionnaire was prepared in master table. In order to Analysis and Interpret the Data, Percentage Analysis, Chi square Test, Rank Analysis are used in this study.

## 1.6 LIMITATIONS OF THE STUDY

The study was primarily limited by small sample size. The primary data collected should not be accurate, it may be biased. The project does not include case study related to hackers and fraud.

## 2.1 REVIEW OF LITERATURE

**E. Indriasari, H. Prabowo, F. L. Gaol, B. Purwandari, and et al., (2022)** "Adoption of Design Thinking, Agile Software Development and Co-creation: A Qualitative Study towards Digital Banking Innovation Success" Digitalization in the financial sector challenges banking institutions to develop new methods of innovation processes by incorporating current concepts such as design thinking (DT), agile software development (ASD), and co-creation. This qualitative study is based on empirical research conducted at three Indonesian banks. Semi- structured interviews with three IT executives and a questioner of 31 middle managers participating in digital banking efforts were used to gather data. A Systematic Literature Review based on Kitchenheim processes generates keywords in the VOS Viewer software. NVIVO 12 qualitative software is employed to aid data analysis for illustrating the process integration. The research's contribution is identified, including process integration, obstacles, potential solutions, and enhanced framework on adopting DT, ASD, and Co-creation.

**R. Arjun, K. Abisek, and K. Subrabha, (2021)** "Developing banking intelligence in emerging markets: Systematic review and agenda" The current banking industry is heavily dependent on technological artifacts supported by intelligent systems for performance on operational and marketing parameters. However, the attributes for enabling practice between such technological interfaces with managerial adoption are been lagging creating a knowledge gap. To address this, present research surveys the prior work from 1970 to 2020 on intelligent decision support models specific to banking. Subsequently, findings are synthesized on quadrant outcomes; technology; employees, customers, and organizations for service ecosystems. In addition, the managerial perceptions of technology on work are captured through short survey. Finally, scope of advancements like big data, internet of things (IOT), virtual reality (VR) along other untapped conceptual relationships into this framework are discussed.

Y. Shen, C. J. Hueng, and W. Hu, (2020) "Using digital technology to improve financial inclusion in China" We investigate the channels through which financial inclusion can be achieved in China. The Partial Least Squares approach to Structural Equation Modelling is used to analyse the relationships among financial literacy, Internet usage, digital financial products usage, and financial inclusion. We show that Internet usage has no direct impact on financial inclusion. Rather, the direct impact comes from the level of financial literacy and the use of digital financial products, which are advanced by popularity of the Internet. Internet usage and digital financial products usage play a multiple mediation role between financial literacy and financial inclusion. We conclude that to achieve the goal of advancing financial inclusion, Chinese policymakers should improve the consumers' financial literacy and promote the use of digital financial products.

## 4. ANALYSIS

#### 4.1 PERCENTAGE ANALYSIS

| Particular                      | Frequency | Percentage |  |  |  |
|---------------------------------|-----------|------------|--|--|--|
| Bank Account                    |           |            |  |  |  |
| Current                         | 18        | 18%        |  |  |  |
| Savings                         | 65        | 65%        |  |  |  |
| Fixed Deposit                   | 10        | 10%        |  |  |  |
| Others                          | 7         | 7%         |  |  |  |
| Awareness about type of Service |           |            |  |  |  |
| Internet Banking                | 42        | 42%        |  |  |  |
| Mobile Banking                  | 62        | 62%        |  |  |  |
| ATM                             | 70        | 70%        |  |  |  |
| Debit/Credit Card               | 54        | 54%        |  |  |  |
| Electronic Fund Transfer        | 21        | 21%        |  |  |  |

| Others   | 10 | 10%  |  |  |  |
|--|----|------|--|--|--|
| Opinion about money transfer offered by E-Banking                      |    |      |  |  |  |
| Excellent  | 34 | 34%  |  |  |  |
| Good   | 45 | 45%  |  |  |  |
|  | 10 | 100/ |  |  |  |
| Average  | 18 | 18%  |  |  |  |
| Bad  | 2  | 2%   |  |  |  |
| Very Bad   | 1  | 1%   |  |  |  |
| Frequency of using Digital Banking                                     |    |      |  |  |  |
| Daily  | 23 | 23%  |  |  |  |
| Weekly   | 47 | 47%  |  |  |  |
| Monthly  | 24 | 24%  |  |  |  |
| Half Yearly  | 6  | 6%   |  |  |  |
| Respondents Satisfied with Banks Up-To-Date Technologies and Equipment |    |      |  |  |  |
| Yes  | 74 | 74%  |  |  |  |
| No   | 26 | 26%  |  |  |  |

## Source: Primary data INTREPRETATION

The above table shows that 65% of the Respondents are using savings account, 70% of the Respondents are using ATM, 45% of the Respondents says Good about money transfer offered by E-Banking, 47% of the Respondents are using Digital Banking weekly and 74% of the Respondents are Satisfied with Banks Up-To-Date Technologies and Equipment.



#### CHART SHOWING RESPONDENTS BANK ACCOUNT



#### CHART SHOWING RESPONDENTS AWARENESS ABOUT TYPE OF SERVICE

#### 4.2 CHI – SQUARE TEST

## RELATIONSHIP OF EDUCATION QUALIFICATION & USING INTERNET BANKING BECAUSE OF ITS 24/7 AVAILABILITY

|                            | LEVELS            |       |         |          |                      |    |
|----------------------------|-------------------|-------|---------|----------|----------------------|----|
| EDUCATION<br>QUALIFICATION |                   |       |         |          | TOTAL                |    |
| & 24/7<br>AVAILABILITY     | STRONGLY<br>AGREE | AGREE | NEUTRAL | DISAGREE | STRONGLY<br>DISAGREE |    |
| Higher Education           | 4                 | 1     | 3       | 0        | 0                    | 8  |
|                            |                   |       |         |          |                      |    |
| Under Graduate             | 22                | 22    | 13      | 5        | 1                    | 63 |
|                            |                   |       |         |          |                      |    |
| Post Graduate              | 4                 | 6     | 5       | 0        | 1                    | 16 |
|                            |                   |       |         |          |                      |    |
| Professional               | 5                 | 4     | 3       | 1        | 0                    | 13 |
|                            |                   |       |         |          |                      |    |
| Professional               | 5                 | 4     | 3       | 1        | 0                    | 13 |

Source: Primary data

Chi-Square Value  $x^2$  =  $\sum$  (O-E)  $^2$  / E

= 0.072915

Degree of freedom = (row-1) (column-1)

= (4-1) (5-1)

= (3) (4)

= 12

Significance Level = 0.05 Table Value = 21.026

X 2 Calculated Value > X2 Tabular Value

## HYPOTHESIS

H0 There is no significant relationship between Education Qualification & Using Internet Banking because of its 24/7 Availability.

#### INTREPRETATION

In the above analysis the calculated value (0.072915) is lower than the table value (21.026) at the level of 0.05 significance. Hence there is no significant relationship between Education Qualification & Using Internet Banking because of its 24/7 Availability.

#### 4.3 RANK ANALYSIS

#### RANKING FOR OVERALL SATISFACTION USING INTERNET BANKING SERVICE

| RANKING FOR  | I EVELS |    |    |   | TOTAL | RANK |    |
|--|---------|----|----|---|-------|------|----|
| SATISFACTION<br>USING INTERNET<br>BANKING<br>SERVICE                                     | 1       | 2  | 3  | 4 | 5     |      |    |
| I think using Internet<br>banking saves my time  | 54      | 20 | 19 | 2 | 5     | 184  | V  |
| I can carry out my<br>banking operations easily<br>using mobile banking                  | 12      | 65 | 15 | 4 | 4     | 223  | II |
| I am happy with the User<br>Interface of mobile<br>banking                               | 27      | 35 | 29 | 7 | 2     | 222  | Ш  |
| I trust the network<br>connectivity while doing<br>a transaction using mobile<br>Banking | 16      | 56 | 16 | 9 | 3     | 227  | I  |
| I find Internet banking<br>cost effective as compare<br>to visiting banks                | 46      | 25 | 18 | 6 | 5     | 199  | IV |

#### Source: Primary data INTERPRETATION

The above table depicts that the level of the customers using internet banking that the highest rank towards "I trust the network connectivity while doing a transaction using mobile banking", Second rank towards "I can carry out my banking operations easily using mobile banking",

Third rank towards "I am happy with the User Interface of mobile banking', Fourth towards "I find Internet banking cost effective as compare to visiting banks", Fifth towards "I think using Internet banking saves my time".

### **5.1 FINDINGS**

- 1. Majority of 50% of the Respondents age between 18 20.
- 2. Majority of 51% of the Respondents are Female.
- 3. Majority of 63% of the Respondents are Under Graduate.
- 4. Majority of 73% of the Respondents Students.
- 5. Majority of 78% of the Respondents are Unmarried.
- 6. Most of the 43% of the Respondents are in urban area.
- 7. Majority of 65% of the Respondents has Savings account.
- 8. Majority of 70% of the Respondents are aware about ATM.
- 9. Majority of 83% of the Respondents says Online Banking are Safe.
- 10. Most of the 47% of the Respondents use Digital Banking weekly.
- 11. Majority of 86% of the Respondents says it is easy to use new technologies offered by banks.
- 12. Majority of 88% of the Respondents says yes for proper security for E-Banking.
- 13. Majority of 80% of the Respondents says yes for ATM facility satisfaction.

- 14. Majority of 74% of the Respondents says yes for bank up -to-date technologies and equipment.
- 15. Majority of 79% of the Respondents says yes for satisfied with the charges fixed for the facilities offered by banks.

#### **5.2 SUGGESTIONS**

- 1. The Banks has to give more awareness to customers with age group of 31-40.
- 2. Near to 50% of respondents are not using Internet Banking Daily. Bank has to improve their technologies day by day.
- 3. Banks has to improve service quality towards customers with reduced cost.
- 4. Banks has to improve service quality towards rural areas.
- 5. Majority of E-Banking customers are using savings account, Bank has to popularize their current account and fixed deposit account through information technology.
- 6. Bank has to popularize their E-Banking services offered for customers.

#### **5.3 CONCLUSION**

The study focus on the role of information technology in banking sector. Majority of respondents are now using e-banking services. Technology is one among the foremost factor of human beings. Customers are started using e-banking made their banking transactions easy. Respondents rated E-Banking as good after computerization. Customers feeling safety about their transactions. Bank also changed their approach from conventional banking to convenient banking. There is also need to maintain e-banking services easy as possible. IT enabled better market infrastructure, implementation of reliable technique for control of risk and help the financial intermediaries to reach geographically distant and diversified markets. But IT can be fully useful only if they enable to meet the challenges in the present environment. There is also need to maintain privacy and confidentiality of data's. Another important responsibility is to ensure that the data is only used for the purpose intended. For this there is a need to implement IT and other cyber laws properly. This will ensure the developmental role of IT in banking industry.

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