"Dissemination of Education for Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe.

VIVEKANAND COLLEGE, KOLHAPUR

(An Empowered Autonomous Institute)

DEPARTMENT OF STATISTICS

A PROJECT REPORT ON

"Study on Customer Satisfaction in Digital Banking"

Submitted by

Miss. Mane Krushna Balavant

Miss. Patil Shital Shivaji

Miss. Bharnkar Sumita Sandip

Miss. Patil Shreya Pravin

Mr. Gorade Vishal Karappa

in partial fulfillment for the award of

the degree of

BACHELOR OF SCIENCE

In

STATISTICS

For the Sem V of Academic Year 2025-26

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(An Empowered Autonomous Institute)
DEAPRTMENT OF STATISTICS

Certificate

This is to Certify that,

Sr. No.	Name	Roll No.
1	Miss. Mane Krushna Balavant	8243
2	Miss. Patil Shital Shivaji	8458
3	Miss. Bharnkar Sumita Sandip	8240
4	Miss. Patil Shreya Pravin	8244
5	Mr. Gorade Vishal Karappa	8457

Have satisfactorily completed the field project on ***"Study on Customer Satisfaction in Digital Banking"*** as a part of **B. Sc. III,** prescribed by the Department of Statistics, ***Vivekanand College, Kolhapur (An Empowered Autonomous Institute)*** in the academic year **2025-26**.

This project has been completed under the guidance and supervision. To the best of our knowledge and belief, the matter presented in this project report is original and has not been submitted elsewhere for any other purpose.

Project Guide

1. Ms. A. M. Makandar

2. Ms. P. V. Ransubhe

Examiner

Head

(Mrs. Shinde V C)

HEAD
DEPARTMENT OF STATISTICS
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

<u>ACKNOWLEDGEMENT</u>

We have immense pleasure in submitting this field project on "Study of Customer Satisfaction in Digital Banking". It is our foremost duty to express our deep sense of gratitude and respect to the guide **Ms. A. M. Makandar & Ms. P. V. Ransubhe** for their up-lifting tendency and inspiring us for making of this field project complete and successful. We are indebted to the library personal for offering all the help in completing the project work. Last but not the least we are thankful to **Mrs. V. C. Shinde** Head, Department of Statistics, teaching, non-teaching staff, friends and those who helped us directly or indirectly throughout this project work.

DECLARATION

We hereby declare that the *field project* entitled **"Study on Customer Satisfaction in Digital Banking"** written and submitted to Department of Statistics, Vivekanand College, Kolhapur (An Empowered Autonomous Institute) as a partial fulfillment of B.Sc. III (Statistics) under the guidance **Ms. A. M. Makandar & Ms. P. V. Ransubhe**. The empirical results in this project are based on the data collected by ourselves.

We understand that any copying is liable to be published as the authorities deem fit.

Date:

Place: Kolhapur

Sr. No.	Name	Roll No.	Sign
1	Miss. Mane Krushna Balvant	8243	[illegible]
2	Miss. Patil Shital Shivaji	8458	[illegible]
3	Miss. Bharnkar Sumita Sandip	8240	[illegible]
4	Miss. Patil Shreya Pravin	8244	[illegible]
5	Mr. Gorade Vishal Karappa	8457	V.K Gorade

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INTRODUCTION

In today's modern world, technology has transformed every aspect of life, and the banking sector is no exception. Digital banking refers to the use of technology to deliver banking services and products through electronic platforms such as mobile apps, websites, and ATMs. It eliminates the need for customers to visit physical branches, offering convenience, speed, and 24/7 access to financial services.

Digital banking includes a wide range of services such as online fund transfers, bill payments, mobile banking, e-wallets, internet banking, and digital lending. With the advancement of smartphones, internet connectivity, and fintech innovations, digital banking has become an essential part of the financial ecosystem.

In India, the rise of digital banking has been strongly supported by initiatives like Digital India, Unified Payments Interface (UPI), and Pradhan Mantri Jan Dhan Yojana (PMJDY). These programs have encouraged people to adopt cashless transactions and helped improve financial inclusion in both urban and rural areas.

The main objectives of digital banking are to provide a seamless banking experience, reduce transaction time, improve security, and enhance customer satisfaction. It not only benefits customers but also helps banks reduce operational costs and manage services more efficiently.

Thus, digital banking represents a major shift from traditional banking methods to a technology-driven, customer-centric approach that defines the future of the banking industry.

OBJECTIVES

- To study the banks and digital banking services used by respondents, including the frequency of usage.
- To identify problems faced by respondents and the frequency of digital banking password changes.
- To examine perceptions of safety and the impact of advertisements and promotions on digital banking usage.
- To evaluate the duration of usage, types of transactions performed, and user satisfaction with various aspects of digital banking services.
- To assess the proportion of customers who consider digital banking safe.
- To analyse the relationship between gender and customer satisfaction.
- To determine whether age influences digital banking satisfaction.

METHODOLOGY

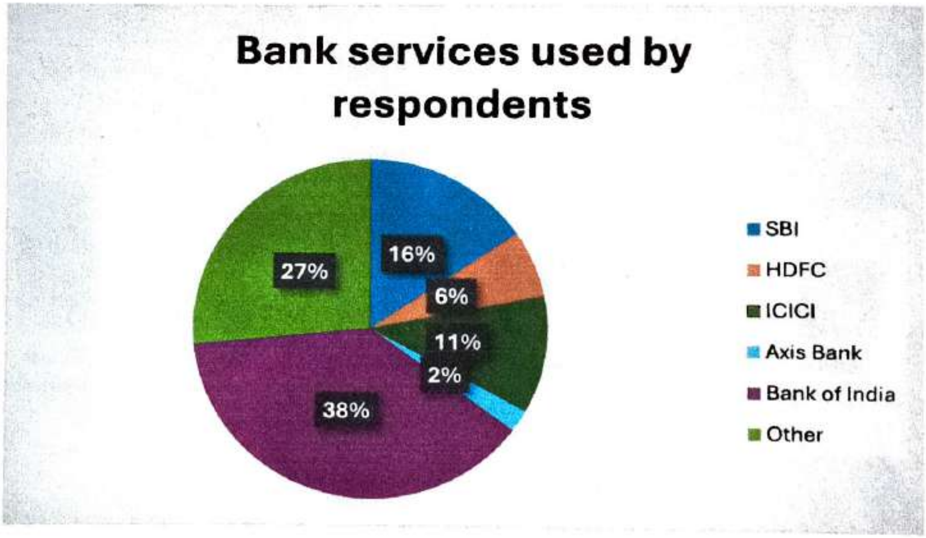
The data for this study was collected using a structured questionnaire survey administered electronically through Google Forms, targeting users of digital banking services. A total of 188 responses were received, comprising 84 males and 104 females. The respondents represented various age groups: 66 below 20 years, 94 between 21–30 years, 16 between 31–40 years, 11 between 41–50 years, and 1 above 50 years. In terms of occupation, 126 were students, 20 employed, 14 business/entrepreneurs, 16 homemakers, and 2 retired.

The study primarily intended to use simple random sampling to ensure every digital banking user had an equal chance of selection; however, due to accessibility constraints, convenience sampling was also employed. The questionnaire included questions on demographics, usage patterns, types of digital banking services used, frequency of usage, perceived safety, problems faced, and overall satisfaction, allowing a comprehensive assessment of customer satisfaction in digital banking.

GRAPHICAL REPRESENTATION

1. Bank services used by respondents

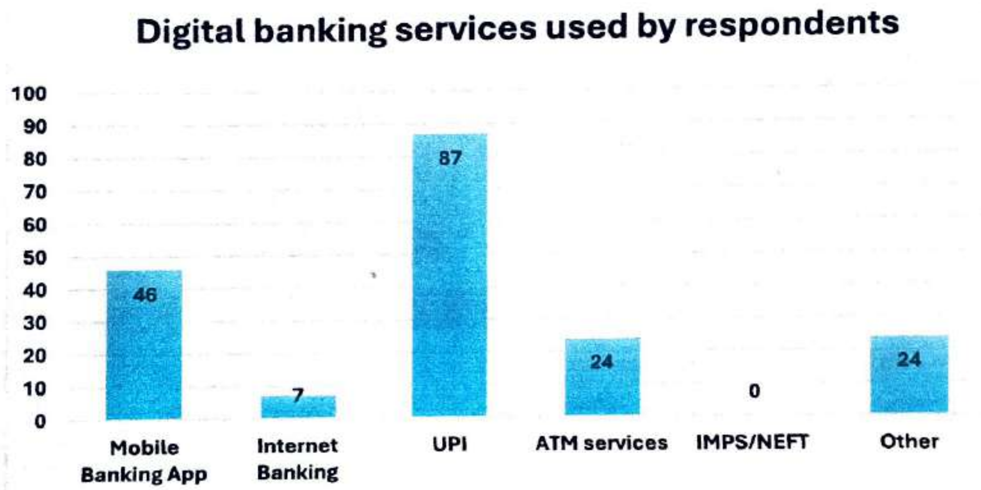
Sr. No.	Bank Name	Frequency	Percentage
1	SBI	29	15.4%
2	HDFC	12	6.4%
3	ICICI	21	11.2%
4	Axis Bank	4	2.1%
5	Bank of India	72	38.3%
6	Other	50	26.6%
	Total	**188**	**100%**



Conclusion: The data shows that Bank of India has the highest number of digital banking users, followed by other banks and SBI. ICICI, HDFC, and Axis Bank have comparatively fewer users.

2. Digital Banking Services used by respondents

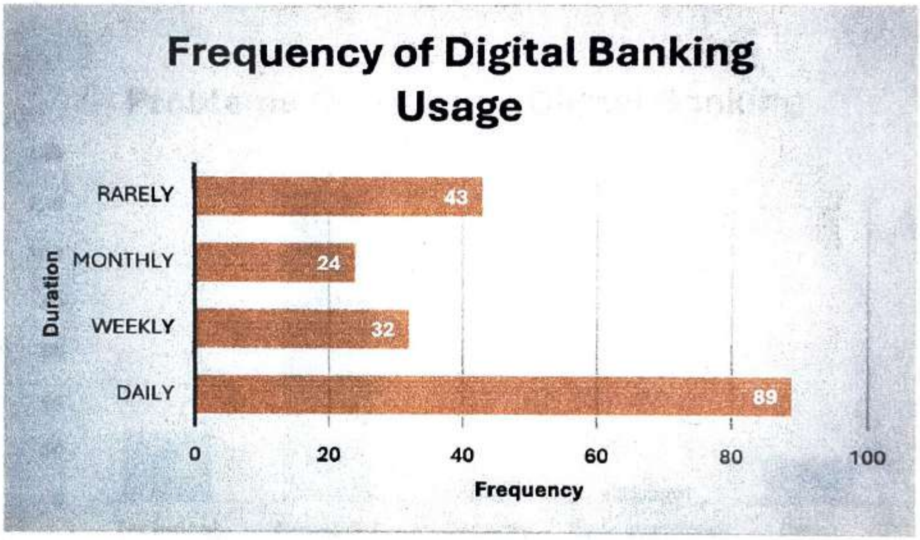
Sr. No.	Digital Banking services	Frequency	Percentage
1	Mobile Banking App	46	24.5%
2	Internet Banking	7	3.7%
3	UPI	87	46.3%
4	ATM services	24	12.8%
5	IMPS/NEFT	0	0%
6	Other	24	12.8%
	Total	188	**100%**



Conclusion: The bar chart above shows that instant and convenient payment methods like UPI are the most preferred, reflecting a shift towards faster and easier digital transactions.

3. Frequency of Digital Banking Usage

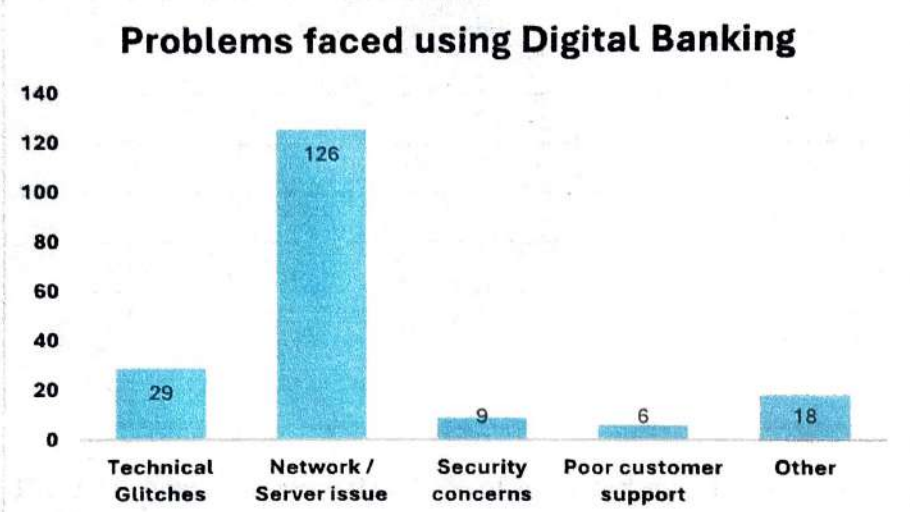
Sr. No.	Duration	Frequency	Percentage
1	Daily	89	47.3%
2	Weekly	32	17%
3	Monthly	24	12.8%
4	Rarely	43	22.9%
	Total	**188**	**100%**



Conclusion: The data shows that the 47.3% users use digital banking services daily, indicating high engagement and reliance on these services.

4. Problem faced by respondents

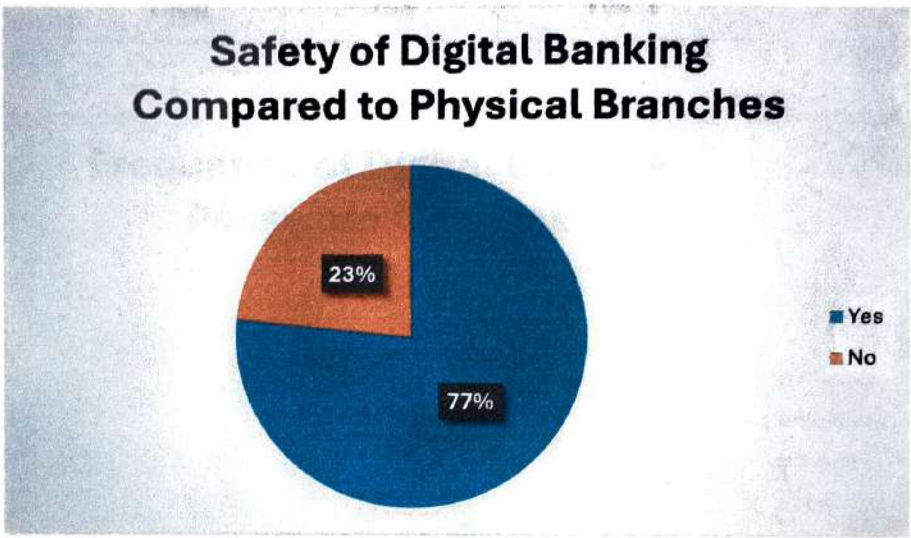
Sr. No.	Problems	Frequency	Percentage
1	Technical Glitches	29	15.4%
2	Network / Server issue	126	67%
3	Security concerns	9	4.8%
4	Poor customer support	6	3.2%
5	Other	18	9.6 %
	Total	**188**	**100%**



<u>Conclusion:</u> The bar chart indicates that the most common problem faced by digital banking users is network or server issues, showing that connectivity and system reliability are major concerns.

5. Safety of Digital Banking Compared to Physical Branches

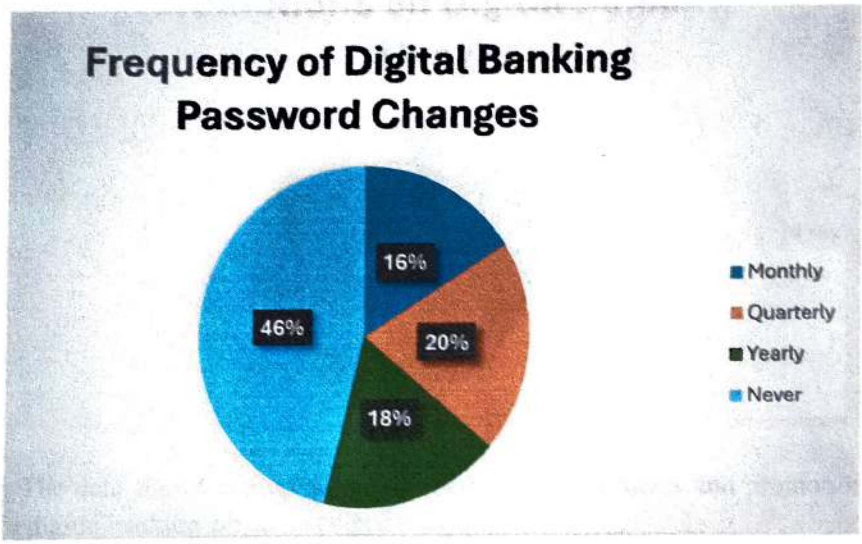
Yes or No	Frequency	Percentage
Yes	144	76.6%
No	44	23.4%
Total	188	**100%**



Conclusion: The data shows that more than 75% of users feel that digital banking is safer than visiting a physical branch.

6. Frequency of Digital Banking Password Changes

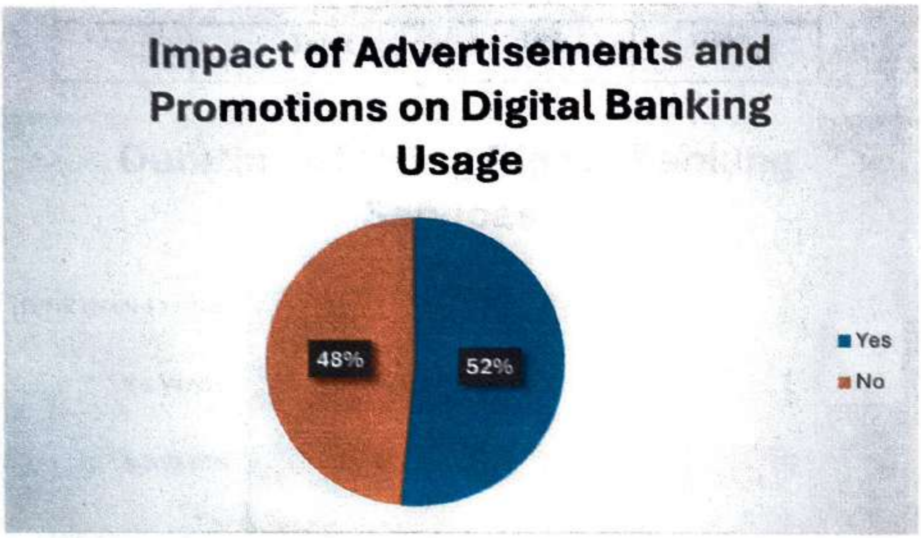
Duration	Frequency	Percentage
Monthly	30	16 %
Quarterly	38	20.2%
Yearly	33	17.5%
Never	87	46.3%
Total	**188**	**100%**



<u>**Conclusion:**</u> The pie chart above shows that most users do not change their passwords regularly, which increases the risk of security problems.

7. Impact of Advertisements and Promotions on Digital Banking Usage

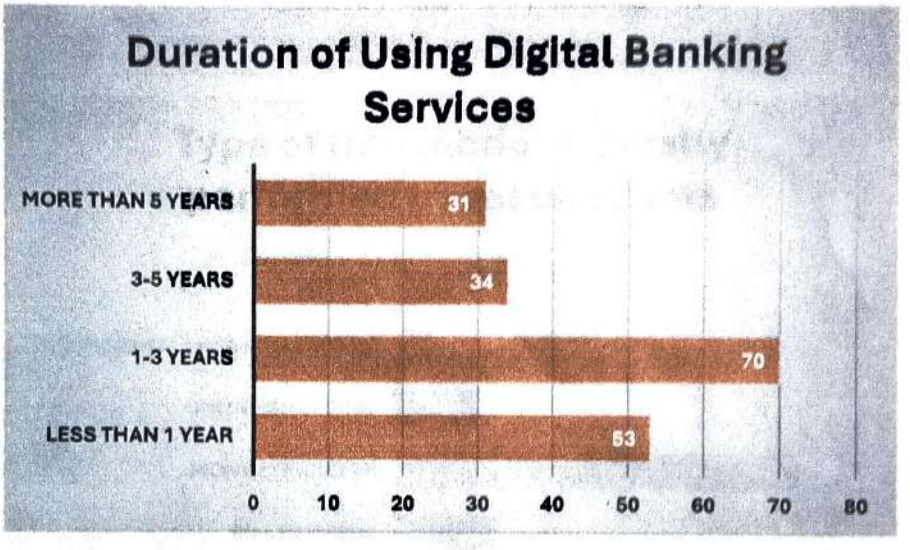
Yes or No	Frequency	Percentage
Yes	97	51.6%
No	91	48.4%
Total	**188**	**100%**



<u>Conclusion:</u> The data shows that opinions on whether advertisements and promotions encourage digital banking are almost equally divided.

8. Duration of Using Digital Banking Services

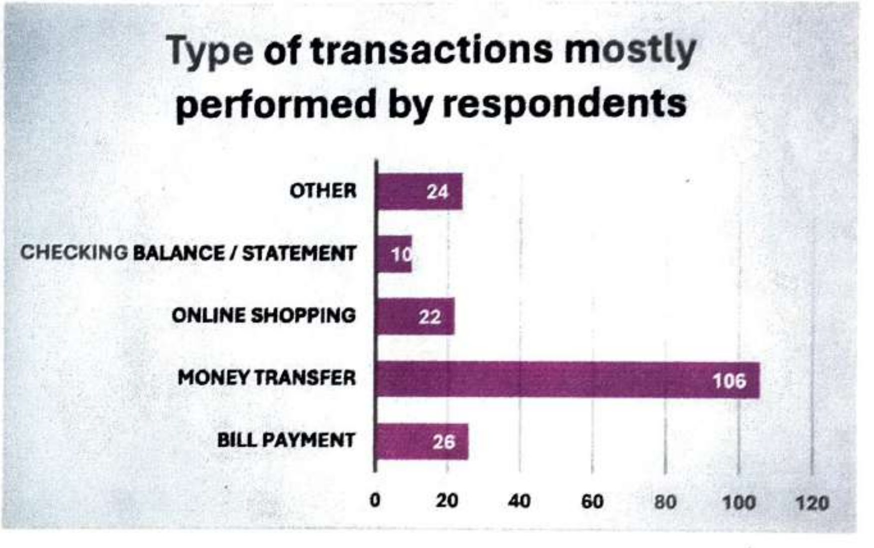
Sr. No.	Duration	Frequency	Percentage
1	Less than 1 year	53	28.2%
2	1-3 years	70	37.2%
3	3-5 years	34	18.1%
4	More than 5 years	31	16.5%
	Total	188	100%



Conclusion: The above graph shows that most users are relatively new to digital banking, with a growing number of moderately experienced customers.

9. Types of Transactions Mostly Performed by Respondents

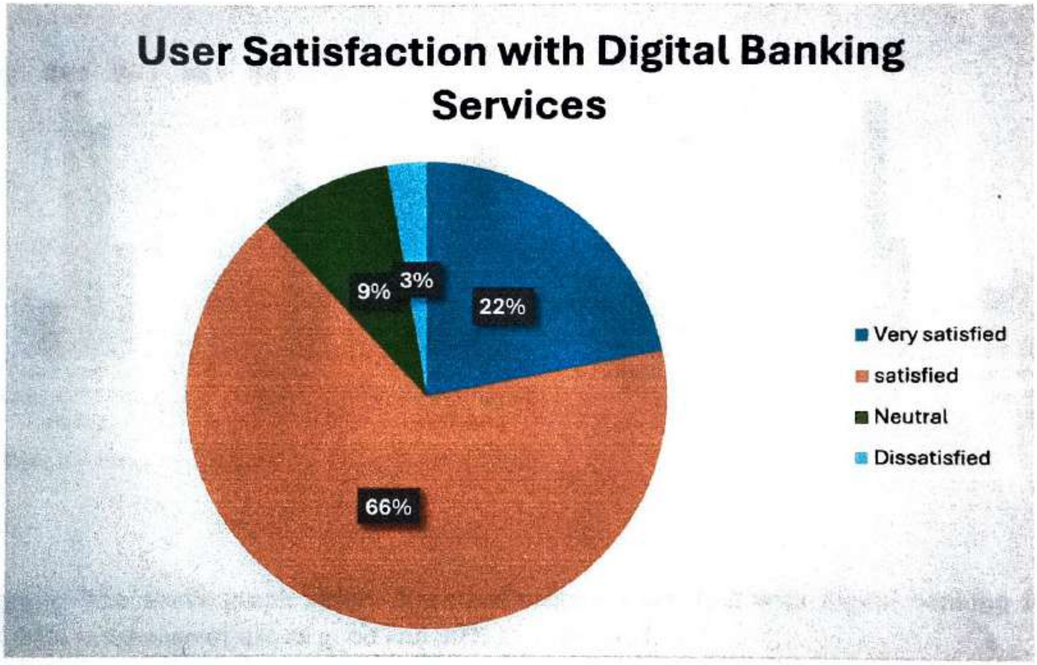
Sr. No.	Transaction	Frequency	Percentage
1	Bill Payment	26	13.8%
2	Money Transfer	106	56.4%
3	Online Shopping	22	11.7%
4	Checking Balance / statement	10	5.3%
5	Other	24	12.8%
	Total	**188**	**100%**



<u>Conclusion:</u> The data shows that more than 50% of users mainly use digital banking for money transfer.

10. User Satisfaction with Digital Banking Services

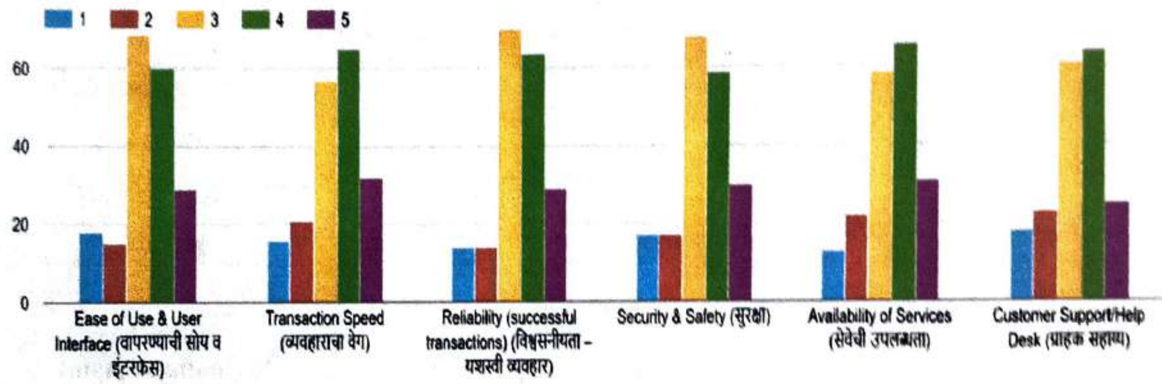
Sr. No.	Satisfaction Level	Frequency	Percentage
1	Very satisfied	41	21.8%
2	Satisfied	125	66.1%
3	Neutral	17	9.5%
4	Dissatisfied	5	2.6%
	Total	188	100%



Conclusion: The chart indicates more than 85% respondents are satisfied with digital banking services.

11. Satisfaction Ratings for Various Digital Banking Features

Sr. No.	Aspects
1	Ease of use &User Interface
2	Transaction speed
3	Reliability (Successful transaction)
4	Security & safety
5	Availability of services
6	Customer support/ Help desk



1 – Very Poor, 2 – Poor, 3 – Medium, 4 – Good, 5 – Very Good

Conclusion: The above graph shows that most users are satisfied with digital banking features. Around 60% rated ease of use as good and 30% as very good.

Statistical Analysis of Data

1. One-Sample Proportion Test for testing whether customers consider digital banking safe.

Hypotheses

H_0: The proportion of customers who consider digital banking safe is 0.50. ($p = 0.50$)

V/s

H_1: The proportion of customers who consider digital banking safe is more than 0.50. ($p > 0.50$)

Test Statistic

$$z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1 - p_0)}{n}}}$$

Calculation

$\hat{p} = 0.766$

$Zcal$ =7.2944

Z_{tab} =1.645

Interpretation:

more than 50% customers believe that digital banking is safe.

2. Chi-Square Test of Independence for Customer Satisfaction by Gender

Hypotheses

H_0: There is no significant difference in satisfaction levels between males and females.

v/s

H_1: There is significant difference in satisfaction levels between males and females.

Gender	Satisfaction Level			Total
	Very Satisfied	Satisfied	Neutral	
Male	18	54	12	**84**
Female	23	71	10	**104**
Total	**41**	**125**	**22**	**188**

$$\chi^2_{cal} = 0.995$$

at df = 2, $\alpha = 0.05$ $\qquad$ $\chi^2_{table} = 5.991$

Interpretation:

Customer satisfaction is independent of gender.

3. Chi-Square Test of Independence Between Age and Satisfaction Level

Hypotheses

H_0: There is no significant association between age group and satisfaction level

v/s

H_1: There is significant association between age group and satisfaction level

Age Group	Very Satisfied	Satisfied	Neutral + Dissatisfied	Total
Below 20	14	43	8	**65**
21–30	21	61	10	**92**
Above 30	6	18	7	**31**
Total	**41**	**122**	**25**	**188**

Here, $\chi^2_{\text{cal}} = 2.87$

at df = 4, α = 0.05: $\chi^2_{\text{table}} = 9.488$

Interpretation:

There is no significant association between age group and satisfaction level.

This means customers across all age groups show similar satisfaction levels with digital banking.

CONCLUSION

- Bank of India has the highest number of digital banking users in Kolhapur city.
- Instant and convenient payment methods like UPI are the most preferred, reflecting a shift towards faster and easier digital transactions.
- The majority of users use digital banking services daily, indicating high engagement and reliance on these services.
- The most common problem faced by digital banking users is network or server issues, showing that connectivity and system reliability are major concerns.
- More than 75% of users feel that digital banking is safer than visiting a physical branch. This clearly indicates that most users consider digital banking to be safer.
- Most users do not change their passwords regularly, which increases the risk of security problems.
- Opinions on whether advertisements and promotions encourage digital banking are almost equally divided.
- Most users are relatively new to digital banking, with a growing number of moderately experienced customers.
- Digital banking is primarily used for transferring money, highlighting its convenience and efficiency.
- A large majority of respondents are satisfied with digital banking services & they realise the features easy to use, and believe that digital banking is safe.
- Male and female customers, as well as customers from all age groups, show similar levels of satisfaction with digital banking.

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Questionnaire

1. Age Group (वय गट):

Below 20 years (20 वर्षांखाली)

21–30 years (21–30 वर्षे)

31–40 years (31–40 वर्षे)

41–50 years (41–50 वर्षे)

2. Gender (लिंग):

Male (पुरुष)

Female (स्त्री)

Other (इतर)

3. Occupation (व्यवसाय):

Student (विद्यार्थी)

Salaried Employee (नोकरी करणारे)

Business/Entrepreneur (व्यवसाय / उद्योजक)

Homemaker (गृहिणी)

Retired (सेवानिवृत्त)

Other (इतर)

4. Which bank's digital services do you use the most?
(कोणत्या बँकेच्या डिजिटल सेवांचा तुम्ही सर्वाधिक उपयोग करता?)

SBI (एसबीआय)

HDFC (एचडीएफसी)

ICICI (आयसीआयसीआय)

Axis Bank (**अ‍ॅक्सिस बँक**)

BOI (**बीओआय**)

Other (**इतर, नमूद करा**): ___

5. Which digital banking service do you use most often?
(*तुम्ही कोणती डिजिटल बँकिंग सेवा सर्वाधिक वापरता?*)

Mobile Banking App (मोबाईल बँकिंग अ‍ॅप)

Internet Banking (Website) (इंटरनेट बँकिंग – वेबसाइट)

UPI/IMPS/NEFT transfers (यूपीआय/आयएमपीएस/एनईएफटी व्यवहार)

ATM Services (एटीएम सेवा)

Others (इतर): ___

6. How often do you use digital banking services?
(*तुम्ही डिजिटल बँकिंग सेवा किती वेळा वापरता?*)

Daily (दररोज)

Weekly (*आठवड्यातून एकदा*)

Monthly (*महिन्यातून एकदा*)

Rarely (क्वचित)

7. Which problems have you faced while using digital banking?
(*डिजिटल बँकिंग वापरताना तुम्हाला कोणत्या समस्या आल्या? – एकापेक्षा अधिक निवडू शकता*)

Technical Glitches (*तांत्रिक अडचणी*)

Network/Server Issues (नेटवर्क/सर्व्हर समस्या)

Security Concerns (fraud, phishing, OTP issues)
(सुरक्षा समस्या – फसवणूक, फिशिंग, ओटीपी अडचणी)

Poor Customer Support (*निम्न प्रतीचे ग्राहक सहाय्य*)

Others (इतर): ___

8. Do you feel digital banking is safer than visiting a physical branch?
(तुम्हाला वाटते का की डिजिटल बँकिंग शाखेत जाण्यापेक्षा सुरक्षित आहे?)

Yes (होय)

No (नाही)

9. How often do you update or change your digital banking password?

(तुम्ही डिजिटल बँकिंगचा पासवर्ड किती वेळा बदलता?)

Monthly (दर महिन्याला)

Quarterly (तीन महिन्यांनी)

Yearly (दर वर्षी)

Never (कधीच नाही)

10. Do advertisements and promotions encourage you to use digital banking more frequently?
(जाहिराती किंवा ऑफर्स तुम्हाला डिजिटल बँकिंग अधिक वापरायला प्रवृत्त करतात का?)

Yes (होय)

No (नाही)

11. How long have you been using digital banking?
(तुम्ही डिजिटल बँकिंग किती काळापासून वापरत आहात?)
Less than 1 year (1 वर्षापेक्षा कमी)

1–3 years (1–3 वर्षे)

3–5 years (3–5 वर्षे)

More than 5 years (5 वर्षापेक्षा जास्त)

12. What type of transactions do you mostly perform?
(तुम्ही प्रामुख्याने कोणते व्यवहार करता?)

Bill Payments (बिल भरणा)

Money Transfers (पैसे पाठवणे/पाठवून घेणे)

Online Shopping (ऑनलाइन खरेदी)

Checking Balance / Statements (शिल्लक/स्टेटमेंट तपासणे)

Other (इतर): ___

13. How satisfied are you with the range of services offered in digital banking?
(डिजिटल बँकिंगमध्ये दिलेल्या सेवा प्रकाराबाबत आपण किती समाधानी आहात?)

Very Satisfied (खूप समाधानी)

Satisfied (समाधानी)

Neutral (तटस्थ)

Dissatisfied (असमाधानी)

14. Rate your satisfaction with the following aspects of digital banking
(खालील डिजिटल बँकिंग बाबींमध्ये तुमचे समाधान दर द्या):

Ease of Use & User Interface (वापरण्याची सोय व इंटरफेस): 1 2 3 4 5

Transaction Speed (व्यवहाराचा वेग): 1 2 3 4 5

Reliability (successful transactions) (विश्वसनीयता – यशस्वी व्यवहार): 1 2 3 4 5

Security & Safety (सुरक्षा): 1 2 3 4 5

Availability of Services (सेवेची उपलब्धता): 1 2 3 4 5

Customer Support/Help Desk (ग्राहक सहाय्य): 1 2 3 4 5