

## Chapter 4

## Research Methodology



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## **4.1 INTRODUCTION**

Introduction Research is a systematic and organized effort to investigate a specific problem or phenomenon, aiming to discover new facts, verify existing knowledge, or develop new theories. It plays a vital role in the advancement of knowledge across disciplines and provides a foundation for informed decision-making and policy development. In essence, research involves a careful and structured process of inquiry that is driven by curiosity, observation, and the desire to understand the underlying causes or patterns associated with a particular issue.

At its core, research is both an art and a science—it involves creativity in formulating hypotheses and solutions, and it requires scientific rigor in collecting, analyzing, and interpreting data. The essence of research lies in its systematic approach, which includes identifying a research problem, reviewing existing literature, designing the study, gathering relevant data, analyzing the results, and drawing valid conclusions.

Research methodology refers to the framework and techniques used to conduct research in a logical and consistent manner. It outlines the procedures and tools applied to gather and evaluate data, ensuring the credibility and reliability of findings. A clear understanding of research methodology is essential not only for conducting research efficiently but also for interpreting and applying research results meaningfully.

## **4.2 MEANING AND DEFINITION OF RESEARCH:**

### **What is Research?**

Research is a structured and systematic process undertaken to gain new knowledge, clarify existing understanding, or solve specific problems. It is an intellectual inquiry that involves the collection, organization, and analysis of information to increase our comprehension of a subject or phenomenon. The term "research" is derived from the French word *recherche*, meaning "to search again," which highlights its nature as a repetitive and thorough pursuit of truth.

In academic and professional contexts, research serves as a foundation for knowledge development, innovation, and informed decision-making. It may be theoretical or applied, qualitative or quantitative, depending on the nature of the problem and the objectives of the investigation. Research can take various forms—such as surveys,

experiments, case studies, or observational studies—but all forms are guided by a disciplined and logical approach.

The primary aim of research is not just to gather information but to generate meaningful insights, test hypotheses, establish facts, and draw conclusions that contribute to the broader understanding of a subject. It helps in validating assumptions and theories through empirical evidence and logical reasoning.

Therefore, research is not merely about finding information, but about evaluating it critically, interpreting it in context, and applying it purposefully. It is a continuous and evolving process that builds upon existing knowledge and paves the way for future exploration.

### **Definitions of Research:**

- **Clifford Woody (1924)**

“Research comprises defining and redefining problems, formulating hypotheses or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulated hypothesis.”

- **C.R. Kothari (2004)**

“Research is a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation.”

- **Ranjit Kumar (2011)**

“Research is a process of collecting, analyzing and interpreting information to answer questions. But to qualify as research, the process must have certain characteristics: it must be controlled, rigorous, systematic, valid and verifiable, empirical and critical.”

### **4.3 WHAT MAKES PEOPLE DO RESEARCH?**

People engage in research for various reasons, often driven by curiosity, problem-solving needs, and a desire to contribute to knowledge and society.

- **Curiosity and Knowledge Seeking:** A natural urge to explore, question, and understand the world.
- **Problem Solving:** To find solutions to real-world issues in fields like health, business, and technology.
- **Scientific and Technological Progress:** To innovate, discover new ideas, and improve existing methods.
- **Career and Professional Growth:** To gain recognition, publish work, and build expertise in a field.
- **Meeting Societal and Organizational Needs:** To support development, policies, and decision-making.
- **Validating or Challenging Existing Knowledge:** To confirm or revise current theories and assumptions.
- **Personal Fulfilment:** For intellectual satisfaction and the joy of discovery.
- **Influencing Policy and Practice:** To drive meaningful change in society, education, or governance.

#### 4.4 OBJECTIVES OF RESEARCH:

The objectives of research represent the specific goals or purposes that guide a research study. These objectives provide a clear direction and help in structuring the entire research process. By defining what the researcher aims to achieve, they ensure that the study remains focused, relevant, and methodologically sound.

**The major objectives of research include:**

- **To Explore New Knowledge:** One of the primary objectives of research is to discover new facts, principles, or relationships that expand the existing body of knowledge.
- **To Understand and Explain Phenomena:** Research aims to investigate the underlying reasons and causes behind certain behaviors, trends, or events in a systematic manner.
- **To Test Hypotheses:** Research provides a platform to verify assumptions or theories using empirical data and scientific methods.

- **To Identify and Solve Problems:** Research often seeks to address specific practical or theoretical problems by finding workable and evidence-based solutions.
- **To Support Decision-Making:** Research plays a crucial role in policy-making, planning, and strategic decisions by offering accurate and relevant data.
- **To Develop New Tools and Techniques:** Through experimentation and analysis, research helps in the innovation and refinement of tools, procedures, and technologies.
- **To Predict Future Trends:** Research also aims to anticipate future developments based on current data and patterns, especially in dynamic fields.
- **To Promote Critical Thinking:** Research encourages logical reasoning, objective analysis, and scientific inquiry, contributing to a more thoughtful and informed society.

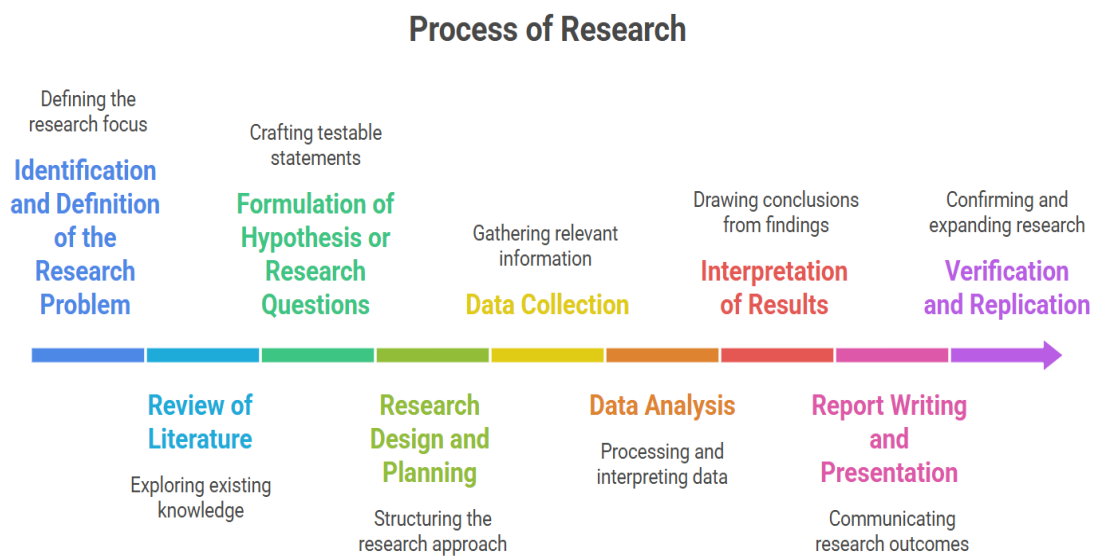
#### 4.5 CHARACTERISTICS OF RESEARCH:

Research is a disciplined and methodical process aimed at discovering new knowledge or validating existing information. It possesses distinct features that differentiate it from ordinary inquiry or casual investigation. These characteristics ensure that research is reliable, valid, and useful for furthering understanding in any field.

- **Systematic:** Research follows a planned and organized approach with clear steps.
- **Logical:** It applies sound reasoning and coherent methods throughout the study.
- **Empirical:** Research is grounded in observable and measurable evidence.
- **Replicable:** The study can be repeated with the same results by other researchers.
- **Objective:** Research maintains impartiality, avoiding personal biases.
- **Analytical:** It involves careful examination and breakdown of data to understand relationships.
- **Critical:** Research critically assesses information and existing theories.
- **Innovative:** It aims to generate new ideas, facts, or solutions.
- **Cyclical:** Research is an ongoing process that often leads to new questions and further studies.

## 4.6 PROCESS OF RESEARCH:

The process of research involves a series of systematic steps designed to ensure that the study is carried out in a logical and organized manner. Each step is essential to maintain the accuracy, validity, and reliability of the findings. Though the specific details may vary depending on the research area and methodology, the fundamental stages of the research process are generally as follows:



(Figure 4.1: Process of Research)

(Source: <https://www.iedunote.com/research-process/>)

- **Identification and Definition of the Research Problem**

The first step is to clearly identify and define the problem or question that the research aims to address. A well-defined problem sets the direction and scope of the study and ensures that the research is focused and relevant. This involves reviewing existing knowledge, observing gaps, and formulating the problem statement precisely.

- **Review of Literature**

A thorough review of existing literature related to the research topic helps in understanding what has already been studied, identifying gaps, and refining the research problem. This step also helps in building a theoretical framework and developing hypotheses or research questions.



- **Formulation of Hypothesis or Research Questions**

Based on the literature review and problem definition, the researcher formulates hypotheses or research questions that guide the investigation. Hypotheses are testable statements predicting relationships between variables, while research questions seek to explore specific aspects of the problem.

- **Research Design and Planning**

This stage involves deciding on the overall approach and methods for conducting the research. It includes selecting the research type (qualitative, quantitative, or mixed), determining data collection techniques, sampling methods, and tools to be used. A well-planned research design ensures that the study is efficient and capable of answering the research questions.

- **Data Collection**

Data is gathered according to the chosen methodology through various means such as surveys, interviews, experiments, observations, or secondary sources. Accuracy and reliability in data collection are critical for producing valid results.

- **Data Analysis**

After data collection, the researcher processes and analyzes the information using statistical tools or qualitative techniques. The analysis helps in identifying patterns, relationships, and trends that answer the research questions or test the hypotheses.

- **Interpretation of Results**

The researcher interprets the analyzed data to derive meaningful conclusions. This step involves relating findings to the initial problem, theoretical framework, and existing literature, assessing their implications, and acknowledging any limitations.

- **Report Writing and Presentation**

The final step is to document the entire research process, findings, conclusions, and recommendations in a clear, structured report or thesis. Effective presentation ensures that the research contributes to the wider body of knowledge and can be understood and utilized by others.

- **Verification and Replication**

In some cases, the research findings are verified through peer review, and other researchers may replicate the study to confirm the results, strengthening the credibility of the research.

## **4.7 IMPORTANCE OF RESEARCH**

Research is essential for the progress of knowledge, innovation, and societal development. It plays a crucial role across academic, social, economic, and technological domains.

- **Expands Knowledge:** Helps uncover new facts, refine theories, and deepen understanding.
- **Supports Decision-Making:** Provides evidence for effective policies, strategies, and planning.
- **Solves Problems:** Identifies challenges and develops practical, sustainable solutions.
- **Drives Innovation:** Fuels technological advancements and boosts economic growth.
- **Improves Education:** Enhances teaching, learning, and academic inquiry.
- **Builds Skills:** Develops critical thinking, analysis, and problem-solving abilities.
- **Promotes Social Understanding:** Offers insights into societal and cultural dynamics.
- **Encourages Sustainability:** Guides eco-friendly and responsible development practices.
- **Boosts Global Competitiveness:** Enables international collaboration and scientific exchange.
- **Fosters Personal Growth:** Enhances professional knowledge and lifelong learning.

## **4.8 PROBLEM OF RESEARCH:**

The exponential rise in online banking in India has revolutionized the financial services landscape, offering convenience, speed, and accessibility to a wide range of customers.

Despite this nationwide digital transformation, the nuanced differences in customer satisfaction across public and private sector banks remain underexplored, especially within specific regional contexts like Gujarat. While metropolitan cities receive considerable research focus, Tier-II and Tier-III cities such as Ahmedabad, Rajkot, Bhavnagar, Surat, and Baroda—despite being key contributors to the state’s banking footprint—are often overlooked in scholarly investigation.

A significant research gap exists in understanding how customers from diverse demographic backgrounds in these cities perceive online banking services and how factors such as service quality, security, responsiveness, ease of use, and reliability affect their satisfaction levels. Furthermore, with the increasing reliance on digital platforms post-pandemic, it becomes imperative to assess whether public sector banks are able to match the agility and service innovation demonstrated by their private counterparts.

This study addresses the lack of region-specific, comparative analysis on online banking satisfaction between public and private sector banks in Gujarat. By identifying key satisfaction drivers, demographic influences, and existing service gaps, this research aims to generate actionable insights for policy makers, banking institutions, and digital strategists.

The statement of the problem for this research is:

***“An Analytical Study on Customer Satisfaction towards Online Banking Services for Selected Public Sector and Private Sector Banks: Special Reference to Gujarat State.”***

#### **4.9 OBJECTIVES OF RESEARCH TITLE:**

In the rapidly evolving digital banking environment, understanding customer satisfaction with online banking services has become critical for banks aiming to retain and expand their customer base. This study aims to explore the various dimensions that shape customer satisfaction and identify specific areas where banks can improve their online offerings. By focusing on selected public and private sector banks in Gujarat, the research seeks to provide insights that are relevant to the regional banking landscape while contributing to the broader knowledge on online banking services.

**The objectives of the study are as follows:**

1. To analyze the impact of demographic variables on customer satisfaction with online banking.
2. To identify the key factors influencing customer satisfaction with online banking services in selected public and private sector banks.
3. To compare the level of customer satisfaction between public sector and private sector banks in Gujarat regarding their online banking services.
4. To examine common challenges and issues faced by customers while using online banking services in both sectors.
5. To recommend strategies for enhancing customer satisfaction with online banking services based on empirical findings.

**4.10 HYPOTHESIS OF RESEARCH:**

Once the research problem has been clearly identified, the next step typically involves formulating a hypothesis. A hypothesis is a testable statement that suggests a potential relationship between two or more variables, or offers a proposed explanation for an observable phenomenon in a scientific context. It reflects the researcher's prediction of the expected outcome of the study and provides a foundation for empirical testing. This process of validating or refuting the hypothesis forms the core of the scientific method.

In hypothesis testing, two complementary statements are used: the null hypothesis ( $H_0$ ) and the alternative hypothesis ( $H_1$ ). The null hypothesis generally asserts that no significant relationship exists between the variables under investigation. It serves as the default or baseline assumption and is tested with the intent of being rejected or disproved through statistical analysis.

**The null hypothesis ( $H_0$ )** typically states that the values of population parameters such as the mean or standard deviation are equal to specific hypothesised values. It implies no statistically significant difference between the variables. The researcher's objective is to collect sufficient evidence to reject this assumption.

**The alternative hypothesis ( $H_1$ )** on the other hand, suggests that a population parameter is either less than, greater than, or different from the hypothesised value stated in the null hypothesis. It asserts that a statistically significant difference does

exist between the variables. In essence, the alternative hypothesis is the logical opposite of the null hypothesis and represents what the researcher aims to prove.

**Null Hypotheses ( $H_0$ ):**

- There is no significant relationship between the key factors influencing customer satisfaction and overall satisfaction with online banking services in selected public and private sector banks.
- There is no significant difference in the level of customer satisfaction between public sector banks and private sector banks regarding their online banking services in Gujarat.
- There is no significant impact of demographic variables (such as age, income, education, and location) on customer satisfaction with online banking services.
- There is no significant difference in the common challenges and issues faced by customers of public sector and private sector banks while using online banking services.
- Implementing recommended strategies does not significantly enhance customer satisfaction with online banking services.

**Alternative Hypotheses ( $H_1$ ):**

- There is a significant relationship between the key factors influencing customer satisfaction and overall satisfaction with online banking services in selected public and private sector banks.
- There is a significant difference in the level of customer satisfaction between public sector banks and private sector banks regarding their online banking services in Gujarat.
- Demographic variables (such as age, income, education, and location) have a significant impact on customer satisfaction with online banking services.
- There is a significant difference in the common challenges and issues faced by customers of public sector and private sector banks while using online banking services.
- Implementing recommended strategies significantly enhances customer satisfaction with online banking services.

**To test the above objectives the following hypothesis was formulated:**

**Objective 1:** To analyze the impact of demographic variables on customer satisfaction with online banking.

**Hypothesis-1 ( $H_0$ ): Impact of Demographic Variables on Customer Satisfaction**

H <sub>1.1</sub>	There is no significant difference in customer satisfaction between the different age groups.
H <sub>1.2</sub>	There is no significant difference in customer satisfaction between the different monthly household income groups.
H <sub>1.3</sub>	There is no significant difference in customer satisfaction between the different Educational Qualification groups.
H <sub>1.4</sub>	There is no significant difference in customer satisfaction between the different City of Residence groups.
H <sub>1.5</sub>	There is no significant difference in customer satisfaction levels between genders.
H <sub>1.6</sub>	There is no significant difference in customer satisfaction levels between Duration of Online Banking Usage groups.

(Table 4.1: Impact of Demographic Variables on Customer Satisfaction)

(Source: Self Constructed)

**Objective 2:** To identify the key factors influencing customer satisfaction with online banking services in selected public and private sector banks.

**Hypothesis( $H_0$ ) - 2: Factors Influencing Customer Satisfaction**

H <sub>2.1</sub>	There no significant relationship between the perceived convenience and time-saving aspects of online banking and overall customer satisfaction.
H <sub>2.2</sub>	There no significant relationship between the User Friendliness of Mobile app/website and overall customer satisfaction.
H <sub>2.3</sub>	There no significant relationship between the Transaction Efficiency of online banking and overall customer satisfaction.
H <sub>2.4</sub>	There no significant relationship between the Visual Appeal of online banking and overall customer satisfaction.

H <sub>2.5</sub>	There no significant relationship between the Service Availability of online banking and overall customer satisfaction.
H <sub>2.6</sub>	There no significant relationship between the Security Feeling in online banking and overall customer satisfaction.
H <sub>2.7</sub>	There no significant relationship between Cybersecurity Measures of online banking and overall customer satisfaction.
H <sub>2.8</sub>	There no significant relationship between the App Responsiveness of online banking and overall customer satisfaction.
H <sub>2.9</sub>	There no significant relationship between the Grievance Redressal of online banking and overall customer satisfaction.
H <sub>2.10</sub>	There no significant relationship between the Feature Availability of online banking and overall customer satisfaction.
H <sub>2.11</sub>	There no significant relationship between the Information Accuracy in online banking and overall customer satisfaction.
H <sub>2.12</sub>	There no significant relationship between the Timely Notifications of online banking and overall customer satisfaction.
H <sub>2.13</sub>	There no significant relationship between the Customer Support of online banking and overall customer satisfaction.
H <sub>2.14</sub>	There no significant relationship between the Recommendation Intention in online banking and overall customer satisfaction.

(Table 4.2: Factors Influencing Customer Satisfaction)

(Source: Self Constructed)

**Objective 3:** To compare the level of customer satisfaction between public sector and private sector banks in Gujarat regarding their online banking services.

**Hypothesis(H<sub>0</sub>) - 3: Comparison Between Public and Private Sector Banks**

H <sub>3.1</sub>	There is a no significant difference between the mean of perceived convenience and time-saving aspects of online banking and Public and Private Sector Banks.
H <sub>3.2</sub>	There is a no significant difference between the mean of User Friendliness of Mobile app/website and Public and Private Sector Banks.

H 3.3	There is a no significant difference between the mean of Transaction Efficiency of online banking and Public and Private Sector Banks.
H 3.4	There is a no significant difference between the mean of Visual Appeal of online banking and Public and Private Sector Banks.
H 3.5	There is a no significant difference between the mean of Service Availability of online banking and Public and Private Sector Banks.
H 3.6	There is a no significant difference between the mean of Security Feeling in online banking and Public and Private Sector Banks.
H 3.7	There no significant relationship between Cybersecurity Measures of online banking and Public and Private Sector Banks.
H 3.8	There is a no significant difference between the mean of App Responsiveness of online banking and Public and Private Sector Banks.
H 3.9	There is a no significant difference between the mean of Grievance Redressal of online banking and Public and Private Sector Banks.
H 3.10	There is a no significant difference between the mean of Feature Availability of online banking and Public and Private Sector Banks.
H 3.11	There is a no significant difference between the mean of Information Accuracy in online banking and Public and Private Sector Banks.
H 3.12	There is a no significant difference between the mean of Timely Notifications of online banking and Public and Private Sector Banks.
H 3.13	There is a no significant difference between the mean of Customer Support of online banking and Public and Private Sector Banks.
H 3.14	There is a no significant difference between the mean of Recommendation Intention in online banking and Public and Private Sector Banks.
H 3.15	There is a no significant difference between the mean of Overall satisfaction in online banking and Public and Private Sector Banks.

(Table 4.3: Comparison Between Public and Private Sector Banks)

(Source: Self Constructed)

**Objective 4:** To examine common challenges and issues faced by customers while using online banking services in both sectors.



**Hypothesis(H<sub>0</sub>) - 4: Common Challenges and Issues**

H 4.1	There is no difference in the mean number (or severity, frequency, etc.) of Technical Issues and Non-Technical Issues in public sector and private sector banks.
H 4.2	There is no significant difference in the types of challenges faced by customers of public sector banks compared to private sector banks.
H 4.3	There is no significant difference in the overall satisfaction levels between customers who have faced financial loss due to online banking issues and those who have not.

(Table 4.4: Common Challenges and Issues)

(Source: Self Constructed)

**Hypothesis(H<sub>0</sub>) - 5: Strategies for Customer Satisfaction**

H 5.1	Customers do not perceive enhanced cybersecurity measures as more important than other suggested improvements.
H 5.2	A major proportion of users do not intend to continue using their current bank's online services in the future.
H 5.3	Customers who report higher overall satisfaction are not more likely to recommend their bank's online services to others.
H 5.4	There is no significant relationship between having faced financial loss and the intention to continue using online banking services.

(Table 4.5: Strategies for Customer Satisfaction)

(Source: Self Constructed)

#### **4.11 RESEARCH DESIGN:**

Research design is essential because it provides a systematic plan that guides the entire research process, ensuring that the study is conducted efficiently and effectively. It helps in organizing and structuring the research operations, thereby maximizing the quality and quantity of information gathered while minimizing the expenditure of time, effort, and resources. Essentially, research design acts as the conceptual framework within which the research is carried out. It serves as a blueprint for the collection, measurement, and analysis of data, helping to align the research objectives with appropriate methods and techniques to achieve reliable and valid results.

In this study, the research design outlines the procedures for selecting the sample, developing data collection instruments, and applying suitable analytical tools to examine customer satisfaction with online banking services across selected public and private sector banks in Gujarat. By adopting a well-structured research design, the study aims to ensure accuracy, relevance, and objectivity throughout the research process.

##### **4.11.1 Title of the Research:**

*“An Analytical Study on Customer Satisfaction towards Online Banking Services for Selected Public Sector and Private Sector Banks: Special Reference to Gujarat State.”*

##### **4.11.2 Types of Research:**

This research is descriptive and analytical, focusing on customer satisfaction towards online banking services in selected public and private sector banks in Gujarat. It aims to analyze factors affecting satisfaction, compare public vs private sector performance, and study the impact of demographic variables. The study uses structured surveys and statistical tools, making it quantitative in nature and suitable for hypothesis testing. It helps in identifying gaps in service delivery and understanding customer expectations. The research findings are intended to provide actionable insights for improving online banking experiences and enhancing customer retention.

##### **4.11.3 Sources of Information:**

The data for this research study has been collected from both primary and secondary sources.

- **Primary data** was obtained through structured surveys conducted among customers of selected public and private sector banks in various cities of Gujarat, including Ahmedabad, Rajkot, Bhavnagar, Surat, and Baroda. These surveys captured details related to demographic variables, usage patterns, satisfaction levels, and perceptions towards online banking services.
- **Secondary data** was gathered from books, research articles, journals, reports, and credible online sources that address customer satisfaction, online banking, and service quality frameworks. This secondary information supported the literature review, helping to establish a theoretical foundation, identify research gaps, and align the study with previous academic findings relevant to the research title.

#### **4.11.4 Universe of Research:**

A person who is a customer of selected public or private sector banks and a resident of India using online banking services is considered as the universe of this research.

#### **4.11.5 Population of Research:**

A person who is a customer of selected public or private sector banks and a resident of Gujarat using online banking services is considered as the population of this research.

#### **4.11.6 Sample of Research:**

The appropriate sample size in research depends on various factors, including the desired confidence level, margin of error, and the variability within the target population. As the exact number of online banking users in Gujarat is not known, the sample size for this study was determined using Cochran's formula (1977), which is widely used for estimating sample size when the population is large or unspecified.

The formula is:

$$S = (Z^2 \times p \times q) / E^2$$

Where:

$S$  = required sample size

$Z$  = standard score (1.96 for 95% confidence level)

$p$  = assumed proportion of the population (0.5 used as a conservative estimate)

$q = 1 - p$

$E$  = acceptable margin of error (commonly 0.05)

Using these assumptions—95% confidence level, 5% margin of error, and  $p = 0.5$ —the minimum required sample size was calculated to be approximately 384 respondents.

For this study, a total of 525 responses were collected from users of online banking services across selected public and private sector banks in Gujarat, which exceeds the minimum requirement and is thus considered statistically adequate. The sampling method adopted was non-probability sampling, specifically convenience sampling, to ensure easy access to participants while covering a diverse customer base.

#### 4.11.7 Geographic Coverage:

Gujarat is one of the leading states in India in terms of digital banking adoption and economic activity. For the purpose of this research, selected major cities across Gujarat have been included to ensure broad and regionally balanced representation. The researcher has covered the following cities:

##### A. Selection of Cities: Ahmedabad, Rajkot, Bhavnagar, Surat, and Baroda

These five cities were strategically selected due to their economic strength, population density, and technological penetration in the state of Gujarat.

City	Key Reason for Selection	Population (approx.)	Economic/Banking Relevance
Ahmedabad	Financial & IT hub of Gujarat	8.2 million	Highest number of bank branches, digital users
Surat	Fastest growing city with high literacy and business growth	7.4 million	Major hub for diamond, textile industries; rapid digital adoption

<b>Baroda</b>	Educational and industrial city	4.2 million	Balanced mix of professionals and business users
<b>Rajkot</b>	Industrial & cultural centre of Saurashtra	3.2 million	High MSME presence; growing fintech usage
<b>Bhavnagar</b>	Emerging port city with strong industrial base	2.8 million	Key center for ship-breaking, salt, and diamond industries; increasing digital penetration

(Table 4.6: Selection of Cities)

(Source: Self Constructed)

#### Reasons for selection of Cities:

- These cities account for over 50% of Gujarat's total urban population.
- All are classified as Tier-1 or Tier-2 cities, with strong digital infrastructure and internet penetration (TRAI, 2023).
- Together, they host more than 3,000 bank branches, with leading public and private sector banks present in all.

#### B. Selection of Banks

Sector	Selected Banks	Reason for Selection
<b>Public Sector</b>	SBI, PNB, BoB	Largest nationalized banks in India by asset size and customer base
<b>Private Sector</b>	HDFC, ICICI, AXIS	Top private banks offering advanced online services and digital innovations

(Table 4.7: Selection of Banks)

(Source: Self Constructed)

#### Reasons for selection of Banks:

##### 1. Market Share (RBI Reports, 2021):

- SBI holds over 22% of market share in banking.
- BoB and PNB are among top 5 PSBs in India.
- HDFC, ICICI, AXIS together cover over 60% of India's private banking market.

## **2. Online Banking Usage:**

- These banks were pioneers in launching internet and mobile banking platforms.
- According to NPCI Digital Payments Report (2021), these banks are among the top contributors in terms of UPI volume, internet banking transactions, and mobile banking adoption.
- According to the Ministry of Electronics and IT, these six banks recorded the highest digital transaction volumes in 2021.
- All six banks are consistently ranked high in various digital banking performance indices.
- According to the MeitY Digital Banking Index (2021) and Forbes India Banking Survey, they are leaders in terms of digital readiness, cybersecurity compliance, and innovation in customer service delivery.

## **3. Presence in Gujarat:**

- All six banks have strong branch and ATM networks across Gujarat, including rural and semi-urban coverage.
- According to SLBC Gujarat (2020), each of these banks has over 100+ branches in the selected cities combined.

### **4.11.8 Sample Profile:**

Gujarat, located on the western coast of India, is a vibrant and economically significant state that plays a pivotal role in national development. With a 1,600 km-long coastline along the Arabian Sea—the longest among Indian states—Gujarat forms a strategic geographical and trade corridor. The state shares borders with Rajasthan to the north, Madhya Pradesh to the east, Maharashtra to the southeast, and the Union Territories of Daman, Diu, Dadra, and Nagar Haveli. It also shares an international boundary with Pakistan in the northwest.

The region includes the entire Saurashtra (Kathiawar) peninsula, an area of prime importance in terms of both demographic strength and industrial activity. The capital of Gujarat is Gandhinagar, located near Ahmedabad, the former capital and current financial hub of the state. Ahmedabad is also recognized as one of India's leading smart cities and digital banking hubs.

Gujarat is historically and culturally rich—it is the birthplace of Mahatma Gandhi, the Father of the Nation, and a centre of spiritual, architectural, and ecological diversity. Key destinations such as the Gir Forests (home to the endangered Asiatic Lions), Palitana Jain Temples, Kutch Desert, and the White Rann highlight the state's appeal. It is also one of India's leading states in technological infrastructure, industrial development, and digital financial inclusion.

#### **Uniqueness of Gujarat State for Research:**

- High financial literacy rates and widespread use of digital banking platforms.
- Presence of all major public and private sector banks with extensive branch networks across urban and semi-urban areas.
- Its role as a commercial powerhouse, contributing over 8% to India's GDP (Statista, 2023), and being home to the International Financial Services Centre (IFSC) at GIFT City.

This makes Gujarat, a logical and valuable area for conducting analytical studies on customer satisfaction in online banking, combining strong economic indicators, digital readiness, and diverse banking demographics.

#### **4.12 DATA COLLECTION:**

In the present study, the researcher designed a structured questionnaire in both English and Gujarati languages to gather data relevant to the research objectives. This questionnaire was carefully crafted to ensure it aligns with the information needs of the study. Respondents were asked to complete the questionnaire, and their responses formed the basis for further analysis. Structured questionnaires may include both open-ended and closed-ended items; however, for this study, only closed-ended questions were utilized, as they facilitate easier data categorization and statistical analysis.

The development process involved an in-depth review of existing literature, examination of secondary data, and consultation with investors and experts in the stock market domain. The questionnaire was formulated with an emphasis on clarity and simplicity to ensure that respondents could understand and answer the questions accurately. A pilot test was conducted to evaluate the reliability and effectiveness of the instrument, and adjustments were made based on the insights gathered from the

pilot responses. To measure the participants' attitudes and opinions, a five-point Likert scale was employed.

#### 4.13 PILOT SURVEY:

A comprehensive evaluation of the pilot survey data was undertaken to detect and resolve any ambiguities or unclear elements in the questionnaire. Such ambiguities, if left unaddressed, could result in inaccurate responses, thereby compromising the reliability of the research findings. To mitigate this risk, questionnaires that contained incomplete or inconsistent responses were thoroughly examined, and follow-up communication was initiated with selected respondents to understand the challenges they encountered while answering. Insights gathered from these interactions were used to rephrase certain questions, with the aim of improving clarity and respondent comprehension. The revised questions are detailed below.

Furthermore, feedback from participants during the pilot testing indicated that the questionnaire was slightly lengthy. Taking this into account, one question was modified for better clarity and conciseness, and an additional question was incorporated to enhance the quality of data collection. The updated question set is presented below.

##### Details of question revised in the questionnaire through pilot survey

Old Questions	Revised Questions
Mention the name of your bank	Changed to select bank type (Public/Private) to simplify and maintain anonymity
Rate the mobile app and website separately	Combined into one question on overall digital banking experience
Do you feel online banking is secure? Explain	Converted to a close-ended question for clarity and easier analysis

(Table 4.8: Revision of Questions)

(Source: Constructed from Pilot Testing)



Added Question	Justification
In which city do you primarily use online banking?	Helps capture regional user experience, aligning with Gujarat-specific focus
What features do you use most in online banking?	Identifies key service usage patterns relevant to satisfaction measurement

(Table 4.9: Addition of Questions)

(Source: Constructed from Pilot Testing)

### Reliability for Factors

A pilot survey was carried out to evaluate the reliability of the identified factors influencing investors' attitudes and perceptions prior to the final data collection. To measure internal consistency, Cronbach's alpha was employed. The results revealed that all factors had Cronbach's alpha values exceeding 0.868, signifying a high level of reliability. It is noteworthy that a Cronbach's alpha value above 0.50 is typically deemed acceptable, while values above 0.70 are considered indicative of strong reliability.

### Reliability for Factors (Pilot Survey)

Variables	Factors	No. of Items (Constructs)	Cronbach's Alpha ( $\alpha$ )	Overall Cronbach's Alpha ( $\alpha$ )
<b>Satisfaction</b>	Understanding of Online banking	5	0.719	0.868
	Preference to use Online Banking	5	0.692	
	Factors Online Banking	8	0.678	
	Investor's Satisfaction	11	0.872	
	Technology	5	0.785	

	Trust on Baking Services	5	0.709	
	Time to Use	4	0.661	
	Decision to Use Online Banking	5	0.792	
	(Table 4.10: Reliability for Factors)			
	(Source: Computed from SPSS)			

The responses from the pilot survey were employed to examine the validity and reliability of the proposed model. A thorough analysis of the results was followed by detailed consultations with subject matter experts in academia and finance. Based on the insights gathered from these discussions, certain constructs were identified as unsuitable and subsequently removed, leading to a revision of the original model. The details of the excluded constructs are outlined below.

Two constructs were added basis on the discussions and suggestion by the expert.

#### Details added of constructs from Model through Pilot Survey

Factors	Construct Added
<b>Technology</b>	Technology platforms ensure the security and privacy of customers, Information
<b>Benefits</b>	I am focused on achieving specific benefits of using online banking services

(Table 4.11: Addition of Factors)

(Source: Constructed from Pilot Testing)

#### Overall Reliability Test after Data Collection:

Reliability Statistics	
Cronbach's Alpha	N of Items
0.868	15

(Table 4.12: Reliability Test after Data Collection)

(Source: Computed from SPSS)

After the data collection process, the researcher evaluated the reliability of the identified factors influencing investors' attitudes and perceptions. This assessment was conducted using Cronbach's alpha coefficient. The results revealed that all the factors demonstrated Cronbach's alpha values exceeding 0.868, signifying a high level of internal consistency and reliability. It is noteworthy that a Cronbach's alpha value above 0.50 is generally regarded as acceptable, while values above 0.70 are considered preferable for ensuring the reliability of measurement instruments.

#### **4.14 DATA ANALYSIS:**

Microsoft Excel was utilized to classify, tabulate, and organize the primary data collected through the questionnaire. To examine and test various hypotheses, the responses were coded and entered into the Statistical Package for the Social Sciences (SPSS) software for detailed analysis. In this study, the researcher employed a range of statistical tools and techniques to draw meaningful inferences from the collected data.

##### **4.14.1 Tools and techniques used for Data Analysis:**

###### **4.14.1.1 Frequency Analysis:**

To determine how often certain responses or categories (e.g., age group, bank preference, service usage) occur in the dataset.

Frequency analysis was conducted to examine the distribution of responses for various categorical and ordinal variables collected through the questionnaire. This method helped summarize how often each response appeared, providing a clear picture of prevailing trends and patterns among the participants. For example, the demographic characteristics such as gender, age group, education level, and occupation were analyzed using frequency tables to determine the most common categories. A total of  $n$  responses was considered for this analysis. The results, expressed in terms of frequencies and percentages, enabled the researcher to identify dominant groups and potential imbalances in the data. Frequency analysis also served as a foundational step for further statistical testing, ensuring data accuracy and completeness before conducting more advanced analyses like cross-tabulations and hypothesis testing.

#### **4.14.1.2 Weighted Average:**

To assign importance to responses based on their rank or scale (e.g., Likert scale), giving more weight to higher priorities in satisfaction dimensions

The Weighted Average Test is a useful statistical method applied in research to analyze ordinal data, particularly when responses are recorded on a rating scale such as a Likert scale (e.g., 1 to 5 or 1 to 7). It helps in calculating the average response by assigning different weights to each response category based on its level of importance or agreement. For example, in a 5-point Likert scale, responses like "Strongly Agree" may be assigned a weight of 5, "Agree" a weight of 4, and so on down to "Strongly Disagree" with a weight of 1. The formula for calculating the weighted average involves multiplying each response frequency by its corresponding weight, summing the total, and then dividing it by the overall number of responses. This method provides a more nuanced view than a simple average, as it considers both the value and frequency of responses. In this research, the weighted average was used to determine the overall perception or satisfaction level of respondents regarding specific variables. It helped the researcher to quantify qualitative opinions into a single representative value, thereby aiding in comparative analysis, identifying trends, and supporting conclusions drawn from the survey data-

#### **4.14.1.3 ANOVA:**

To analyze whether there are significant differences in customer satisfaction across more than two demographic groups (e.g., different age or income categories).

Analysis of Variance (ANOVA) is a statistical technique used to determine whether there are statistically significant differences between the means of two or more independent groups. It is especially valuable in research when comparing three or more group means and helps to assess whether any observed differences are due to actual variation rather than random chance. ANOVA works by testing the null hypothesis that all group means are equal. If the test results in a low p-value (typically less than 0.05), it indicates that at least one group mean is significantly different from the others.

There are different types of ANOVA, each designed to suit specific research contexts and data structures:

- **One-Way ANOVA:**

Used when there is one independent variable (factor) with three or more categories or groups. It evaluates whether there are statistically significant differences among the group means for a single factor.

- **Two-Way ANOVA:**

This type extends the one-way ANOVA by examining the effects of two independent variables on a single dependent variable. It also tests for any interaction effect between the two variables.

- **Repeated Measures ANOVA:**

Applied when the same participants are measured under different conditions or at multiple time points. It is useful in within-subject designs and helps assess changes over time or across conditions.

ANOVA is a robust tool in research, providing clarity on group differences and supporting informed decision-making based on statistical evidence. It is commonly used in social sciences, healthcare, education, and business studies for analyzing survey and experimental data.

#### **4.14.1.4 Correlation:**

To measure the strength and direction of the linear relationship between two variables, such as perceived convenience and satisfaction.

Correlation is a statistical technique used in research to measure the strength and direction of the relationship between two variables. It helps determine whether an increase or decrease in one variable corresponds with an increase or decrease in another. The most commonly used measure is the Pearson correlation coefficient ( $r$ ), which ranges from -1 to +1:

- +1 indicates a perfect positive relationship (as one variable increases, the other also increases),
- -1 indicates a perfect negative relationship (as one increases, the other decreases),
- 0 indicates no linear relationship between the variables.

In this research, correlation analysis is used to examine how strongly variables such as customer satisfaction, digital banking usage, or service quality are related to one another. While correlation shows association, it does not imply causation—it only tells us whether variables move together, not whether one causes the other. It is a valuable tool in exploratory data analysis and helps support or reject research hypotheses based on variable associations.

#### **4.14.1.5 Regression Analysis:**

To predict customer satisfaction based on multiple independent variables like usability, speed, security, etc.

Regression Analysis is a powerful statistical method used in research to examine the relationship between a dependent variable and one or more independent variables. It helps to understand how changes in the independent variable(s) influence or predict changes in the dependent variable. The most common form is linear regression, which assesses the strength and direction of a linear relationship between variables.

There are different types of regression, including:

- **Simple Linear Regression** – Involves one independent and one dependent variable.
- **Multiple Regression** – Involves two or more independent variables predicting a single dependent variable.

Regression analysis provides key outputs such as the regression coefficient ( $\beta$ ), R-squared value, and p-value, which help determine the impact and significance of each variable in the model.

The regression analysis was used to identify how factors such as service quality, digital features, and customer experience influence customer satisfaction. It not only

helps test hypotheses but also enables forecasting and decision-making by quantifying the strength of influence between variables.

#### **4.14.1.6 T - Test:**

To compare the mean customer satisfaction scores between two groups, such as public vs private sector banks.

The T-test is a widely used statistical tool in research for comparing the means of two groups to determine whether there is a significant difference between them. It is especially useful when analyzing data obtained from independent samples (such as comparing the responses of male vs. female participants or public vs. private sector bank customers). The T-test works by calculating the difference between the sample means and assessing whether that difference is statistically significant, considering the variability in the data and the sample size. There are two main types: the Independent Samples T-test, used when comparing two separate groups, and the Paired Samples T-test, used when comparing the same group at two different points in time (such as before and after an intervention). In this research, the T-test was used to examine whether the satisfaction levels or attitudes of respondents significantly differed based on demographic factors or the type of bank they used. A significance level (p-value) of less than 0.05 is generally considered an indication that the observed difference is statistically meaningful. The T-test thus helped the researcher validate hypotheses and draw reliable conclusions from the collected data.

#### **4.14.1.7 Paired T - Test:**

To compare mean scores from the same respondents on two related variables (e.g., satisfaction before and after introducing a new feature).

Paired T-Test is a statistical method used in research to compare the means of two related groups to determine whether there is a significant difference between them. Unlike an independent T-test, which compares two separate groups, the paired T-test is applied when the same participants are measured twice—such as before and after an intervention, or under two different conditions.

This test examines the difference between paired observations and checks whether the average of these differences is significantly different from zero. It assumes that the data is normally distributed and that the pairs are meaningfully matched.

In this research, the paired T-test can be used to analyze changes in customer satisfaction or perception levels before and after introducing a new online banking feature. A p-value less than 0.05 typically indicates a statistically significant difference between the two conditions.

The paired T-test is particularly useful for evaluating the effectiveness of changes, treatments, or interventions in longitudinal or experimental research designs.

#### **4.14.1.8 Chi-Square Analysis:**

To examine the association between categorical variables (e.g., bank type and type of issues faced by customers).

Chi-Square Analysis is a non-parametric statistical test commonly used in research to examine the relationship between two or more categorical variables. It helps determine whether the observed distribution of data differs significantly from what would be expected by chance. The test compares the actual frequencies in each category with the expected frequencies if there were no association between the variables. In research, Chi-Square Test of Independence is often applied to identify whether a significant relationship exists between variables such as gender and satisfaction level, age group and banking preference, or type of bank and service usage. The results are interpreted using a p-value, with a value less than 0.05 typically indicating a statistically significant association. Chi-square analysis is especially useful in survey-based studies where responses are grouped into categories. In this study, the Chi-Square Test was used to evaluate whether demographic factors like age, income, or education are significantly associated with customer satisfaction in online banking services.

#### **4.14.1.9 Mann - Whitney U - Test:**



To compare differences in satisfaction levels between two independent groups when the data is ordinal or not normally distributed.

The Mann–Whitney U Test is a statistical method used to find out if there is a significant difference between two independent groups when the data is not normally distributed or when it is in the form of ranks (like ratings). It is often used instead of the Independent T-test when the data doesn't meet certain conditions like equal spread or normal distribution. This test compares whether the values in one group are generally higher or lower than those in another group. In this research, the Mann–Whitney U Test was used to check if there is a meaningful difference in customer satisfaction levels between people using public sector banks and those using private sector banks. If the result (called the p-value) is less than 0.05, it means the difference between the two groups is statistically significant. This test is useful when the data comes from surveys or when answers are given in the form of scales or ranks.

#### **4.14.1.10 Friedman Test:**

To compare more than two related samples or repeated measures on the same subjects (e.g., ranking multiple online banking issues by importance).

The Friedman Test is a non-parametric statistical test used to compare three or more related groups or conditions. It is often used when the same group of participants is measured multiple times under different conditions or over different time periods. The test helps to determine whether there are significant differences in the rankings of responses across the conditions. It is similar to the repeated measures ANOVA but is used when the data does not meet the assumptions of normal distribution.

In research, the Friedman Test is useful for analyzing survey or experimental data where responses are collected using Likert scales or ranks. For example, in this study, the Friedman Test can be used to assess whether there is a significant change in customer satisfaction across different service features (like mobile banking, ATM service, and online support) evaluated by the same respondents. If the test result (p-value) is less than 0.05, it means that there is a statistically significant difference among the groups or conditions being compared.

#### **4.14.1.11 Pearson Correlation:**

To examine the strength and direction of the linear relationship between two continuous variables (e.g., service efficiency and customer satisfaction).

Pearson Correlation is a parametric statistical technique commonly used in research to measure the degree of association between two continuous variables. The correlation coefficient ( $r$ ) ranges from -1 to +1, where values close to +1 indicate a strong positive relationship, values close to -1 indicate a strong negative relationship, and values near 0 suggest no linear relationship. In research, Pearson Correlation is often applied to explore relationships such as the link between technology adoption and user satisfaction, response time and perceived convenience, or transaction efficiency and loyalty intention. The significance of the correlation is evaluated using a p-value, with a value less than 0.05 typically indicating a statistically significant relationship. Pearson Correlation is particularly useful in survey-based studies with interval or ratio scale data. In this study, Pearson Correlation was employed to assess how key factors like ease of use, reliability, and security of online banking services are associated with overall customer satisfaction.

#### **4.15 SCOPE FOR THE RESEARCH:**

The scope of the present research includes the following points:

- The study is limited to selected cities of Gujarat (Ahmedabad, Rajkot, Bhavnagar, Surat, and Baroda). Therefore, the research can be expanded to include other regions or states for broader generalization.
- The research focuses on customer satisfaction with online banking services in six selected banks (SBI, PNB, BoB – Public; HDFC, ICICI, AXIS – Private); further studies may include other public and private banks or cooperative banks.
- The study's sample size is 525 respondents; future studies may involve a larger and more diverse sample to increase reliability and representativeness.
- This research examines satisfaction based on key service factors like convenience, speed, security, responsiveness, and grievance redressal. Additional factors such as personalization, chatbot usage, and mobile app performance can be explored.

- The study focuses on demographic variables like age, income, education, and location; future research may include psychographic or behavioral variables.
- The study provides empirical recommendations for enhancing customer satisfaction; future work can evaluate the implementation and effectiveness of these strategies over time.

#### **4.16 ASSUMPTIONS OF THE RESEARCH:**

- The responses provided by the participants are assumed to reflect their best knowledge and honest opinions.
- The collected data is considered to follow a normal distribution.
- The sample size used in the study is sufficiently large for statistical analysis as per **Cochran's** formula.

#### **4.17 SIGNIFICANCE OF RESEARCH:**

The following are the significance of the research:

- This research presents a detailed analysis of customer satisfaction levels regarding online banking services in selected public and private sector banks across key urban centers in Gujarat—namely Ahmedabad, Rajkot, Bhavnagar, Surat, and Baroda—offering region-specific insights into digital banking behavior.
- It identifies core satisfaction drivers such as perceived convenience, interface usability, transaction speed, digital security, customer support responsiveness, and grievance redressal mechanisms—helping banks prioritize service improvements.
- The research aids banking institutions in assessing performance gaps between customer expectations and their current digital offerings, enabling strategic decisions in service innovation, mobile app redesign, and customer journey optimization.
- Regulatory authorities such as the Reserve Bank of India (RBI), Ministry of Finance, and digital banking task forces can leverage these findings to frame policy recommendations that improve digital financial inclusion, user safety, and consumer rights in the online banking ecosystem.

- The study provides valuable inputs to fintech companies and technology vendors, offering evidence-based insights for designing customer-centric solutions like AI-based chatbots, biometric logins, UPI integration, and multilingual support features for enhanced user experience.
- Insights from demographic analysis (age, income, education, and location) allow marketing and analytics professionals in banks to personalize communication, craft targeted campaigns, and segment users more effectively to increase engagement and satisfaction.
- The research contributes to academia and business education, serving as a robust reference point for courses and case studies related to digital marketing, service quality management, information systems, consumer behavior, and banking operations.
- Human resource and training departments in banks can use the findings to train frontline digital support staff based on common issues and customer expectations identified in the study.
- The study also opens up new directions for future research, including longitudinal studies (e.g., how satisfaction evolves over time), cross-regional comparisons, and the impact of emerging technologies such as blockchain, open banking, and digital lending platforms on customer satisfaction.
- Furthermore, the research supports the government's vision of Digital India by highlighting the barriers and enablers of digital banking usage, thus helping stakeholders promote financial literacy, trust, and adoption among underserved populations.

#### **4.18 LIMITATIONS OF THE RESEARCH:**

In the real world, every research study faces certain limitations due to practical challenges, data constraints, or external factors. While this study provides valuable insights into customer satisfaction with online banking services, the following limitations were observed:

- The study is based on primary data collected through a structured questionnaire. There is a possibility of biased or inaccurate responses due to misunderstanding or personal interpretation of questions.

- The sample size was restricted to 525 respondents from selected cities in Gujarat. Though carefully chosen, the sample may not fully represent the entire banking population of the state.
- The study was limited to selected public and private sector banks, excluding cooperative, rural, and foreign banks. Hence, the findings cannot be generalized to all banking institutions.
- The research focused on specific factors like convenience, usability, responsiveness, and grievance handling. Other relevant aspects such as digital literacy, customer loyalty, and technological adaptation were not covered.
- Statistical tools like correlation, regression, and ANOVA were used, each with their own assumptions. Any deviation from these assumptions may impact the validity of the findings.
- The responses are influenced by the participants' knowledge and experience with online banking. Lack of awareness among some users may have affected the accuracy of their feedback.
- The study reflects customer opinions during a specific period. As digital banking continues to evolve rapidly, customer expectations may change, requiring future studies for updated insights.

#### **4.19 CHAPTER PLAN:**

- **Chapter 1: Theoretical Framework – Online Banking and Customer Satisfaction**

This chapter outlines the evolution and structure of the banking system with a focus on India. It covers the role of banks in economic development, differences between public and private banks, and the regulatory framework led by the RBI. Key areas include financial inclusion, technological progress, and the rise of online banking. It also highlights growth, regulations, cybersecurity, digital payments, adoption in Gujarat, challenges, and future prospects, concluding with key insights.

- **Chapter 2: Conceptual Framework**

This chapter examines customer satisfaction in online banking by defining its concept, components, and influencing factors. It highlights demographic roles, differences

between public and private banks, and reviews relevant theories and models, including technology acceptance frameworks. Current trends, customer challenges, and the impact of expectations on satisfaction are discussed. The chapter also emphasizes the importance of measuring satisfaction and introduces the Integrated Customer Satisfaction Model (ICSM) for online banking, concluding with key insights.

- **Chapter 3: Review of Literature**

This chapter highlights the need to review existing studies to identify gaps in research on customer satisfaction with online banking in Gujarat. It explores key factors like ease of use, security, service quality, and responsiveness, setting the foundation for understanding what shapes customer experiences in public and private sector banks. The growing adoption of digital platforms demands deeper insights into evolving customer expectations. This review also supports the formulation of targeted strategies to enhance satisfaction and loyalty in the online banking environment.

- **Chapter 4: Research Methodology**

This chapter presents the research methodology, including the problem statement, objectives, hypotheses, research design, and limitations. The study focuses on analyzing customer satisfaction with online banking services in selected public and private sector banks in Gujarat. It outlines the sampling method, data collection tools, and analytical techniques. The chapter also highlights the study's scope and its significance in enhancing understanding of digital banking experiences.

- **Chapter 5: Data analysis and Interpretation**

This chapter outlines the data analysis and interpretation process undertaken in the study to assess customer satisfaction with online banking services in Gujarat. Data was collected through structured questionnaires and analyzed using statistical techniques to identify patterns and draw meaningful conclusions. The findings reveal key factors such as convenience, service quality, security, and user-friendliness that significantly influence customer satisfaction in both public and private sector banks.

Interpretation of the results helped in understanding the demographic influences on user experiences and provided actionable insights for improving digital banking services. The outcomes are beneficial for banks, policymakers, and digital service designers

aiming to enhance customer-centric strategies. This chapter also discusses the limitations of the research and suggests areas for future exploration. Overall, the analysis plays a vital role in drawing evidence-based conclusions and contributing to the existing literature on customer satisfaction in online banking.

- **Chapter 6: Summary, Findings and Suggestions**

This chapter summarized the study on customer satisfaction in online banking in Gujarat, highlighting key factors like service quality, ease of use, and security. Data was collected through structured questionnaires and analyzed statistically. The findings show that demographic variables and the type of bank (public or private) significantly affect satisfaction. These insights can help improve banking services. Future research can expand to other regions and explore emerging technologies in digital banking.

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