

# Analysis Of Customer Adoption of Digital Banking Channels

M Selva Guru<sup>1</sup>, Dr. R Senthil Kumar<sup>2</sup>

<sup>1</sup>Student; School of Management Studies Vels Institute Science And Technology Advance Studies Vistas  
Pallavaram Chennai, India.

<sup>2</sup>Assistant Professor; Department of Management Studies Vels Institute Science And Technology Advance  
Studies Vistas Pallavaram Chennai, India.

ORCHID ID: 0009-0006-7408-1861

## **Abstract:**

*The rapid growth of digital technology has significantly transformed the banking sector, leading to increased adoption of digital banking channels such as mobile and internet banking. This study explores the factors influencing customer adoption of these platforms, focusing on convenience, ease of use, security perceptions, and technological awareness. With the widespread use of smartphones and internet connectivity, customers are increasingly shifting from traditional banking methods to digital alternatives that offer faster, more accessible, and cost-effective services.*

**Keywords:** Digital Banking, Mobile Banking, Internet Banking, Customer Adoption, Security, Customer Awareness, Online Banking, Digital Payment Services, Banking Technology, Customer Satisfaction.

## **INTRODUCTION**

The banking industry has experienced a major transformation over the last decade due to rapid technological advancements and increasing digitalization. Traditionally, banking activities such as fund transfers, account inquiries, bill payments, and loan applications required customers to visit bank branches physically. These conventional banking methods consumed considerable time and often involved lengthy procedures and paperwork. However, the introduction of digital banking services has significantly changed the way financial transactions are conducted.

Digital banking refers to the use of electronic platforms such as mobile banking applications, internet banking portals, Automated Teller Machines (ATMs), digital wallets, and online payment systems to provide banking services to customers. Customers can now access their accounts, transfer money, pay utility bills, apply for loans, and monitor transactions at any time and from any location using smartphones or computers. This has increased convenience, speed, and accessibility in banking operations.

The growth of smartphones, affordable internet services, and improved telecommunication infrastructure has played a major role in increasing the adoption of digital banking. Government initiatives such as Digital India, Unified Payments Interface (UPI), Aadhaar-enabled services, and cashless economy programs have further accelerated digital transaction usage in India. Banks are also investing heavily in digital platforms to improve customer experience, reduce operational costs, and remain competitive in the financial market.

Digital banking provides numerous benefits to customers and banks alike. Customers benefit from faster transactions, 24/7 service availability, reduced waiting time, and improved accessibility. Banks benefit through

reduced operational costs, better customer engagement, and increased efficiency. Digital banking also supports financial inclusion by enabling banking services to reach remote and rural areas where physical banking infrastructure may be limited.

Despite these advantages, several challenges continue to affect the adoption and usage of digital banking services. Security concerns such as online fraud, phishing attacks, hacking, identity theft, and unauthorized transactions create fear among customers. Technical issues such as poor internet connectivity, application failures, and server downtime also affect customer satisfaction. In addition, some customers, especially elderly individuals and rural populations, may lack digital literacy and confidence in using digital banking platforms.

Customer trust and awareness therefore play a crucial role in determining the success of digital banking services. Banks must focus on improving security systems, providing customer education, and ensuring user-friendly interfaces to encourage greater adoption of digital banking technologies. Understanding customer behavior, satisfaction levels, preferences, and concerns is therefore important for improving digital banking services and enhancing customer experience.

This study aims to analyze customer awareness, usage patterns, preferences, satisfaction, and factors influencing the adoption of digital banking services such as mobile banking and internet banking. The study also examines customer concerns regarding security and compares preferences between traditional banking and digital banking systems.

## RESEARCH METHODOLOGY

Research methodology refers to the systematic process used to collect, analyze, and interpret data for achieving the objectives of a study. It provides a structured approach for conducting research and ensures accuracy, reliability, and validity in the findings. The methodology adopted in this study helps in understanding customer behavior, awareness, satisfaction, and preferences regarding digital banking services.

### Research Design

The research design used in this study is descriptive in nature. Descriptive research helps in describing and analyzing customer opinions, attitudes, preferences, and behavior related to digital banking services such as mobile banking and internet banking. This type of research design is suitable because the study aims to understand existing customer experiences and identify the factors influencing the adoption of digital banking.

The descriptive research design enables the researcher to collect data in a systematic manner and present meaningful interpretations regarding customer usage patterns, awareness levels, satisfaction, and security concerns. It also helps in identifying trends and relationships among different variables related to digital banking adoption.

### Nature of the Study

The study is analytical and empirical in nature as it involves the collection and analysis of real-time data from banking customers. The research focuses on evaluating customer experiences and understanding the practical issues faced while using digital banking services.

### Sources of Data

The study uses both primary data and secondary data sources for obtaining relevant information.

### Primary Data

Primary data refers to first-hand information collected directly from respondents for the specific purpose of the study. In this research, primary data was collected from customers using structured questionnaires.

- The questionnaire included questions related to customer awareness, frequency of usage, preferred digital banking services, satisfaction levels, ease of use, convenience, trust, and security concerns.
- The survey was conducted through both online and offline methods. Online data collection was carried out using Google Forms, while offline data was collected through direct interaction with respondents.
- The use of questionnaires helped in obtaining quantitative data that could be analyzed statistically.
- Primary data collection enabled the researcher to understand actual customer opinions and experiences regarding digital banking services.

### Secondary Data

Secondary data refers to information collected from already existing sources. In this study, secondary data was obtained from various reliable sources such as:

- Bank websites
- Research journals
- Published articles
- RBI reports
- Books and online publications
- Previous research studies related to digital banking

Secondary data helped in understanding the background of digital banking, recent technological developments, customer adoption trends, and industry statistics. It also supported the interpretation of primary research findings and improved the overall reliability of the study.

### Sampling Method

The study adopted a convenient sampling method for selecting respondents. Customers who use banking services and were easily accessible to the researcher were included in the survey. Convenience sampling helped in collecting data quickly and efficiently within the available time and resources.

### Sample Size

The sample consisted of customers from different age groups, occupations, educational backgrounds, and income levels. The responses collected from participants formed the basis for analysis and interpretation.

### Data Collection Tools

The main research instrument used for collecting data was a structured questionnaire. The questionnaire contained both closed-ended and multiple-choice questions to obtain accurate responses from customers.

The questionnaire focused on areas such as:

- Awareness of digital banking services
- Frequency of mobile banking and internet banking usage
- Customer satisfaction levels
- Ease of use and convenience
- Security concerns and trust
- Preference between traditional banking and digital banking

### **Limitations of the Study**

- The study is limited to a specific sample of respondents and may not represent the opinions of all banking customers.
- Some respondents may not have provided completely accurate information due to lack of awareness or personal bias.
- The study focuses mainly on digital banking services such as mobile banking and internet banking and may not cover all financial technologies.
- Time and resource limitations restricted the size of the sample and geographical coverage of the study.

### **REVIEW OF LITERATURE**

The review of literature provides an understanding of previous studies and research findings related to digital banking adoption, customer behavior, trust, technology acceptance, and satisfaction. Various researchers have studied the factors influencing customer acceptance and usage of digital banking services.

#### **Davis (1989) – Technology Acceptance Model (TAM)**

Davis introduced the Technology Acceptance Model (TAM), which explains that people adopt new technologies mainly based on two important factors: perceived usefulness and perceived ease of use. According to the study, customers will use digital banking services if they believe that such services improve their banking efficiency and are simple to operate. In the context of digital banking, customers prefer applications that save time, reduce effort, and provide convenience. The model highlights that user-friendly interfaces and easy navigation increase customer acceptance of digital banking technologies.

#### **Venkatesh et al. (2003) – Unified Theory of Acceptance and Use of Technology (UTAUT)**

Venkatesh and his colleagues proposed the Unified Theory of Acceptance and Use of Technology (UTAUT), which explains the factors influencing technology adoption. The study identified performance expectancy, effort expectancy, social influence, and facilitating conditions as key factors affecting technology usage. In digital banking, customers are more likely to adopt online banking services if they believe the technology is useful, easy to use, socially accepted, and supported by proper infrastructure and guidance. The study emphasized the importance of technical support and customer assistance in increasing adoption rates.

#### **Gefen et al. (2003) – Trust and Security in Online Banking**

Gefen and his co-authors highlighted the importance of trust in e-commerce and internet banking services. According to the study, customers will use digital banking only when they feel that their financial information and personal data are secure. Trust plays a major role in reducing customer fear regarding online fraud, hacking, and unauthorized transactions. The study concluded that strong security measures, privacy protection, and reliable banking systems are essential for increasing customer confidence in digital banking platforms.

#### **Pikkarainen et al. (2004) – Awareness and Customer Knowledge**

Pikkarainen and his colleagues found that customer awareness and knowledge significantly influence the adoption of internet banking services. Customers who are familiar with digital banking technologies and understand their benefits are more likely to use online banking systems. The study emphasized that banks should conduct awareness programs, customer education initiatives, and training sessions to improve digital banking adoption among customers.

The literature review indicates that factors such as convenience, ease of use, trust, awareness, security, and technological support strongly influence customer adoption of digital banking services. Previous studies also suggest that improving customer education and security measures can significantly increase customer satisfaction and digital banking usage.

## OBJECTIVES OF THE STUDY

### Primary Objective

- To study customer awareness, usage patterns, preferences, and satisfaction regarding digital banking services such as mobile banking and internet banking.

### Secondary Objectives

- To study how customers use digital banking services like mobile banking and internet banking.
- To understand how aware customers are about digital banking and how they learned about these services.
- To examine customer usage patterns, preferences, and frequency of using digital banking.
- To identify the main factors that encourage or affect the use of digital banking, such as convenience, ease of use, trust, and accessibility.
- To understand customer concerns regarding security, privacy, and technical issues in digital banking services.
- To compare customer preference between traditional banking and digital banking systems.
- To analyze customer satisfaction levels regarding digital banking services provided by banks.

## DATA COLLECTION

### Primary Data

Primary data was collected directly from banking customers using a structured questionnaire. The survey was conducted both online and offline to obtain responses from a wider group of participants. Google Forms were used for online surveys, while direct interactions were conducted for offline data collection.

The questionnaire included questions related to awareness, frequency of use, convenience, security, satisfaction, trust, and customer preferences regarding digital banking services. The primary data helped in understanding actual customer experiences and opinions about digital banking technologies.

### Secondary Data

Secondary data was collected from reliable sources such as bank websites, research journals, RBI reports, articles, books, and online publications. This data provided information regarding the growth of digital banking, customer adoption trends, technological developments, and challenges faced by the banking sector. Secondary data also supported the interpretation and validation of primary research findings.

## DATA ANALYSIS AND INTERPRETATION

The collected data was analyzed using various statistical tools and techniques to interpret customer responses accurately. The analysis helped in understanding customer behavior, satisfaction levels, awareness, and factors influencing digital banking adoption.

### Percentage Analysis

Percentage analysis was used to classify and summarize customer responses regarding digital banking awareness, usage frequency, customer preferences, and satisfaction levels. This method helped in presenting data in a simple

and understandable format. Percentage analysis provided clear insights into the number of customers using mobile banking, internet banking, and other digital financial services.

**ANOVA (Analysis of Variance)**

ANOVA was used to determine whether significant differences existed between different customer groups based on factors such as age, education, occupation, and frequency of digital banking usage. This analysis helped in identifying whether customer opinions and satisfaction levels varied across different demographic categories.

**Correlation Analysis**

Correlation analysis was used to study the relationship between variables such as customer awareness, ease of use, trust, satisfaction, and digital banking adoption. The analysis helped in identifying whether factors such as convenience and security positively influence customer usage of digital banking services.

**Interpretation of Data**

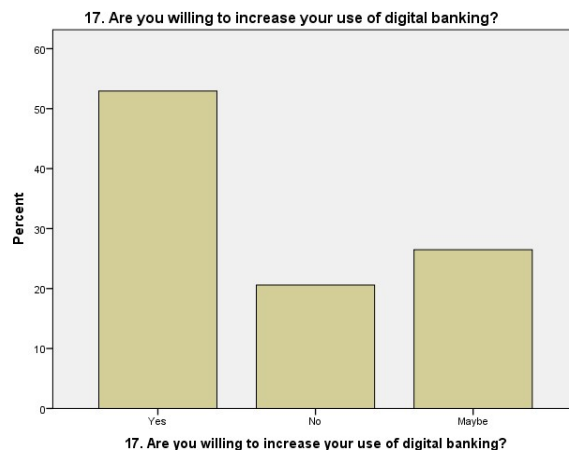
The analyzed data was presented using tables, charts, and graphical representations for easy understanding. The interpretation of data revealed customer behavior patterns, awareness levels, satisfaction, trust factors, and concerns regarding digital banking services. The findings also helped in identifying major factors encouraging customers to adopt digital banking technologies and the challenges affecting customer confidence.

**Willingness to Increase Usage of Digital Banking Services**

**Interpretation:**

The results show that most customers are interested in increasing their use of digital banking services. The positive values indicate a favourable attitude towards digital banking adoption in the future.

Response	Value	Relationship
Yes	0.529	Positive
No	0.206	Weak
Maybe	0.265	Moderate
Final Value	1.000	Overall Correlation



**Limitations of the Study:**

- The study is based on 102 respondents, which may not fully represent all bank customers
- Even though a stratified sampling method is used, there may be some limitations in selecting respondents, which can affect the results.
- The study is limited to a specific geographical area, so the findings may not apply to other regions.

**Findings and Suggestions****Findings:**

- The majority of the people surveyed belong to the younger age group (18-25), indicating greater acceptance of digital banking by youth.
- The majority favors mobile banking applications over other methods.
- Digital banking is primarily used by customers for money transfer and paying bills.

**REFERENCES**

1. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.  
Link: <https://www.jstor.org/stable/249008>
2. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.  
Link: <https://www.jstor.org/stable/30036540>
3. Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.  
Link: <https://books.google.com/books?id=9U1K5LjUOwEC>
4. Soti, P. (2026). Data, Trust, and Transformation: Reimagining Business through FinTech. *Minnesota Journal of Business Law and Entrepreneurship*, (1s), 70-76.
5. Joshi, G., Gour, P.N., Soti, P., Aggarwal, A., Singh, H., Gupta, S.K. (2023). Factors Influencing Behavioural Intentions Towards Investment in Cryptocurrency: A Study on Generation Z Female of India. In: Kulkarni, A.J., Mirjalili, S., Udgata, S.K. (eds) *Intelligent Systems and Applications. Lecture Notes in Electrical Engineering*, vol 959. Springer, Singapore.