Maharashtra Education Society's

Institute of Management & Career Courses (IMCC), (Autonomous) Pune- 411038

RESEARCH PROJECT REPORT

On

"Digital Payment Frauds in India: A Study of Consumer Awareness, Risk Perception and Preventive Actions"

By

Sanika R. Kalke

Institute Roll Number: 2402076

Specialization: Financial Management

Under the Guidance of

Dr. Poonam Vatharkar

Submitted to

Maharashtra Education Society's

Institute of Management & Career Courses (IMCC)

AUTONOMOUS

Pune – 411038

In partial fulfilment of the requirements for the award of the degree of

Master of Business Administration (MBA)

2024–2026

MAHARASHTRA EDUCATION SOCIETY'S
(SINCE 1860)
INSTITUTE OF MANAGEMENT & CAREER COURSES (IMCC)
AUTONOMOUS
Approved by AICTE and Recognized by Savitribai Phule Pune University, Pune
IMCC Campus, 131, Mayur Colony, Kothrud, Pune 411038, Maharashtra, India | Ph.: 020-2546 6271/73 | e-mail: info.imcc@mespune.in | http://imcc.mespune.in
NAAC Accredited with Grade A+

Outward No. MES IMCC/ MBA /149 /2025-26 **Date – 6th November, 2025**

Research Project Completion Certificate

This is to certify that Mr./ Ms. Sanika R. Kalke of MBA II Year (Specialization: Financial Management) at IMCC has completed the Research Project titled Digital Payment Frauds in India: A Study of Consumer Awareness, Risk Perception and Preventive Actions to my satisfaction and as per the requirements of the two-year full-time MBA (Autonomous) program (Batch 2024-26) of Savitribai Phule Pune University.

Date:

_____ _____

Faculty Guide (Name & Sign)

Dr. Manasi Bhate
HOD – MBA & Deputy Director

External Examiner Name: _____ Sign: _____

Internal Examiner Name: _____ Sign: _____

External VIVA Date: _____

INDEX

Chapter No.	Title	Page No.
	Executive Summary	
Chapter 1	Introduction	1
Chapter 2	Review of Literature	6
Chapter 3	Research Methodology	15
Chapter 4	Data Analysis and Interpretation	23
Chapter 5	Findings and Suggestions	43
Chapter 6	Conclusion	46
	References	
	Annexure/Appendices	

Executive Summary

The research study titled **"Digital Payment Frauds in India: A Study of Consumer Awareness, Risk Perception and Preventive Actions"** aims to understand how consumers in India, particularly in Pune, perceive and respond to the growing issue of digital payment frauds. With the rapid expansion of online transactions and digital banking, India is becoming a leading digital economy. However, this progress has also brought challenges in the form of increased online financial frauds such as phishing, UPI scams, SIM swap, and fake investment schemes.

The main objectives of this study were to evaluate the level of consumer awareness regarding digital payment frauds, to understand how consumers perceive the risk of such frauds, and to examine the preventive actions they adopt to protect themselves. The study also aimed to find the relationship between awareness, risk perception, and preventive behaviour.

A structured questionnaire was used to collect primary data from 103 respondents in Pune. The collected data was analysed using statistical tools such as frequency analysis, percentage analysis, and correlation. The demographic profile showed that most respondents were young working professionals with good exposure to digital payment systems.

The findings revealed that while most respondents were aware of digital payments and their advantages, many were not fully informed about the types of frauds and safety measures required. A significant number of users reported receiving fraudulent calls or messages but only a few had experienced direct financial loss. Most consumers take basic precautions such as not sharing OTPs and using trusted apps, but many still lack awareness about more advanced safety features like multi-factor authentication and secure Wi-Fi use.

The correlation analysis indicated a positive relationship between consumer awareness, risk perception, and preventive actions. This means that as consumers become more aware of fraud risks, they are more likely to take preventive steps to protect themselves.

The study concludes that increasing digital literacy and awareness campaigns can play an important role in reducing digital payment frauds. Banks, fintech companies, and government bodies should continue to educate consumers through social media, mobile apps, and official communication channels. Strengthening digital infrastructure and promoting responsible usage can build consumer confidence and support India's journey towards a secure and cashless economy.

Chapter 1: Introduction

1.1 Overview:

The digital payments sector in India is undergoing rapid transformation, propelled by government initiatives, expanding smartphone and internet penetration, and widespread technological innovations. Digital payments, defined as monetary transactions conducted through electronic platforms, have revolutionized the transactional landscape, moving the country closer to a "Faceless, Paperless, Cashless" economy. According to recent estimates, India is expected to reach 1.5 billion daily digital transactions by 2025, positioning itself among the world's largest and most dynamic payment ecosystems.

Despite the opportunities and conveniences offered by digital payments, the sector faces a formidable challenge: the prevalence of digital payment frauds. With the exponential rise in e-transactions, instances of fraud—ranging from phishing attacks, SIM swap scams, and malware infections to UPI and online banking frauds—have multiplied, undermining consumer confidence and threatening the integrity of digital finance in India. Reports indicate that while the adoption of security protocols and awareness campaigns has increased, the overall risk faced by individual users remains significant.

Digital payments are transactions made using electronic or online methods, where both the payer and payee use digital platforms to exchange money. Simply put, they are the transfer of funds between payment accounts using a digital device or channel.

India's digital payments sector is thriving, enabling the country to leapfrog from a cash-centric economy to a "Digitally Empowered Economy". Having one of the largest payment ecosystems in the world and a flourishing digital economy, India is poised to become a $5 trillion economy by 2025, with digital payments reaching 1.5 billion transactions a day by that year.

Even though cash remains the dominant mode of transaction, digital payments are witnessing a massive year-on-year growth. A bouquet of e-payment modes, including Unified Payments Interface (UPI), Immediate Payment Service (IMPS), National Electronic Toll Collection (NETC), Bharat Bill Payment System (BBPS), and Aadhaar-enabled Payment System (AePS) among others, are fortifying India's payment ecosystem. UPI, instant real-time payment system, hit a record high of 2.8 billion transactions in June 2021, according to data released by

National Payments Corporation of India (NPCI), fast-tracking the growth of India's digital economy.

The digital-first push by the Government and a mission to usher "Faceless, Paperless, Cashless" economy under the robust Digital India programme coupled with increasing smartphone ownership, growing internet user base, entry of fintech players, and technological innovations are powering India's digital payment revolution. This in turn, is immensely benefitting citizens, giving them easy, safe, and reliable access to multiple digital payment options that enhances their overall Quality of Life.

Digital payment fraud in India is a growing concern, with incidents and associated losses increasing alongside the rise in digital transactions. While digital payments offer convenience and efficiency, they also present opportunities for fraudulent activities, including phishing, SIM swap fraud, and malware attacks. Several initiatives are underway to combat this, including enhanced security protocols, awareness campaigns, and reporting mechanisms.

1.2 Background of the Study

Many consumers are unfamiliar with the risks associated with digital payments or do not take appropriate preventive actions. The consequences of digital fraud extend beyond financial loss, including lack of trust in digital platforms and psychological distress. Although several studies have examined digital payment adoption and technical safeguards, there remains a substantial gap regarding consumer awareness, risk perception, and practical preventive behaviour. This research aims to address these gaps by examining not only how much consumers know about frauds, but also how their perceptions of risk and personal experience influence their protective actions.

1.3 Definitions

Digital Payment: A digital payment, sometimes called an electronic payment, is the transfer of value from one payment account to another using a digital device or channel.

Consumer Awareness: Knowledge of fraud types, warning signs, and safe practices.

Risk Perception: How likely and severe consumers believe the threat of fraud to be.

Preventive Actions: Steps consumers take to avoid becoming victims (e.g., not sharing passwords or OTPs, verifying payment links, enabling security features).

Digital Payment Fraud: The illegal use of online transaction systems to steal money or sensitive data, involving methods like phishing, AI-driven impersonation fake apps, and account takeovers

1.4 Types of Digital Payment Fraud in India:

1. **Phishing:**

   Fraudsters use deceptive emails, messages, or websites to trick users into revealing sensitive information like passwords, card details, or OTPs.

2. **SIM Swap Fraud:**

   Fraudsters obtain a new SIM card linked to a victim's phone number, allowing them to intercept one-time passwords and gain access to bank accounts.

3. **Malware Attacks:**

   Malicious software can be installed on devices through infected links or attachments, enabling fraudsters to steal data or control devices remotely.

4. **Online Banking Frauds:**

   Unauthorized access to online banking accounts through stolen credentials or phishing attacks.

5. **Credit/Debit Card Fraud:**

   Misuse of stolen or compromised card details for unauthorized transactions.

6. **UPI Frauds:**

   Fraudulent activities involving the Unified Payments Interface (UPI), including phishing and app-based scams.

7. **Investment Scams:**

   Fraudulent schemes promising high returns on investments, often using social media or messaging platforms.

8. **Digital Arrests:**

   Impersonating law enforcement officials to deceive victims into transferring money

1.5 Need and Importance of the Study

This area of study is important because digital payment frauds are increasing every day. Even though digital payments are easy and convenient, many people are still becoming victims of fraud. It is also important to understand what steps consumers are taking to protect themselves while using digital payment methods. Digital fraud impacts consumers and also weakens their trust in digital payment systems.

Digital payments have become a part of everyday life in India. While they offer convenience and speed, many people are not fully aware of the risks involved. Cases of fraud like phishing, fake apps, and UPI scams are rising, yet many users don't take proper precautions.

The researcher wants to understand how aware consumers really are, what risks they perceive, and what actions they take to protect themselves. This study can help in identifying gaps in awareness and suggest ways to improve safety through better education and preventive measures. It's a relevant and important topic in today's digital economy.

1.6 Variables

Consumer Awareness

The level to which a consumer is aware about digital payment fraud types, warning signs, and precautions.

Risk Perception

The consumer's perceived likelihood and seriousness of becoming a victim of digital fraud.

Preventive Actions

The measures and behaviours consumers take to protect themselves from fraud (e.g., not sharing OTPs, verifying links, enabling app locks).

Exposure to Digital Payment Fraud

Whether the respondent has experienced or been targeted by digital payment fraud. Can also include the level of financial or emotional impact.

1.7 Objectives

1. To assess the level of consumer awareness about different types of digital payment frauds.
2. To evaluate consumer perception of risk involved in using digital payment systems.
3. To study the preventive measures adopted by consumers to protect themselves from digital fraud.
4. To analyze whether consumer awareness and risk perception influence the adoption of preventive actions.

Chapter 2: Literature Review

In their research paper titled **“An Empirical Study of Customers’ Perceptions of Security and Trust in E-Payment Systems” published in (2010), Changsu Kim, Wang Tao, Namchul Shin, and Ki-Soo Kim** studied how customers feel about security and trust in electronic payment systems. The study was based on a survey of 291 users in Korea and used a structural model to understand the factors that influence people's use of e-payment systems. The authors found that technical protections like encryption and privacy, along with clear and easy-to-understand security statements, help increase customers’ feelings of security. This sense of security then builds trust, which makes people more willing to use electronic payments. However, the study also showed that transaction procedures, like login or payment confirmation steps, do not have a strong effect on how secure or trustworthy the system feels to users. The authors suggested that e-payment providers should focus not only on technical safety but also on giving users clear and simple information about how their data is protected. This helps build trust and encourages more people to use digital payment services.

In the paper titled **"Fraud in Electronic Payment Transactions: Threats and Countermeasures", Lina Fernandes (2013)** explains how the growth of e-business has also increased the risk of electronic payment fraud. The author describes many types of e-frauds, including phishing, identity theft, spoofing, account hacking, lottery scams, and check fraud. These frauds happen because of the anonymous nature of the internet and the fast growth of online transactions. Fernandes also shares data showing how fraud has caused big financial losses for both consumers and businesses. The paper highlights that fraud can happen in many ways, and criminals keep finding new methods. To reduce these risks, the author discusses the use of fraud detection tools like IP tracking, fraud screening software, UPIC, and secure payment systems such as SSL and SET. Fernandes also says that awareness and education are important for both merchants and consumers. If people understand the risks and use good security practices, fraud can be reduced. This study is helpful for understanding the challenges of digital payment safety and the need for strong security systems in e-commerce.

In the research paper titled **"Digital Payment Systems: Perception and Concerns among Urban Consumers", authors Dr. M. Sumathy and Vipin K.P. (2017),** studied how urban people feel about digital payments. The study was done in Malappuram district of Kerala with 100 respondents using convenient sampling. The aim of the study was to understand people's awareness, attitude, and safety concerns about digital payment systems. The authors found that although digital transactions are growing in India, many people still prefer using cash because of habit, difficulty in using digital platforms, and fear of fraud or hidden charges. The study also showed that there is no big difference in awareness between men and women, and a person's education level does not strongly affect their attitude towards digital payments. The researchers concluded that to increase digital payment use, people need better education, more safety, and good offers. This study helps in understanding the problems people face while using digital payments and suggests ways to improve the system.

In the paper titled **"Digital Payment Frauds – An Evaluative Study of Awareness and Digital Literacy," Ms. Saroj Bala Dewatwal and Prof. Krishna Gupta (2021)** studied the increasing problem of digital payment frauds and how digital awareness can help to reduce them. The authors explain that with the growing use of digital payments in both rural and urban areas, frauds such as phishing, vishing, smishing, spoofing, and card-related scams have also increased. These frauds create fear and reduce trust among users. The study was done in Rajasthan with 40 respondents, and it showed that most people knew basic digital terms like PIN and OTP, but many were not fully aware of fraud types—especially spoofing and vishing. The paper highlights that **digital literacy** is very important to protect people from online frauds. When consumers have better knowledge about how digital systems work, they can make safer choices. The study also suggests that both the government and users should work together to improve digital education and create a secure digital environment.

In the paper **"Digital Payments and Consumer Experience in India", authors Sudiksha Shree, Bhanu Pratap, Rajas Saroy, and Sarat Dhal (2021)** studied how people's trust, perception, and past experience with fraud affect their use of digital payments in India. The researchers used an online survey and analysed the data using a statistical method called multinomial logistic regression. They found that people who think digital payments are safe, easy, and low-cost are more likely to use them instead of cash. Also, people who trust banks,

the RBI, and digital payment apps are more comfortable using digital methods. The study also showed that if someone has experienced a digital payment fraud, they may stop using digital payments for small things like groceries, but still use them for bigger things like shopping or bills, because of the convenience. The study found that men, younger people, those living in cities, and people with higher education and income are more likely to use digital payments. This research helps to understand that while digital payment systems are growing in India, many people still worry about safety and need more trust and awareness to feel confident using them.

In the paper titled **"A Study on Users Perception and Awareness towards Digital Payment Security Threats among Youngsters in Chennai, Tamil Nadu, India", V. Parvathy and D. Durairaj (2021)** studied how young people in Chennai understand and feel about the security of digital payments. The study was based on responses from 63 users, mostly working professionals and postgraduate students. The results showed that people with higher education were more aware of digital threats like hacking and phishing, and they followed better safety practices such as changing their PINs regularly. However, users with lower education levels had less knowledge about these threats. The research also found that most people did not know about important government safety tools like the *Digital Payment Suraksha* campaign and *M-Kavach* antivirus. Some users who were satisfied with digital payment apps were still using risky methods like free Wi-Fi, which can lead to fraud. The study highlights that although digital payments are becoming common, many users are still not fully aware of the risks. The authors suggest that the government and RBI should create awareness programs for different regions, so that more users learn how to stay safe while using digital payments.

In the research paper titled **"A Study on Awareness and Consumer Perception on Use of Digital Payments System in India with Special Reference to Chennai", authors Mohammed Zubair Basha N. and Shabeena Shah W. (2021)** examined how people in Chennai understand and feel about using digital payment systems. The study collected data from 120 users and found that many people, especially young adults and students, are using apps like Google Pay for digital transactions. The study also showed that factors like age, gender, and job status affect how people use and trust digital payments. For example, people of different ages had different views about the ease and benefits of using digital payments.

Also, working people had more awareness than others. However, trust and security feelings did not change much between men and women. The authors suggested that more awareness and education are needed to help people use digital payments safely and easily. They also said that digital payment systems should be simple, user-friendly, and secure to make more people shift from using cash to digital money.

In the research paper titled **"Awareness on Online Financial Scam: A Study in Malaysia" by Lee Wen Xian, Lim Nya Hia, and Vivian Lim Yan Yi (2023)**, the authors studied how much Malaysians know about online financial scams. The study was based on two theories: the Technology Threat Avoidance Theory (TTAT) and the Theory of Planned Behaviour (TPB). The researchers collected data from 384 people in Malaysia who use e-wallets or online banking. The study looked at four factors—cybersecurity knowledge, perceived severity of scams, subjective norms (social pressure), and security and privacy concerns. The findings showed that cybersecurity knowledge, perceived severity, and subjective norms have a strong and positive relationship with awareness about online scams. However, concerns about security and privacy did not have a significant impact. The study is important because it helps policymakers and companies understand how to increase public awareness and reduce the number of online scam victims. This research highlights the need for better education and awareness programs to protect people in the digital world.

In the research paper titled **"A Study on Customer Awareness on Cyber Security and Digital Payment Fraud Prevention in Nationalized Banks", author L. Jaikala Karthikeyan (2023)** studied how much customers of nationalized banks in India understand about cybersecurity and digital payment fraud. The paper explains that as online payments grow, the number of cyber frauds like phishing, malware attacks, and identity theft is also increasing. The study used a questionnaire to collect information from bank customers and found that many people are using digital banking, but they do not fully know how to protect themselves from cyber risks. It also found that customers are not well aware of their banks' rules and processes for handling fraud. The author suggests that banks should do more to teach customers about cybersecurity by using alerts, campaigns, and regular updates. This can help people stay safe while using digital payment systems.

In the research paper titled **"Mitigating Economic and Financial Risks: The Importance of Regulation and Consumer Awareness in Combating Credit Card Fraud" by S. Priya and Dr. R. Janarthanan (2023)**, the authors study how credit card fraud is increasing and how it affects the economy and financial system. They explain that as more people use credit cards in India, frauds like identity theft and phishing are also rising. The paper uses data from the Reserve Bank of India, NPCI, and other reports. The authors find that many frauds happen because people are not aware, and also because there are not enough safety rules. They suggest that better laws, smarter fraud detection tools, and more consumer education can help reduce these frauds. They also say that banks, the government, and the police should work together to protect customers. This study shows that both strong rules and informed users are important to fight credit card fraud.

In the research paper titled **"Fraud Prevention in Digital Payment Systems and Cybersecurity Education for Customers of Nationalized Financial Institutions" by Khushwant Singh, Mistrean Larisa, Yudhvir Singh, Dheerdhwaj Barak, and Abhishek Parashar (2023)**, the authors studied how cyber frauds are increasing in India's digital banking system. As more people use online banking for convenience, they also face more risks like phishing, hacking, and data theft. The paper explains that nationalized banks and government agencies such as the Reserve Bank of India (RBI) have created safety steps like OTPs, digital signatures, and fraud alerts to protect users. A survey done in Bengaluru showed that many people use online banking, but some still do not know much about cybersecurity laws. The study also found that cyber fraud can happen to anyone, no matter their age, income, or job. The authors suggest that banks should do more to educate customers, update their systems, and respond quickly to any fraud cases. This paper helps understand the importance of cybersecurity and customer awareness in preventing digital payment frauds.

In the research paper titled **"E-Commerce Frauds: Awareness and Preventive Measures"** by **Saritha Crasta and Caroleena Janefer (2024)**, the authors study the increasing problem of online shopping frauds and how aware consumers are about them. They explain that with the growth of e-commerce, people face new risks like phishing, fake websites, identity theft, and payment scams. The study was based on a survey of 200 people from different age groups and places. It found that while 72% of the respondents were aware of e-commerce frauds, 28%

still did not know much, especially older people. Also, 45% had either experienced fraud themselves or knew someone who did. Many people did not follow basic safety steps like checking if a website is secure before buying. Only 60% used two-factor authentication. The paper also found that most people wanted to learn more through awareness programs, and many believed that government rules were not strong enough to stop fraud. The authors suggest using better security technologies like AI and blockchain, improving laws, and educating consumers—especially those in rural areas and the elderly. This study shows that more awareness, better safety practices, and stronger rules are needed to make online shopping safer for everyone.

In their research paper titled **"A Study on the Awareness of Various Digital Payment Frauds Among Gen-Zs in Ahmedabad City," authors Darshit Hirapara, Krisha Sheth, and Jignesh Vidani (2024),** studied how much Generation Z in Ahmedabad knows about digital payment frauds. The study focused on common types of fraud like phishing, identity theft, and unauthorized transactions. The authors found that older Gen-Z members had slightly more awareness than younger ones, but the difference was not very strong. Most participants were not afraid to use digital payments, even though they knew about fraud risks. The study showed that trust in digital platforms and personal experience with fraud had a bigger effect on behaviour than age. Also, awareness increased when banks and payment platforms gave proper information. The authors suggested that more education is needed to help Gen-Z stay safe while using digital payments. They recommended targeted campaigns, better security features, and future studies in other regions and age groups. This paper gives important ideas for banks, digital platforms, and policymakers to make digital payments safer for young users.

In the research paper titled **"Role of UPI Application Usage and Mitigation of Payment Transaction Frauds: An Empirical Study", the authors B. Franklin Edburg, K. Umadevi, M. Vidya, and P. M. Ramesh Kumar (2024**), studied how people use UPI apps like Google Pay, PhonePe, and Paytm, and how to reduce frauds connected with these apps. The study was done in Chennai with 404 UPI users. It found that many people use UPI apps because they are easy and quick. But at the same time, frauds have increased, especially during COVID-19, by 346%. The study showed that people are more likely to use UPI apps safely if they feel the app is secure, safe, and useful. Features like digital certificates and OTP (one-time passwords) help

reduce fraud. The study also found that internal and external fraud awareness did not strongly affect user behaviour. The authors suggest that banks and companies should educate users, improve security features, and make the apps more user-friendly to build trust and stop frauds. This research helps to understand user behaviour and gives ideas to make digital payments safer in India.

In the research paper titled **"A Comprehensive Study on Security Measures and Consumer Awareness with Special Reference to UPI in India", authors Aniket Swaraj and Ayush Bohara (2024),** studied how people in India use the UPI (Unified Payments Interface) system and how aware they are about its security. The paper explains that even though UPI is widely used, especially by young people, many users do not know how their data is stored or how to report fraud. The study also found that nearly half of the users had faced some kind of security issue but were unsure about what steps to take. Some users believe they are responsible for keeping their accounts safe, while others think that fintech companies or the government should handle it. The authors also talked about new features like UPI Lite, UPI-ATM, and Hello UPI, which aim to make payments easier and safer. However, they suggest that more education and training are needed to help users understand how to protect themselves. The paper highlights that technology should grow along with consumer awareness so that digital payments in India can be both easy and secure.

In their paper titled **"Consumer Perception and Adoption of Digital Payment Methods: A Study on Trust and Security Concerns," Pranjal Rawat, Muthulakshmi R, Hari Prasad Josyula, Abhinav Kataria, and Sunil Rajaram Landge (2024),** studied how trust and security concerns affect people's decision to use digital payment methods. The authors explain that while digital payments offer many benefits like speed and convenience, people are often worried about security issues such as fraud, identity theft, and data breaches. These worries can stop them from using digital payments. The study shows that trust in service providers, clear information about transactions, easy-to-use systems, and strong protection measures like encryption and biometric verification help to build consumer confidence. The paper also discusses the importance of rules made by the government and educational efforts to help people feel safer when using digital payments. The authors use models like the Technology Acceptance Model (TAM) and the Diffusion of Innovations Theory to understand what

influences people's decisions. The study suggests that combining better technology, clear rules, and awareness programs can help more people accept and use digital payment systems.

In the research paper titled **"A Study on the Level of Awareness of Online Banking Frauds Among the Middle-Aged Category with Special Reference to Kumbalangi Panchayath" by M. Sanjana, Angel Sajan, and Diya Anna Francis (2024)**, the authors studied how aware middle-aged people are about online banking frauds in the Kumbalangi Panchayath area of Kerala. The paper explains that as digital banking becomes more common, the risk of cyber fraud also increases, especially for people between the ages of 30 and 50. The researchers used a questionnaire to collect data from 50 people. The study found that while 76% of the respondents used online banking, only 60% were aware of identity theft, and many did not know other types of fraud. Most people got their information from newspapers and social media. Though many users were satisfied with banking services, they still lacked proper knowledge about fraud prevention. The authors suggested that banks should improve customer education, use strong security methods like biometric verification, and offer better help to customers who face fraud. This study shows that more awareness programs are needed to help people use online banking safely.

In the research paper titled **"Enhancing Consumer Vigilance and Mitigating Tactics Against Internet Shopping Fraud", author Saritha Crasta (2024),** studied how aware consumers are about online shopping fraud and what steps they take to protect themselves. The study found that with the rise of e-commerce, frauds like phishing, identity theft, and fake websites have also increased. A survey of 250 online shoppers showed that while many people use some safety steps—like reading reviews, checking website security (HTTPS), and using trusted payment methods—only a few uses all of these methods together. The study also found that many people are not fully aware of their consumer rights or how to report fraud. The paper suggests that better education, stronger online security features, stricter seller checks, and good customer support are needed to protect consumers. The author also recommends that the government, companies, and consumer groups should work together to reduce online fraud and make internet shopping safer.

In the research paper titled **"Trust and Cybersecurity in Digital Payment Adoption: Socioeconomic Insights from India",** authors **Aya Aljaradat and Sandeep K. Shukla (2025)**, studied the factors that influence people's trust and feelings of safety when using digital payments in India. The study found that **ease of use**, **benefits** like rewards or discounts, influence from others, and good complaint-handling systems help users trust digital payments more. When people trust the system and feel it is secure, they are more likely to use it. However, the study also showed that people who have experienced cybercrime, like online fraud or scams, often lose trust, even if the system is safe. This shows that past bad experiences can affect future decisions. The authors used models like TAM (Technology Acceptance Model) and UTAUT (Unified Theory of Acceptance and Use of Technology), and also included emotional factors like fear and risk. The paper says that digital payment systems should not only be technically secure but should also help users feel safe and supported, especially those who have faced cyber fraud before. This is important for building trust and helping more people use digital payments in countries like India.

In their research paper titled **"A Review Research on Online Financial Frauds in India", Dr. S. Jamuna, Dr. J.R. Gaur, Anshu Singh, and Dharam Barot (2023),** discussed the increasing problem of online financial frauds in India. The study explains that financial literacy is very important in today's digital world. People need to understand how to manage their money and protect themselves from frauds. The authors showed that many people in India become victims of digital scams such as phishing, vishing, fake mobile apps, QR code scams, and ATM skimming. According to the Microsoft 2021 report, a large number of Indian consumers lost money through online methods like UPI, bank transfers, and credit cards. The paper also mentions RBI's efforts like the Financial Literacy Week to make people more aware of safe banking. The authors explained that people who are not aware or who get easily tempted by fake offers are more likely to fall into traps. To stay safe, the public should never share their OTPs, passwords, or card details and should always use trusted apps and websites. The study concludes that increasing financial awareness and education will help reduce such frauds and improve financial safety in the country.

Chapter 3: Research Methodology

This chapter explains the systematic process followed to conduct the study. It includes details about the research design, sampling process, data collection, measurement tools, and data analysis techniques used in the study.

3.1 Research Design

The research design serves as the blueprint for collecting and analysing data. This study follows a descriptive research design, as it focuses on describing and analysing the level of consumer awareness, risk perception, and preventive actions related to digital payment frauds in India. A descriptive design is suitable because it helps in collecting factual information, understanding opinions, and identifying patterns in consumer behaviour. The nature of the study is quantitative, as the data was collected through a structured questionnaire and analysed using statistical techniques.

3.2 Data Collection Design

Type of Study: The study is descriptive and quantitative in nature.

Data Collection Method: Primary data was collected using a structured questionnaire distributed through Google Forms. The questionnaire included close-ended and Likert-scale questions designed to measure awareness, risk perception, and preventive actions related to digital payment frauds.

3.3 Sampling Design

Population of the Study: The target population includes consumers using digital payment systems in India, with a focus on respondents from Pune city.

Sampling Method: A non-probability convenience sampling technique was used. This method was chosen because it allows easy access to respondents who are familiar with digital payment systems and are available to participate in the survey.

Sample Size: A total of 103 respondents were selected for the study.

3.4 Sample Profile (Demographic Details)

Section A of the questionnaire included demographic questions such as gender, age, education, occupation, and income. The majority of respondents were between 21–30 years, mainly graduates and working professionals. Both males and females were almost equally represented. Most respondents belonged to the middle-income group, showing that digital payments are widely used among working-class individuals and students.

Table: Demographic Profile of Respondents

	Number	Percent
Gender		
Male	**49**	**47.6**
Female	**53**	**51.5**
Other	**01**	**1**
Age Group		
Below 20	**08**	**7.8**
21-30	**52**	**50.5**
31-40	**18**	**17.5**
41-50	**21**	**20.4**
Above 50	**04**	**3.9**
Highest Educational Qualification		
10^{th}	**00**	**0**
12^{th}	**08**	**7.8**
Graduate	**61**	**59.2**
Post Graduate	**29**	**28.2**
Other	**05**	**5**
Occupation		
Student	**26**	**25.2**
Working Professional	**52**	**50.5**
Business Owner	**09**	**8.7**
Home Maker	**12**	**11.7**
Retired	**01**	**1**
Other	**03**	**3**
Yearly Income		
Below2,50,000	**18**	**17.5**
2,50,000-5,00,000	**14**	**13.6**
5,00,000-10,00,000	**08**	**7.8**
10,00,000-25,00,000	**06**	**5.8**
Above 25,00,000	**03**	**2.9**
Prefer not to say	**54**	**52.4**

Sample Interpretation:

The demographic data of the respondents provides an overview of the background of participants included in the study. The survey was conducted among 103 respondents who actively use digital payment systems. The distribution of respondents is as follows:

In terms of gender, the sample consisted of 47.6% male, 51.5% female, and 1% others, showing a fairly balanced participation. This balance ensures that both male and female perspectives are represented in the study.

Regarding age group, the largest proportion of respondents (50.5%) belonged to the 21–30 years category, followed by 20.4% in the 41–50 years group and 17.5% in the 31–40 years group. Only 7.8% were below 20 years and 3.9% were above 50 years. This shows that young and middle-aged adults are the main users of digital payments and are more engaged with digital financial systems.

With respect to educational qualification, a majority of the respondents (59.2%) were graduates, followed by 28.2% postgraduates and 7.8% 12th pass. Only 5% of respondents had other educational backgrounds, and none were limited to 10th standard education. This indicates that most participants are well-educated, which contributes to a better understanding of digital transactions and related risks.

The occupational profile shows that 50.5% of the respondents are working professionals, followed by 25.2% students and 11.7% homemakers. A smaller percentage were business owners (8.7%), retired (1%), or from other occupations (3%). This suggests that professionally active individuals and students are the major users of digital payment platforms, likely due to convenience and technological familiarity.

In terms of yearly income, more than half of the respondents (52.4%) preferred not to disclose their income. Among those who did, 17.5% earned below ₹2,50,000, 13.6% earned between ₹2,50,000–₹5,00,000, 7.8% earned between ₹5,00,000–₹10,00,000, and smaller groups earned between ₹10,00,000–₹25,00,000 (5.8%) and above ₹25,00,000 (2.9%). This indicates that digital payment usage is common across all income levels, not limited to high-income groups.

Graphical Representation:

Figure 3.1 – Gender of Respondents

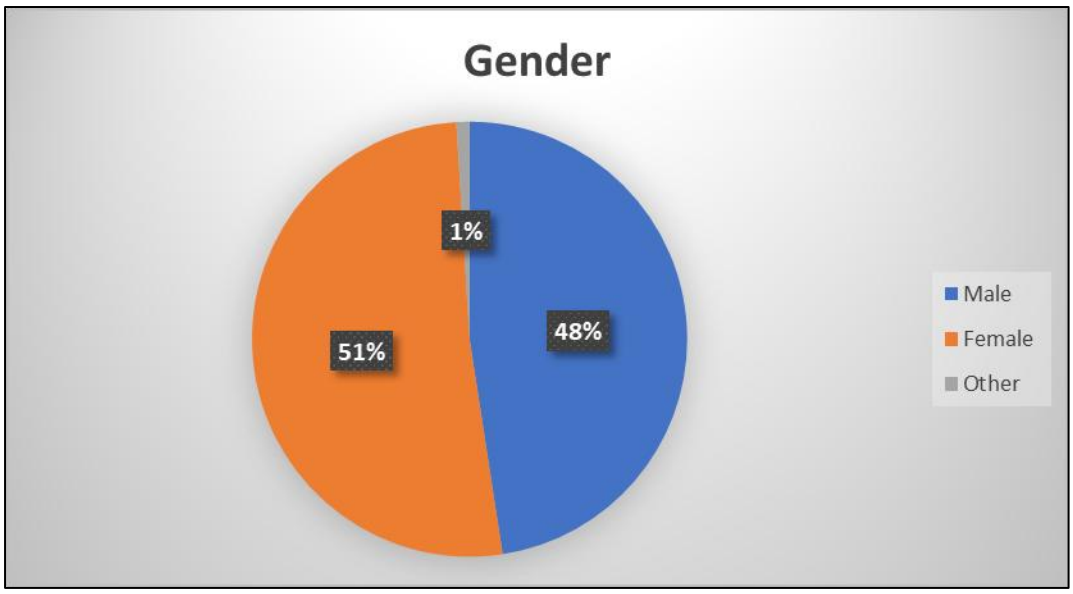


Figure 3.2 – Age Group of Respondents

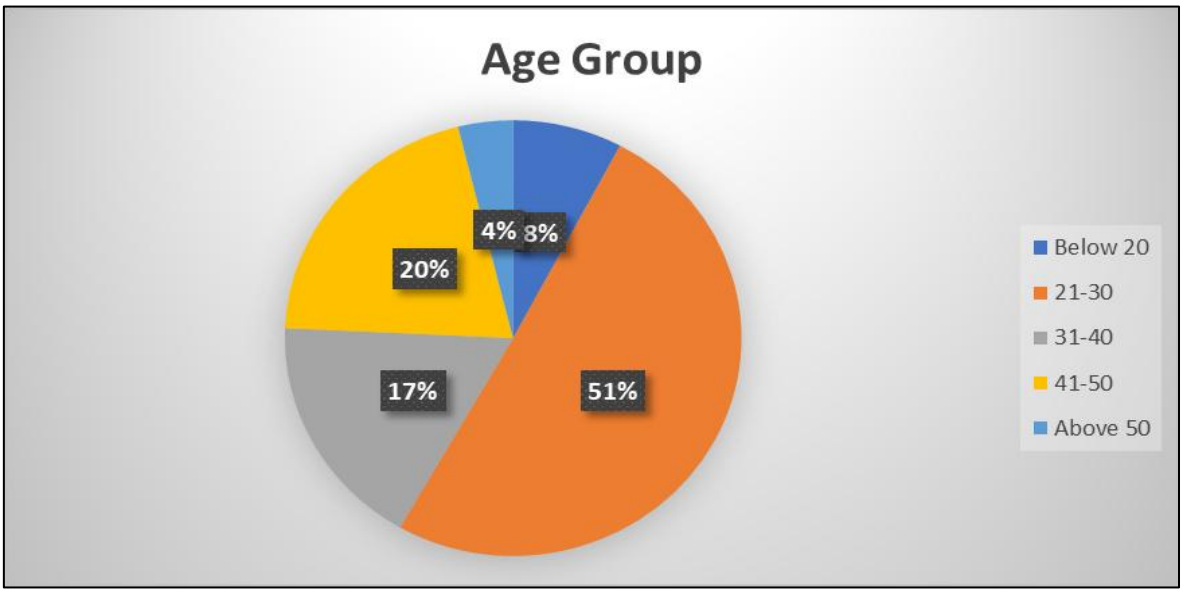


Figure 3.3 – Highest Educational Qualification of Respondents

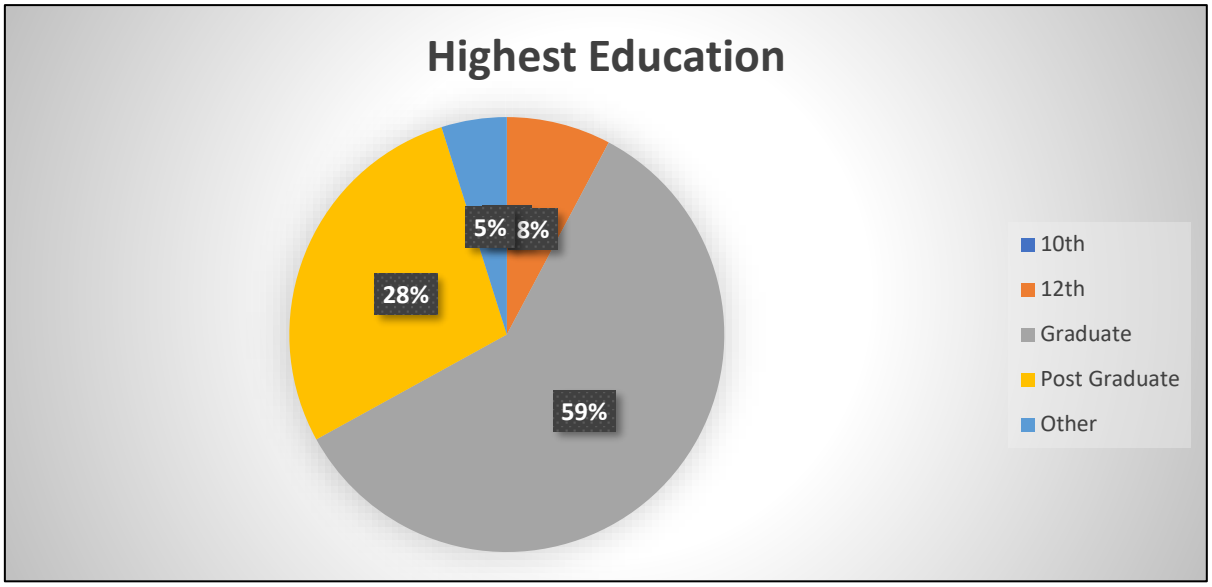


Figure 3.4 – Occupation of the Respondents

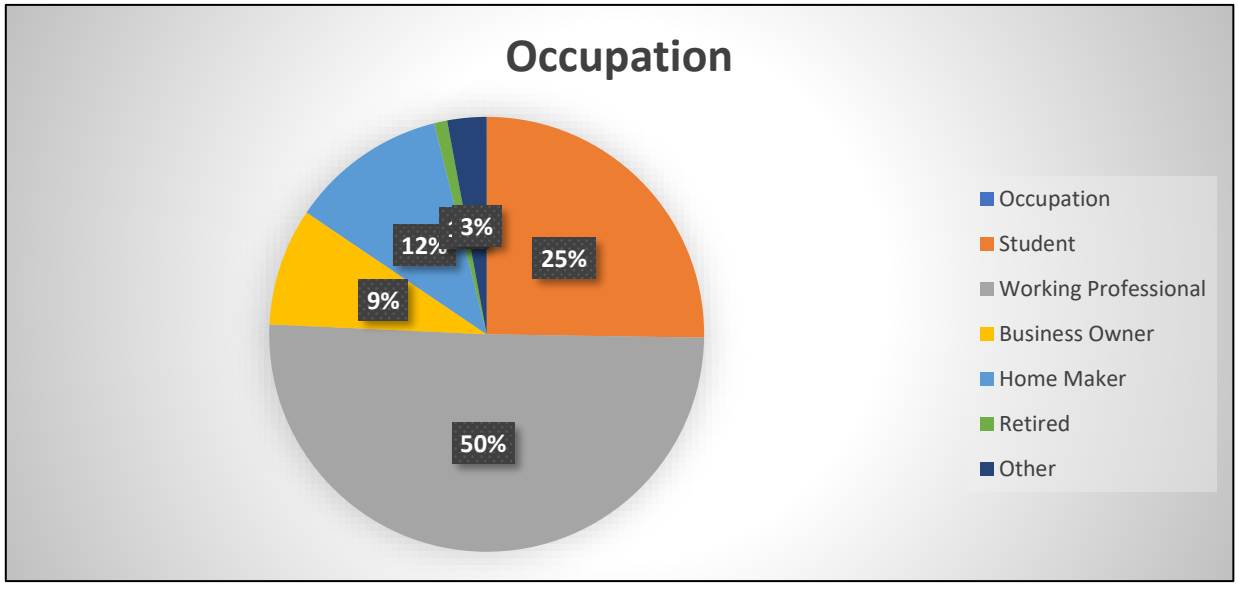
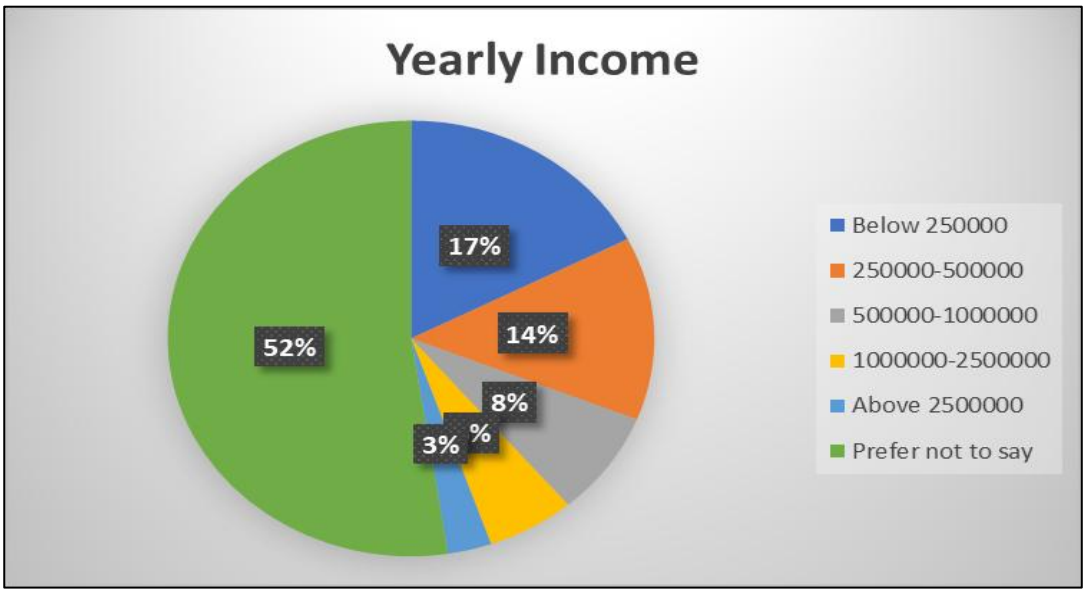


Figure 3.5 – Yearly Income of Respondents



3.5 Measures / Scales Used

The study used a structured questionnaire developed based on previous studies and online sources. Each section measured a key variable as follows:

- Consumer Awareness: Measured through questions about knowledge of digital payment methods and types of frauds.
- Risk Perception: Measured through questions on how safe or risky respondents feel while using digital payments.
- Preventive Actions: Measured through multiple-choice questions about safety practices followed by consumers (e.g., not sharing OTPs, using secure apps, checking statements regularly).

Responses were recorded using multiple-choice and Likert-scale formats.

3.6 Data Analysis Techniques

The collected data was coded and analysed using Microsoft Excel. Basic statistical tools such as percentages, frequencies, and charts were used to describe the demographic profile and awareness levels. Further, correlation analysis was used to examine the relationship between awareness, risk perception, preventive actions, and digital payment usage. This helped identify

how these factors are connected and how awareness influences preventive behaviour among consumers.

3.7 Limitations of the Study

1.The study is based on self-reported data, which may include some personal bias or inaccuracy.

2. The research was limited to Pune city, so the findings may not represent the entire country.

3. The sample size of 103 respondents is small, which limits the generalization of the results.

4. The convenience sampling method may not provide full randomness.

5. The study is cross-sectional, meaning it captures responses at one point in time and does not reflect long-term behavioural changes.

3.8 Scope of the Study

The study focuses on understanding consumer awareness, risk perception, and preventive actions related to digital payment frauds in India. It is limited to respondents who actively use digital payment systems. The geographical scope is confined to Pune city, which represents an urban population familiar with digital transactions. The study period covered data collected during the year 2024–25. The findings reflect the current situation of digital payment users and can serve as a base for future research on financial fraud awareness and digital security.

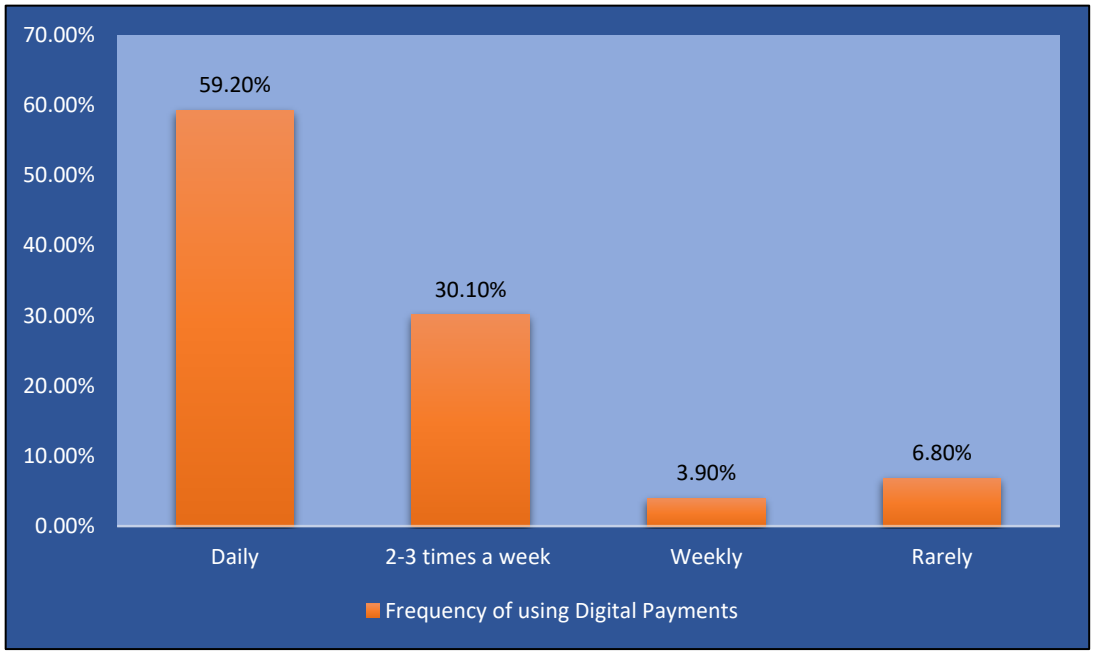
Chapter 4: Data Analysis and Interpretation

7. How frequently do you use digital payments?

Table 4.1 – Respondent's frequency of using digital payments

Frequency of using digital payments	Frequency	Percentage
Daily	61	59.2
2-3 times a week	31	30.10
Weekly	04	3.90
Rarely	07	6.80

Figure 4.1 – Respondent's frequency of using digital payments



Interpretation:

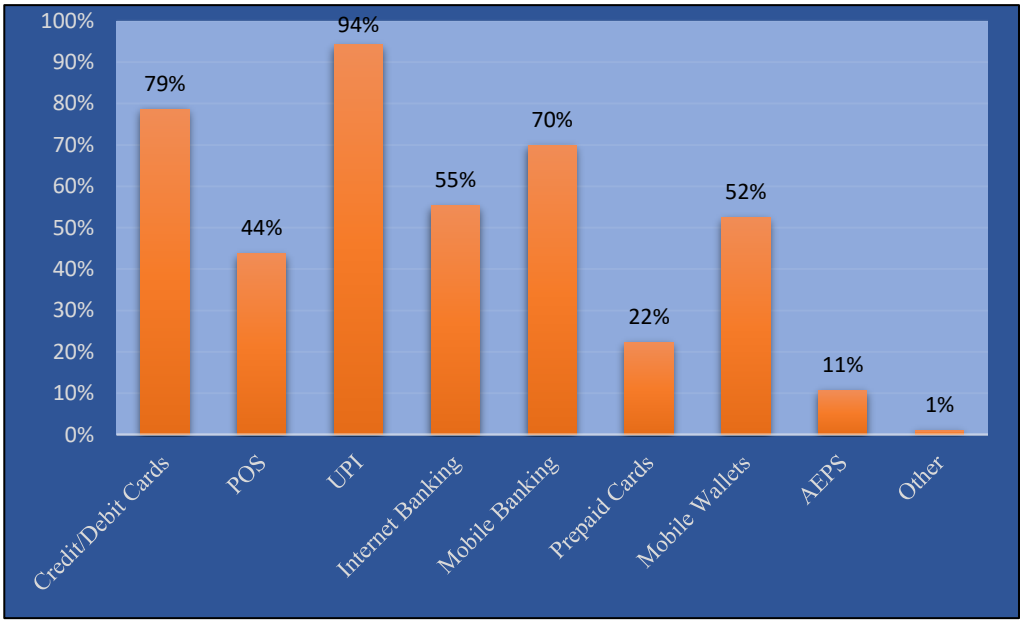
Most respondents reported using digital payments very frequently. A large number use them daily or several times a week, while only a few use them occasionally or rarely. This shows that digital payments have become a regular part of people's lives, especially among younger and working individuals. It also reflects the growing dependence on online payment platforms in everyday transactions.

8. Which of these digital payments are you aware of?

Table 4.2 - Digital Payments Respondents Aware of

	Frequency	Percentage
Credit/Debit Cards	81	79
POS	45	44
UPI	97	94
Internet Banking	57	55
Mobile Banking	72	70
Prepaid Cards	23	22
Mobile Wallets	54	52
AEPS	11	11
Other	2	1

Figure 4.2 - Digital Payments Respondents Aware of



Interpretation:

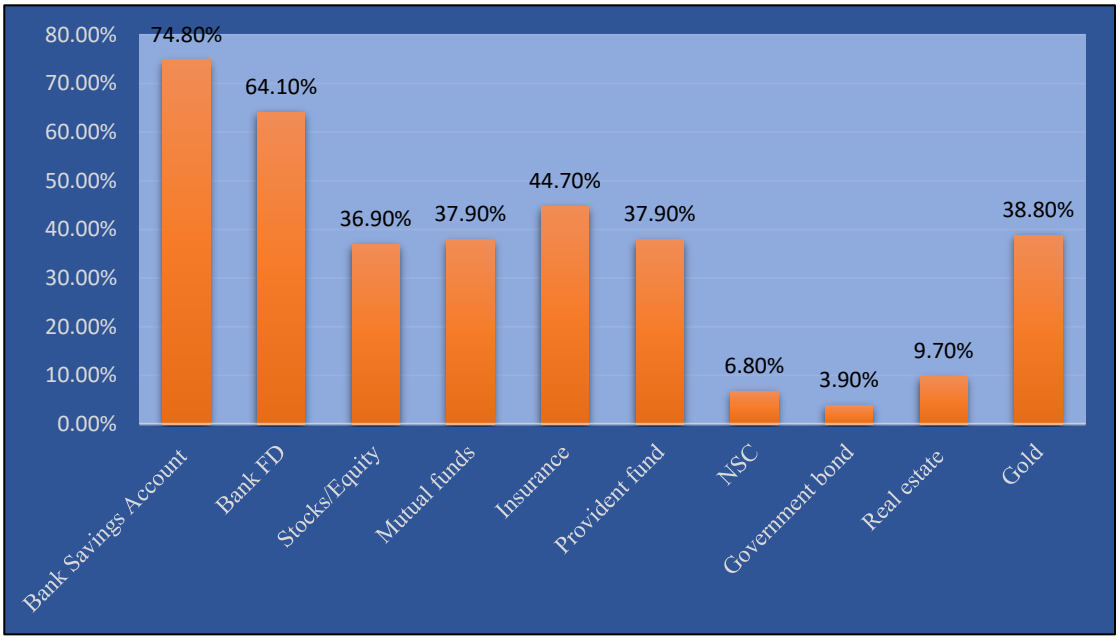
The data shows that respondents are most aware of UPI, internet banking, mobile banking, and debit/credit cards. A smaller number knew about prepaid cards, AEPS, and POS systems. This indicates that newer and simpler technologies like UPI have high awareness, while specialized systems are less familiar to general users. Overall, awareness of major digital payment methods is high among respondents.

9. Which of these do you save/invest in?

Table 4.3 - Respondents' Saving/Investment Preferences

	Frequency	Percentage
Bank Savings Account	77	74.8
Bank FD	66	64.1
Stocks/Equity	38	36.9
Mutual Funds	39	37.9
Insurance	46	44.7
Provident Fund	39	37.9
NSC	7	6.8
Government Bond	4	3.9
Real Estate	10	9.7
Gold	40	38.8

Figure 4.3 - Respondents' Saving/Investment Preferences



Interpretation:

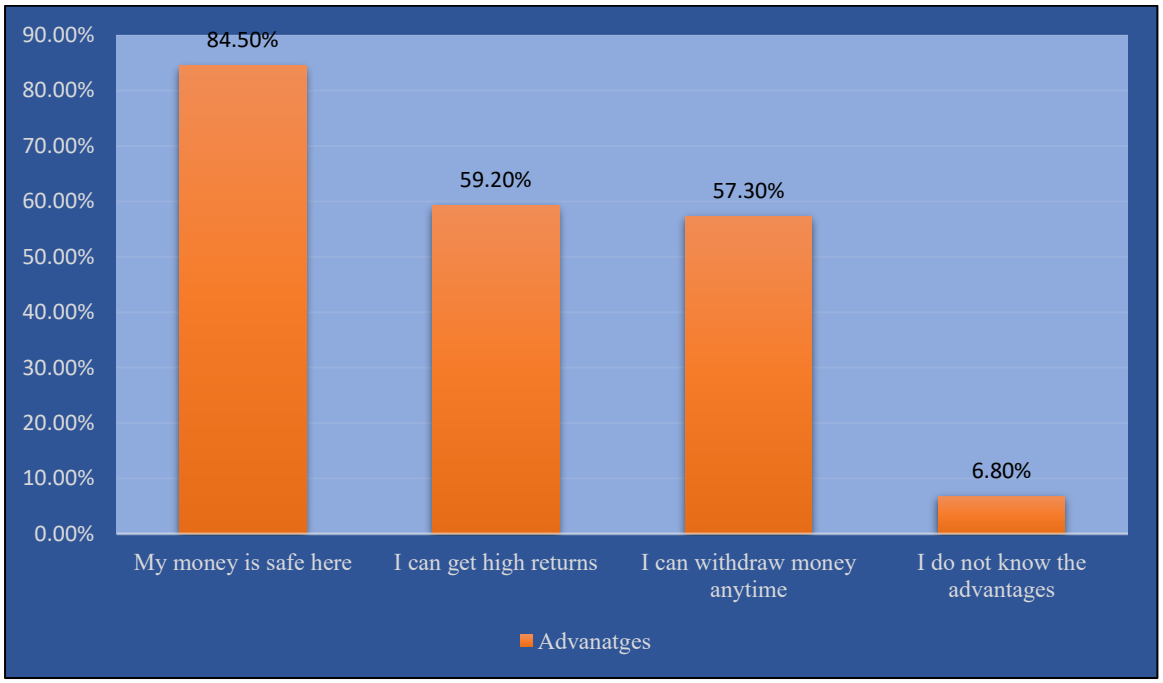
Most respondents preferred traditional saving options such as bank savings accounts and fixed deposits, followed by mutual funds and insurance. Fewer respondents invested in stocks, gold, or government bonds. This shows that people still prefer safe and low-risk investments, possibly because of a cautious approach toward financial risks and limited awareness of advanced investment options.

10. What advantages do they give you?

Table 4.4 – Advantages of Savings/Investment Options

	Frequency	Percentage
My money is safe here	87	84.5
I can get high returns	61	59.2
I can withdraw money anytime	59	57.3
I do not know the advantages	7	6.8

Figure 4.4 – Advantages of Savings/Investment Options



Interpretation:

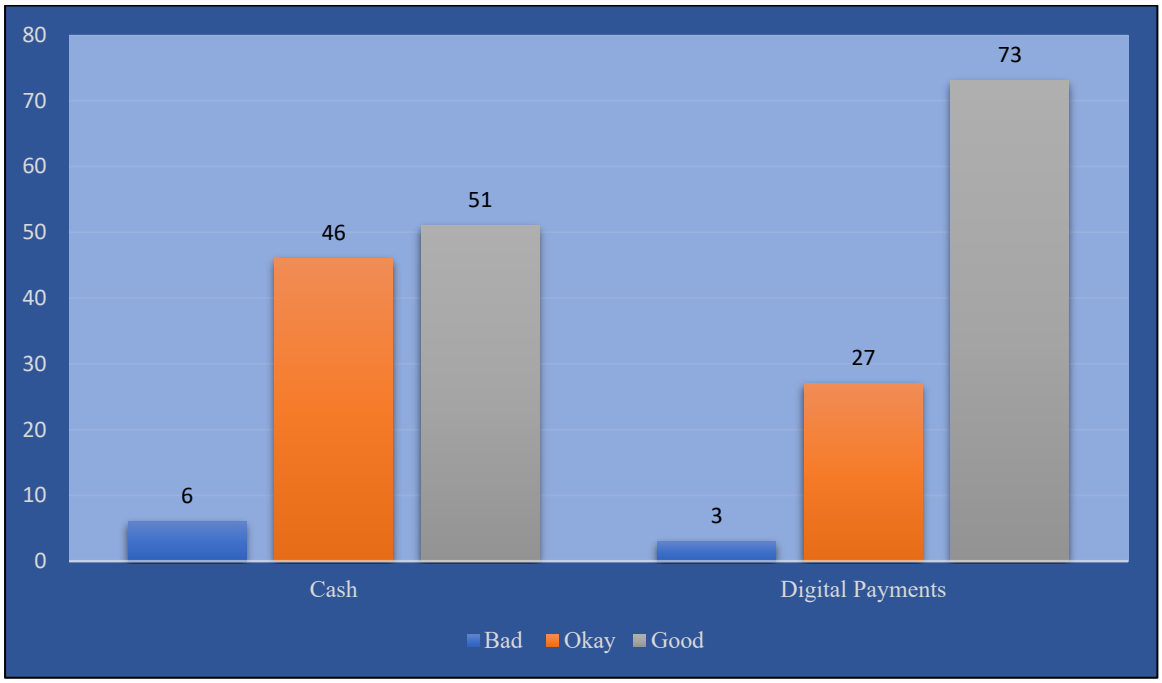
The majority of respondents believed that their money is safe in their chosen saving or investment options. Some respondents felt that these options offer high returns or easy withdrawal facilities, while a few were unaware of the advantages. This suggests that safety remains the most important factor influencing financial decisions among consumers.

11. How would you rate your experience or opinion of using cash/digital payments for transactions?

Table 4.5 – Experience of using Cash/Digital Payments

	Cash	Digital Payments
Bad	6	3
Okay	46	27
Good	51	73

Figure 4.5 – Experience of using Cash/Digital Payments



Interpretation:

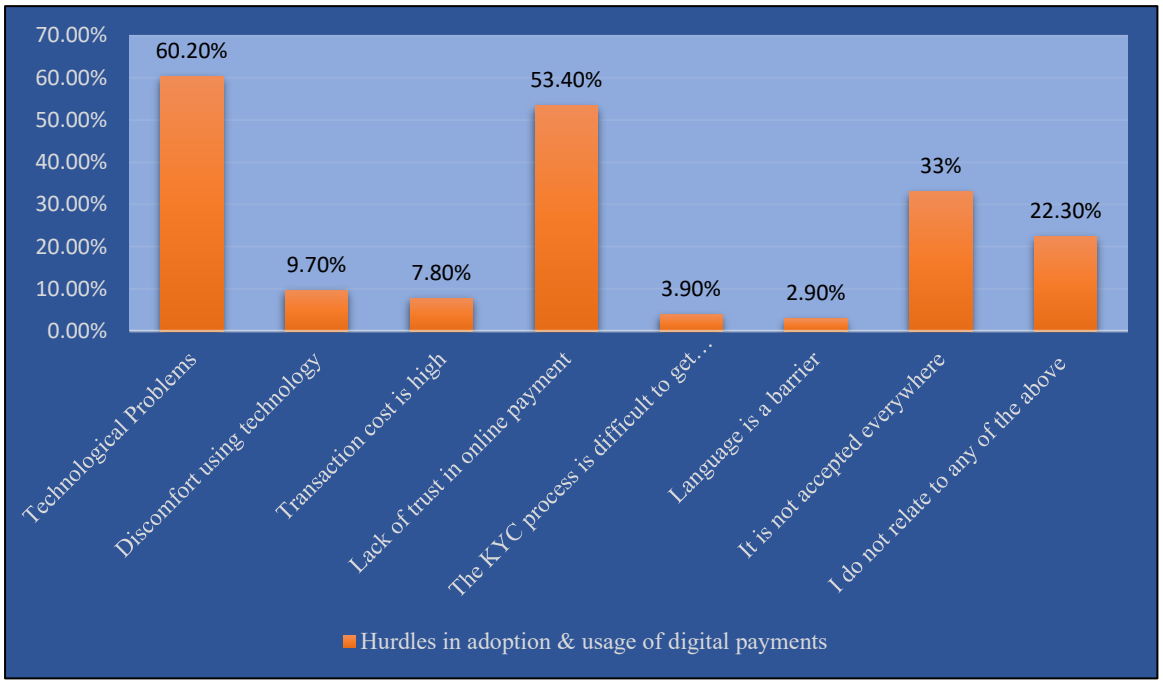
Most respondents rated their experience with digital payments as good, while some found it satisfactory or average. Very few rated it as bad. This indicates that digital payment systems are generally viewed positively, offering convenience, speed, and safety compared to cash transactions.

12. What are the main HURDLES in the adoption and usage of digital payments for you?

Table 4.6 – Hurdles in adoption & usage of digital payments for Respondents

	Frequency	Percentage
Technological Problems	62	60.2
Discomfort using technology	10	9.7
Transaction cost is high	8	7.8
Lack of trust in online payment	55	53.4
The KYC process is difficult to get done	4	3.9
Language is a barrier	3	2.9
It is not accepted everywhere	34	33
I do not relate to any of the above	22	22.3

Figure 4.6 – Hurdles in adoption & usage of digital payments for Respondents



Interpretation:

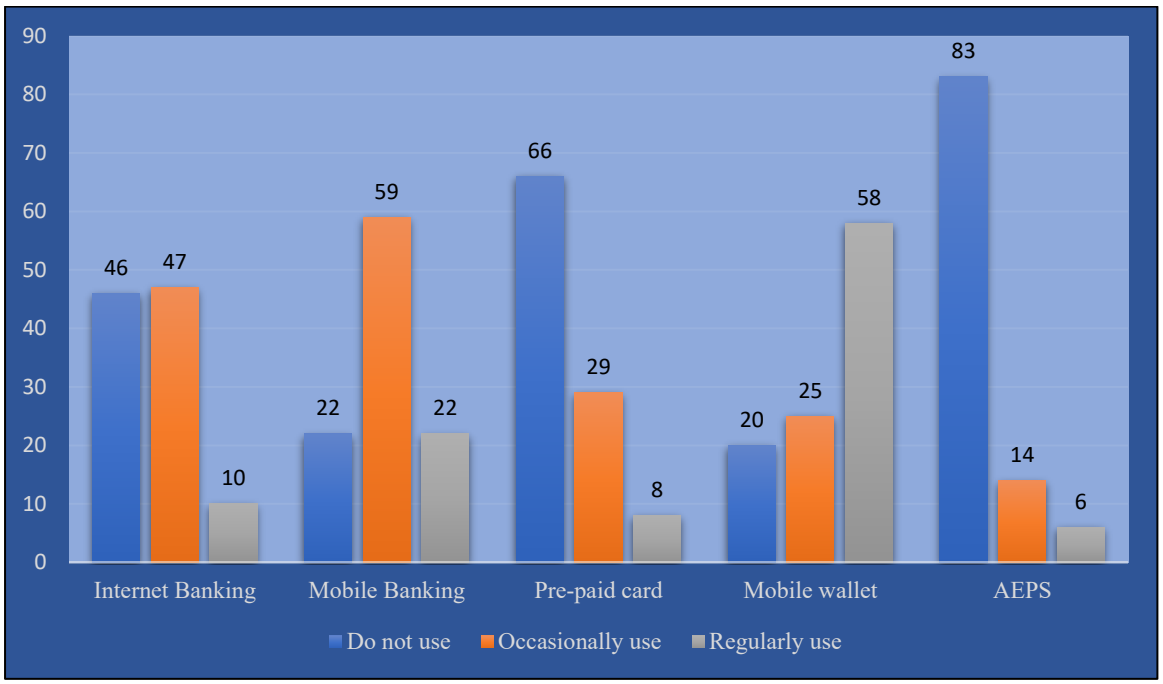
The main problems faced by respondents were technological issues (poor internet, app glitches) and lack of trust in online payments. A few also mentioned discomforts with technology and high transaction costs. This means that while digital payments are popular, some users still face barriers related to technology reliability and security concerns.

13. How frequently do you utilize the following digital payment methods?

Table 4.7 – Frequency of Using Different Digital Payment Methods

	Do not use	Occasionally use	Regularly use
Internet Banking	46	47	10
Mobile Banking	22	59	22
Pre-paid Card	66	29	8
Mobile Wallets	20	25	58
AEPS	83	14	6

Figure 4.7 – Frequency of Using Different Digital Payment Methods



Interpretation:

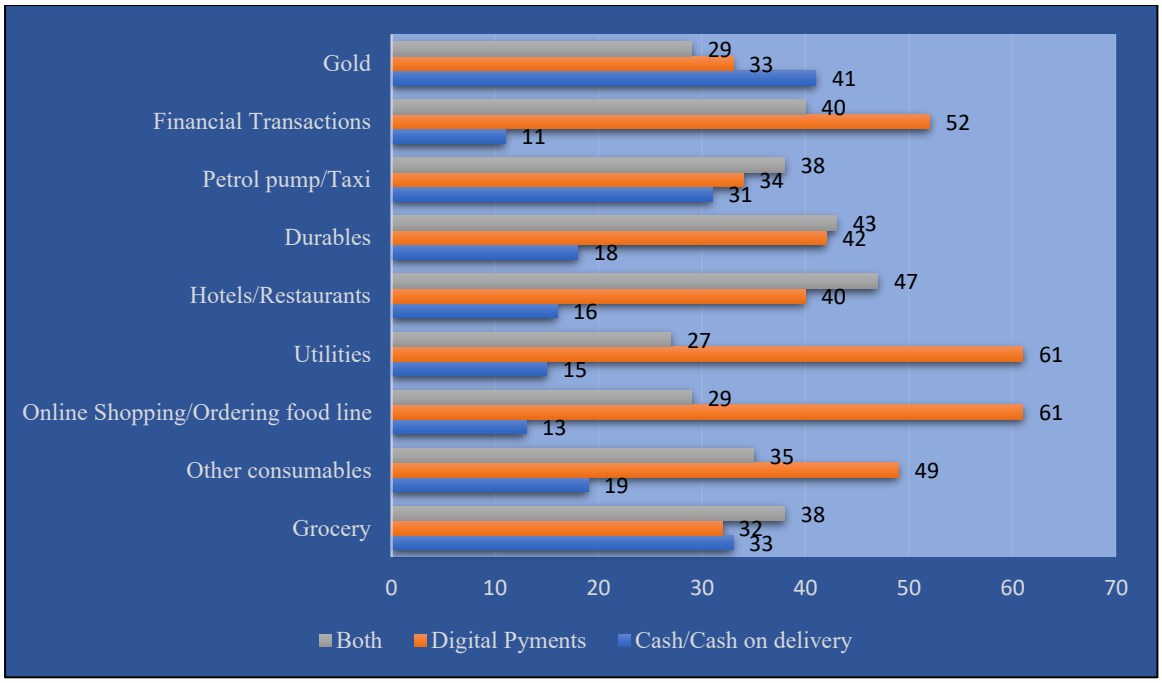
Among all methods, UPI and mobile banking were the most frequently used, while prepaid cards and AEPS were used rarely. This suggests that easy-to-use and widely accepted methods are preferred by consumers, while less common tools are used occasionally or not at all.

14. What modes of payment do you primarily use for the following types of purchases or transactions?

Table 4.8 - Mode of Payment Used for Different Purchases

	Cash/Cash on delivery	Digital Payments	Both
Grocery	33	32	38
Other consumables	19	49	35
Online shopping/Ordering food online	13	61	29
Utilities	15	61	27
Hotels/Restaurants	16	40	47
Durables	18	42	43
Petrol pump/Taxi	31	34	38
Financial Transactions	11	52	40
Gold	41	33	29

Figure 4.8 - Mode of Payment Used for Different Purchases



Interpretation:

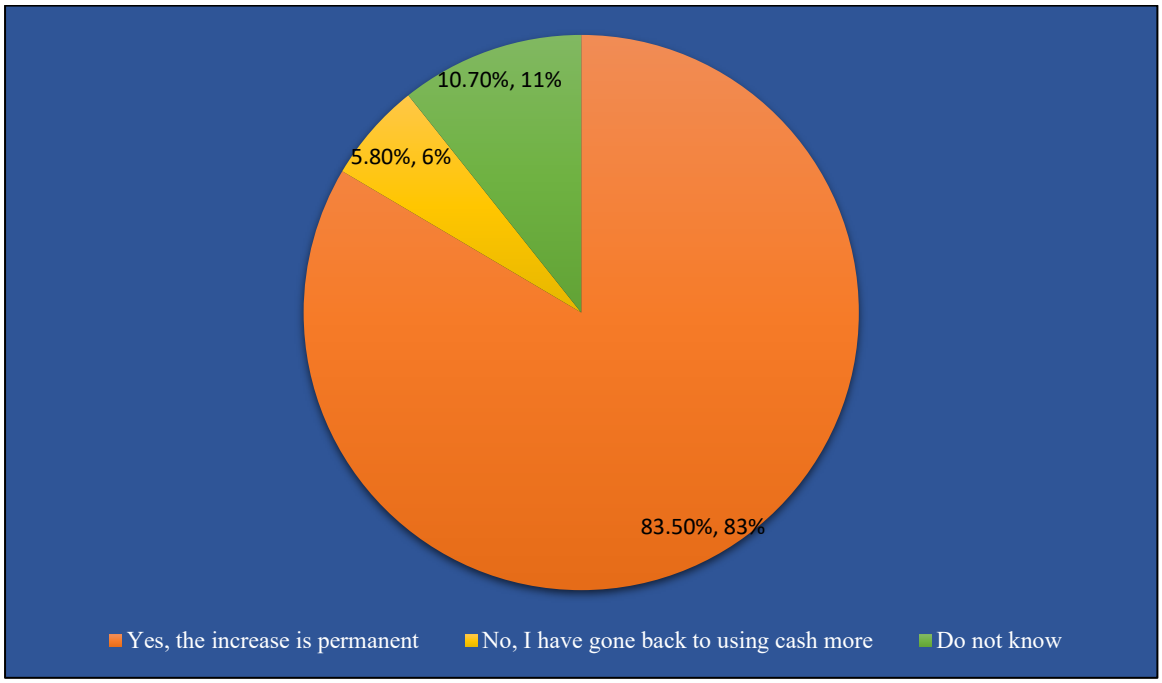
The data shows that digital payments are mostly used for online shopping, food delivery, and utility bills, whereas cash is still preferred for groceries and small local purchases. This suggests that although digital payments are growing, cash remains common for low-value or local transactions.

15. Since the COVID-19 pandemic, has your use of digital payments increased?

Table 4.9 – Change in Digital Payment Usage Since COVID-19

	Frequency	Percentage
Yes, the increase in permanent	86	83
No, I have gone back to using cash more	06	6
Do not know	11	11

Figure 4.9 – Change in Digital Payment Usage Since COVID-19



Interpretation:

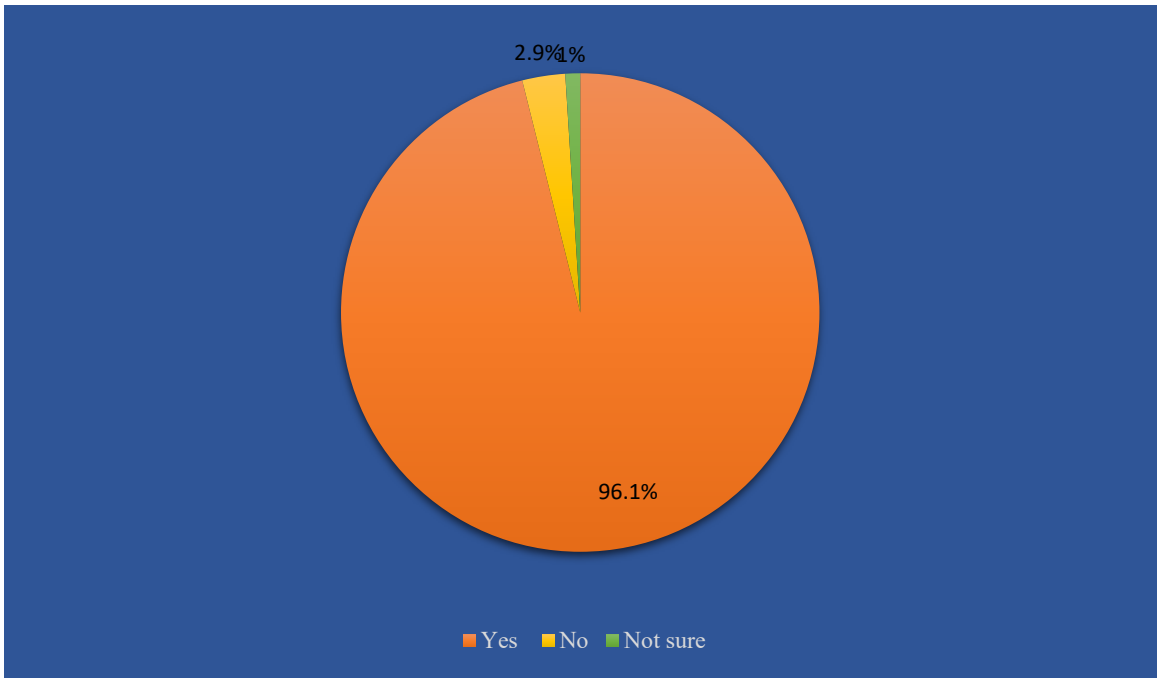
A large number of respondents said that their use of digital payments increased after COVID-19, and the increase became permanent. Only a few returned to using cash. This clearly shows that the pandemic played a major role in encouraging the adoption of digital transactions in India.

16. Are you aware about the digital payment's fraud?

Table 4.10 - Awareness About Digital Payment Frauds

	Frequency	Percentage
Yes	99	96.1
No	3	2.9
Not sure	1	1

Figure 4.10 - Awareness About Digital Payment Frauds



Interpretation:

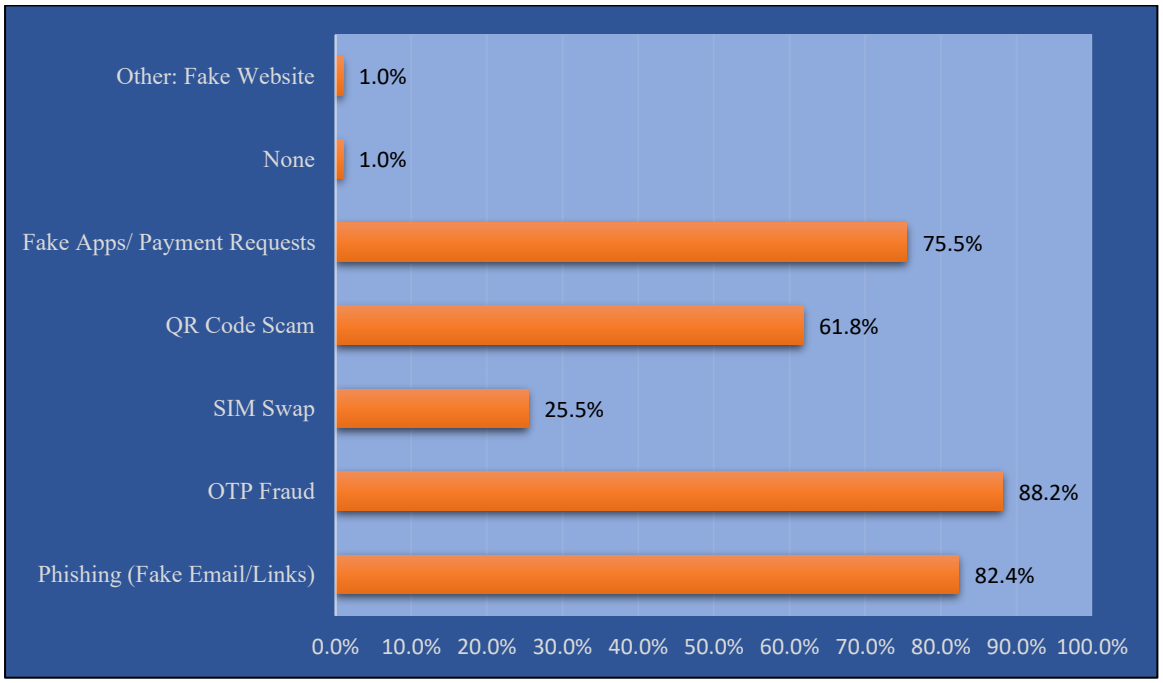
Most respondents reported being aware of digital payment frauds, while a small portion were not sure or unaware. This shows that awareness levels are high, but there is still a need for more education about newer and advanced types of fraud.

17. If yes, which of the following frauds are you aware of?

Table 4.11 - Types of Digital Frauds Known to Respondents

	Frequency	Percentage
Phishing (Fake Email/Links)	84	82.4
OTP Fraud	90	88.2
SIM Swap	26	25.5
QR Code Scam	63	61.8
Fake Apps/Payment Requests	77	75.5
None	1	1
Other	1	1

Figure 4.11 - Types of Digital Frauds Known to Respondents



Interpretation:

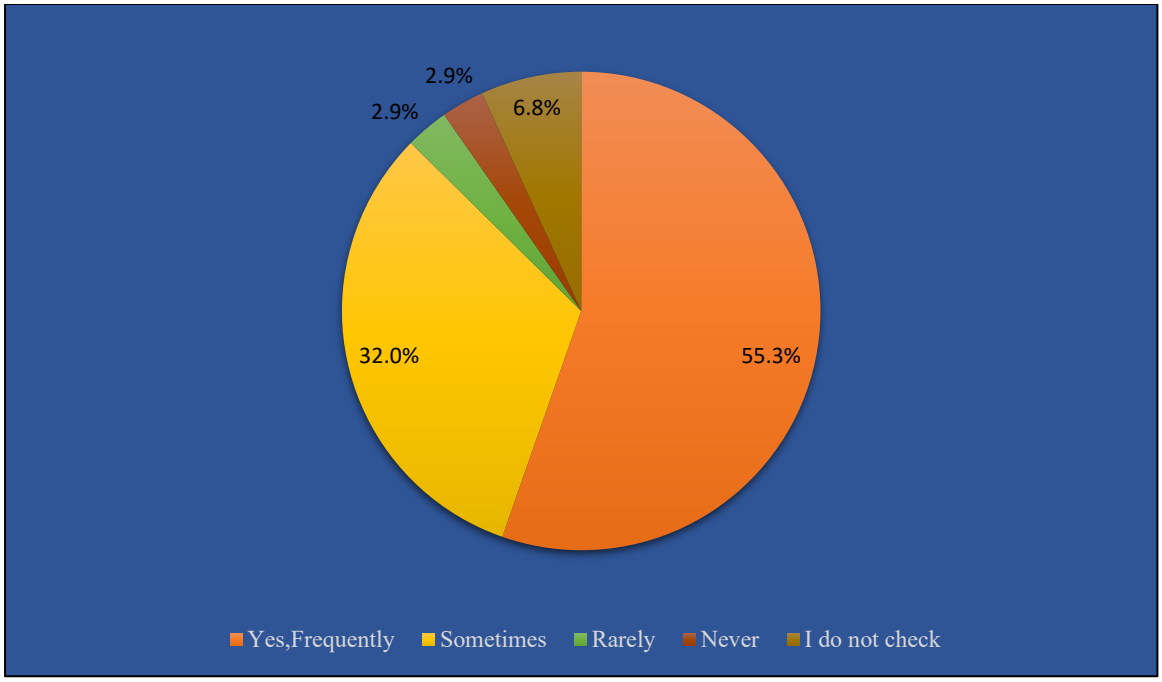
Respondents were most aware of phishing, OTP frauds, and fake apps, while awareness about SIM swap and QR code scams was lower. This suggests that people know about common frauds they hear in the media but are less informed about technical or complex fraud types.

18. Have you received any awareness messages from your bank or payment app about frauds?

Table 4.12 - Awareness Messages from Banks or Apps

	Frequency	Percentage
Yes, Frequently	57	55.3
Sometimes	33	32
Rarely	3	2.9
Never	3	2.9
I do not check	7	6.8

Figure 4.12 - Awareness Messages from Banks or Apps



Interpretation:

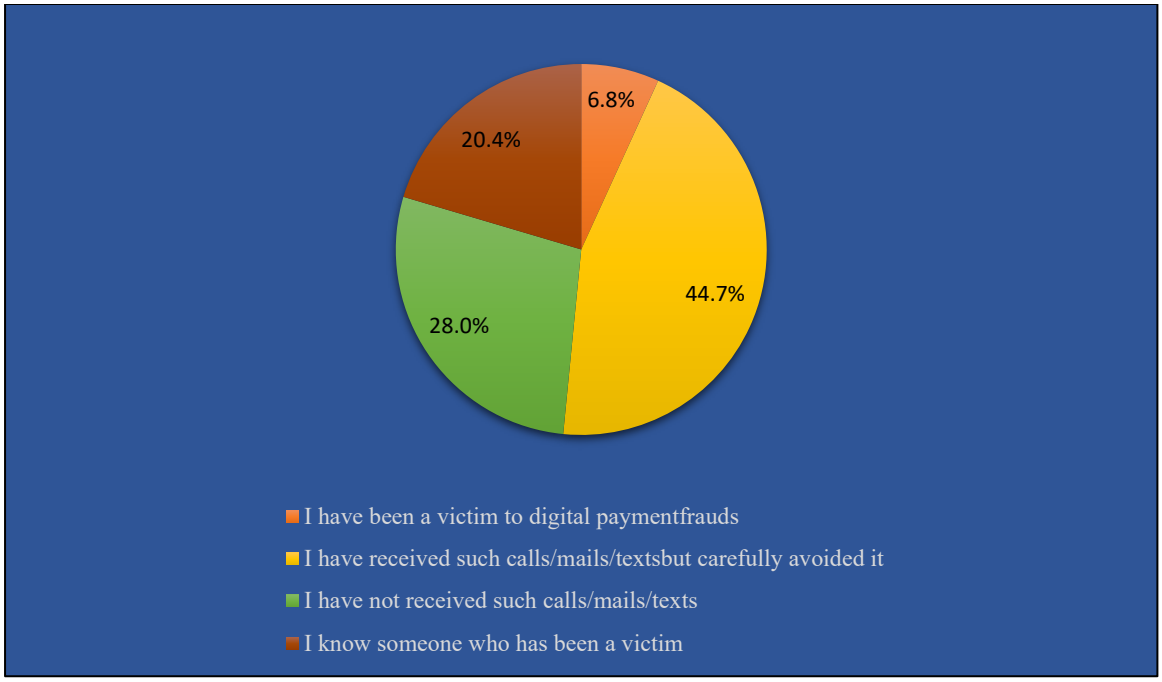
Most respondents said they sometimes or rarely receive fraud awareness messages from banks or payment apps. A smaller group reported receiving them frequently. This shows that banks and payment platforms need to communicate more actively with users about fraud prevention.

19. What is your experience with digital payments FRAUD (e.g. on-call fraudsters, phishing etc.)?

Table 4.13 - Experience with Digital Payment Frauds

	Frequency	Percentage
I have been a victim to digital payments frauds	07	6.8
I have received such calls/mails/texts but carefully avoided it	46	44.7
I have not received such calls/mails/texts	29	28.2
I know someone who has been a victim	21	20.4

Figure 4.13 - Experience with Digital Payment Frauds



Interpretation:

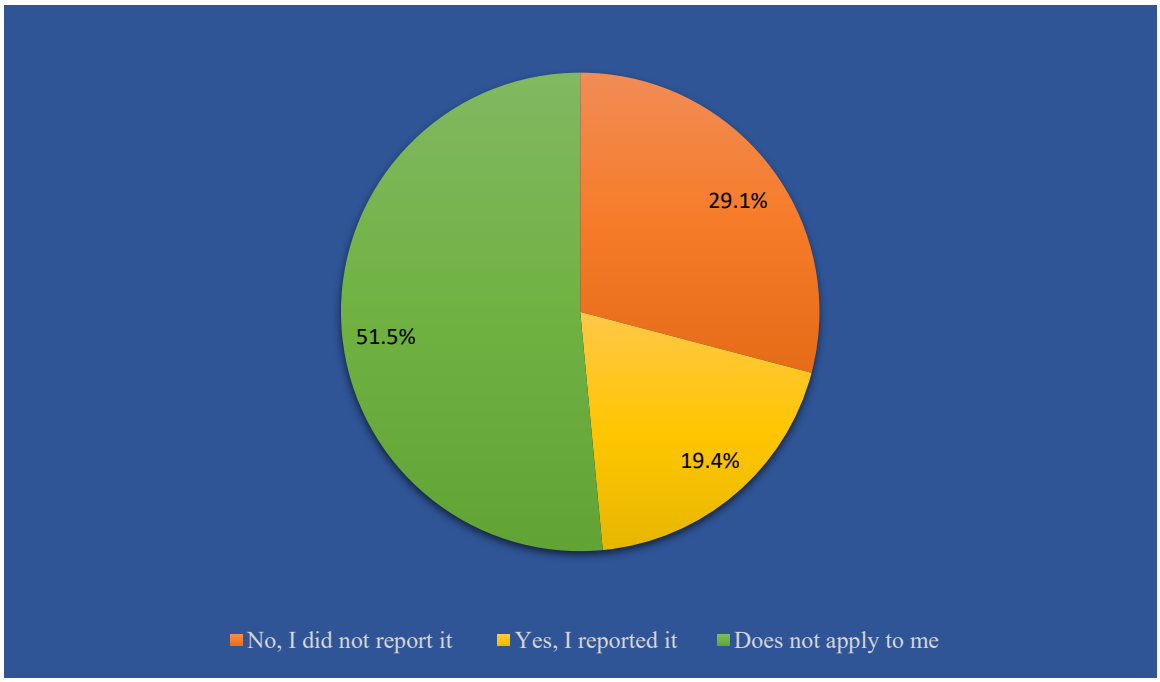
A majority of respondents said they have received fake calls, texts, or emails but avoided becoming victims. A few respondents were actual victims, while some never faced such incidents. This indicates that fraud attempts are common, but awareness helps prevent victimization for many users.

20. If you have been a victim or carefully avoided the fraud, then was the case reported to the concerned authority?

Table 4.14 - Reporting Fraud Cases to Authorities

	Frequency	Percentage
No, I did not report it	30	29.1
Yes, I reported it	20	19.4
Does not apply to me	53	51.5

Figure 4.14 - Reporting Fraud Cases to Authorities



Interpretation:

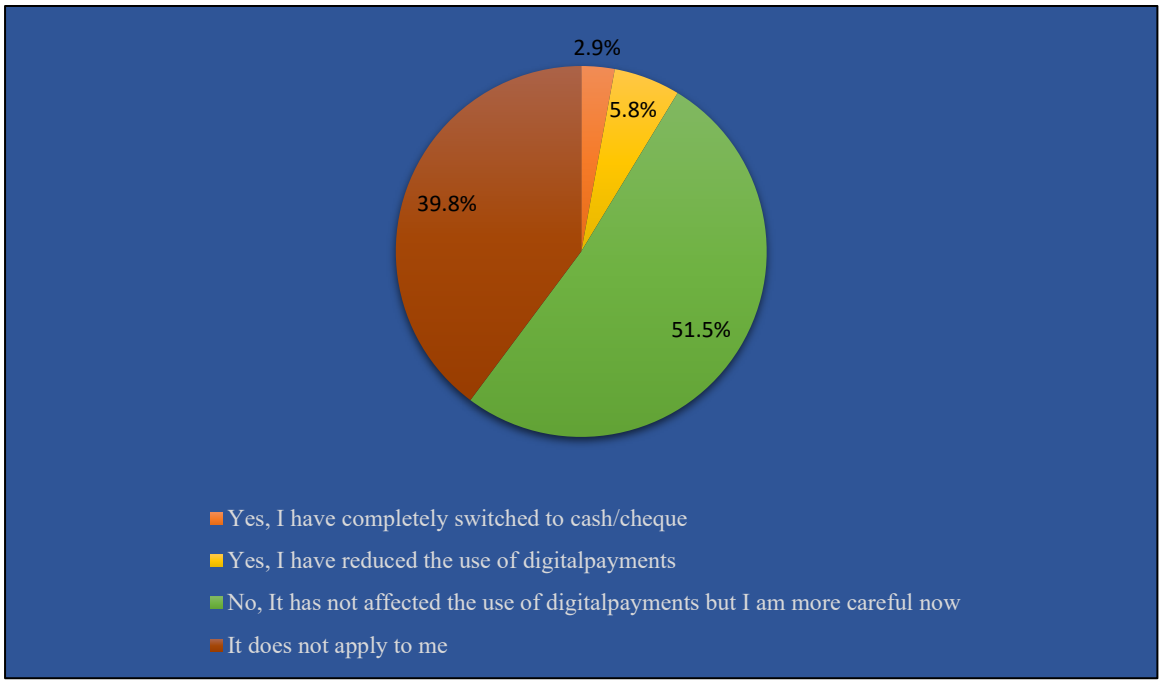
Among those who faced or avoided fraud, many did not report the incident, while a smaller number informed authority. This shows a low tendency to report, possibly because people think the process is complicated or that reporting will not lead to any action.

21. If you have AVOIDED or been a VICTIM to such a fraud, then have you REDUCED your digital payments usage?

Table 4.15 - Effect of Fraud Experience on Digital Payment Usage

	Frequency	Percentage
Yes, I have completely switched to cash/cheque	3	2.9
Yes, I have reduced the use of digital payments	6	5.8
No, it has affected the use of digital payments but I am more careful now	53	51.5
It does not apply to me	41	39.8

Figure 4.15 - Effect of Fraud Experience on Digital Payment Usage



Interpretation:

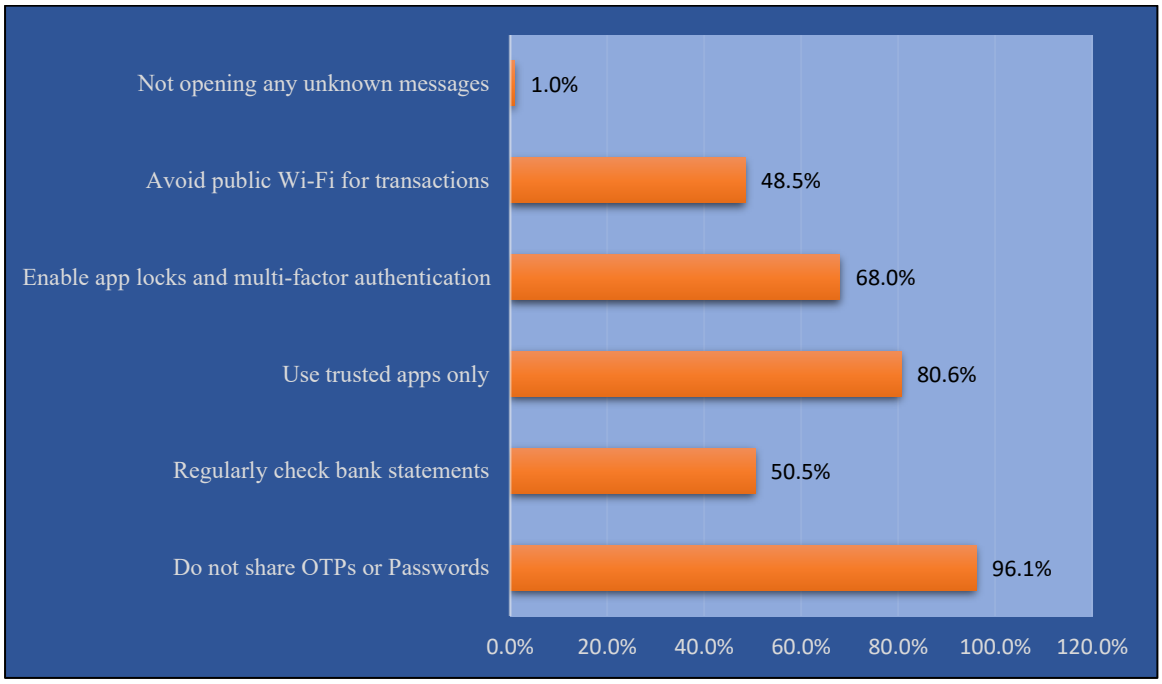
Most respondents said they did not stop using digital payments after facing or avoiding fraud but became more careful. A few reduced their usage, and only a very small number completely stopped. This shows that trust in digital systems remains strong, though users have become more alert.

22. Which safety practices do you follow?

Table 4.16 - Safety Practices Followed by Respondents

	Frequency	Percentage
Do not share OTPs or Passwords	99	96.1
Regularly check bank statements	52	50.5
Use trusted apps only	83	80.6
Enable app locks & multi-factor authentication	70	68
Avoid public Wi-Fi for transactions	50	48.5
Other: Not opening any unknown messages	01	1

Figure 4.16 - Safety Practices Followed by Respondents



Interpretation:

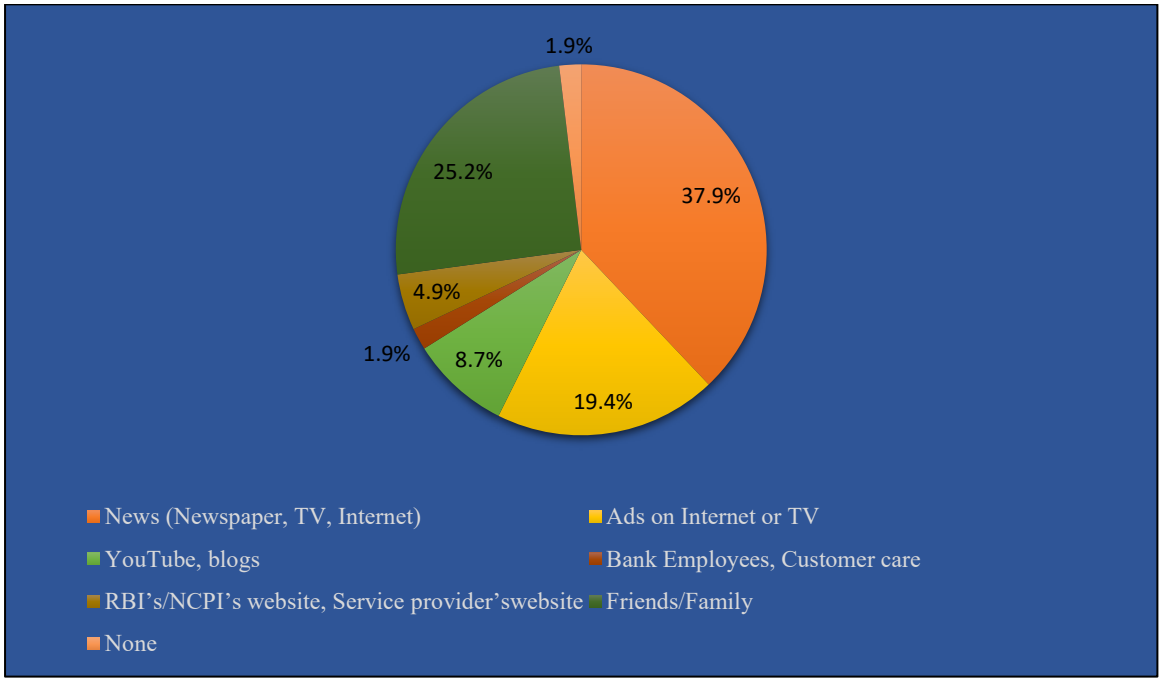
The most common safety practices were not sharing OTPs or passwords, using trusted apps, and regularly checking bank statements. Fewer respondents enabled app locks or avoided public Wi-Fi. This suggests that while people are aware of basic precautions, they may not always follow all advanced safety measures.

23. From which of the following sources do you mostly get your information about digital payments?

Table 4.17 - Sources of Information About Digital Payments

	Frequency	Percentage
News (Newspaper, TV, Internet)	39	37.9
Ads on Internet or TV	20	19.4
YouTube, Blogs	09	8.7
Bank employees, Customer care	2	1.9
RBI's/NCPI's website, Service provider's website	5	4.9
Friends/Family	26	25.2
None	02	1.9

Figure 4.17 - Sources of Information About Digital Payments



Interpretation:

Most respondents get information from friends and family, news media, and YouTube/blogs, while fewer rely on official websites like RBI or NPCI. This shows that informal sources play a big role in spreading information, but official awareness channels should be promoted more for reliable knowledge.

4.2 Correlation Analysis

Correlation analysis was conducted to study the relationship between key variables such as consumer awareness, risk perception, experience with fraud, preventive actions, and usage of digital payments. Pearson's correlation coefficient was used to measure the strength and direction of the relationship between these variables. The correlation value (r) ranges from -1 to +1, where a positive value indicates a direct relationship and a negative value indicates an inverse relationship between the variables. The data for correlation analysis was taken from the coded responses of the questionnaire.

Analysis 1: Relationship between Awareness and Risk Perception

Table 4.23

	Risk Perception
Awareness	-0.057

The first correlation analysis examined the relationship between consumer awareness about digital payment frauds and their risk perception. The Pearson correlation coefficient was found to be r = -0.057, indicating a very weak negative relationship between the two variables. This result suggests that an increase in awareness levels does not necessarily lead to a higher perception of risk. In fact, people who are more aware of digital payments may feel slightly more confident and less fearful while making online transactions. However, the correlation is extremely weak, implying that awareness and risk perception are not strongly connected in this study.

Analysis 2: Relationship between Experience with Fraud and Preventive Actions

Table 4.24

	Preventive Actions
Experience with fraud	-0.14

The second analysis aimed to determine the relationship between consumers' experience with digital payment frauds and their preventive actions. The correlation coefficient was found to be r = -0.147, which indicates a weak negative correlation between the two factors. This means that respondents who have faced or observed digital payment frauds do not necessarily take stronger preventive measures. The weak correlation indicates that prior experience with fraud has not significantly influenced the safety practices of consumers. This highlights the need for continuous awareness and education campaigns to promote responsible and secure digital payment behaviour.

Analysis 3: Relationship between Digital Payment Usage and Awareness

Table 4.25

	Awareness
Digital Payment Usage	0.20

The third correlation analysis explored the relationship between digital payment usage and awareness about digital payment frauds. The correlation coefficient obtained was r = 0.207, showing a weak positive relationship between the two variables.
This result indicates that consumers who frequently use digital payments tend to have slightly higher awareness levels about digital transactions and possible fraud risks. Although the relationship is not very strong, it implies that regular users of digital platforms may gain more exposure and knowledge through their experience.

Overall Interpretation

From the correlation analysis, it can be observed that:

Awareness and risk perception have a very weak negative correlation.

Experience with fraud and preventive actions show a weak negative correlation.

Digital payment usage and awareness show a weak positive correlation.

These results suggest that while consumers are using digital payments and have some awareness, it does not strongly influence their perception of risk or preventive behaviour. Therefore, there is a clear need to **enhance consumer education and awareness programs** to promote safe digital payment practices and reduce the occurrence of frauds.

Chapter 5: Findings and Suggestions

5.1 Findings

1. Demographic Profile

- Out of 103 respondents, 49 were male and 53 were female, showing a balanced gender mix.
- The majority (50.5%) were between 21–30 years, showing that young adults are the main users of digital payment systems.
- Most respondents (59.2%) were graduates, followed by postgraduates (28.2%), which means that most users are well educated.
- About half of the respondents (50.5%) were working professionals and 25.2% were students, showing that both professionals and students use digital payments actively.
- Respondents from all income groups use digital payments, showing that it is popular across different income levels.

2. Awareness of Digital Payments and Frauds

- Most respondents were aware of popular digital payment methods such as UPI, mobile banking, and internet banking.
- Awareness of frauds such as phishing, OTP scams, and fake apps was high, while awareness about SIM swap and QR code frauds was lower.
- The correlation between awareness and risk perception was weak and negative ($r = -0.057$), meaning awareness does not strongly influence how risky people feel about digital payments.

3. Risk Perception and Preventive Actions

- The correlation between experience with fraud and preventive actions was weak and negative ($r = -0.147$).
- This means people who have faced frauds do not always become more careful or follow better safety habits.

- ❖ Although most people know about safety measures, they do not always follow them regularly.

4. Digital Payment Usage and Awareness

- ❖ A weak positive correlation (r = 0.207) was found between digital payment usage and awareness.
- ❖ This means frequent users of digital payments tend to have a little more awareness about frauds and safety, but the link is not very strong.

5. Overall Understanding

- ❖ Digital payments are widely used, especially after COVID-19, but awareness alone is not enough to reduce frauds.
- ❖ Many users know about frauds but still don't follow safe habits like avoiding public Wi-Fi or checking bank statements regularly.
- ❖ There is a gap between knowing and actually practicing safe behaviour.
- ❖ Overall, more awareness programs, education, and simple fraud reporting systems are needed to make users safer.

5.2 Suggestions

Based on the findings, the following suggestions are made:

1. **Increase Awareness Programs:**
   Banks, payment apps, and government agencies should conduct awareness campaigns, workshops, and advertisements to teach people about digital frauds and safety steps.

2. **Simplify Fraud Reporting:**
   Reporting fraud should be quick and easy. Helplines and online complaint forms should be made more user-friendly and responsive.

3. **Promote Safe Online Habits:**
   Users should be reminded not to share OTPs, use only trusted apps, check account statements, and update passwords regularly.

4. **Digital Education for All:**
   Special programs should be designed for senior citizens and people in rural areas to improve their digital knowledge and confidence.

5. **Regular Alerts and Updates:**
   Banks and apps should send regular messages, emails, or app notifications about new fraud trends and ways to stay safe.

6. **Stronger Cybersecurity Policies:**
   The government and RBI should make stricter rules and take faster action against cybercriminals involved in digital payment frauds.

7. **Encourage Preventive Behaviour:**
   Awareness efforts should also focus on motivating users to take preventive actions, not just knowing about frauds.

Chapter 6: Conclusion

The research study titled **"Digital Payment Frauds in India: A Study of Consumer Awareness, Risk Perception and Preventive Actions"** was carried out to understand how people use digital payment systems, how much they know about online frauds, and what preventive steps they follow to stay safe. The main focus of the study was to examine the relationship between consumer awareness, their perception of risk, and their actual safety practices.

The findings of the study show that digital payments have become an important part of daily life for most people, especially among young and working individuals. Most respondents were aware of popular payment methods such as UPI, mobile banking, and debit or credit cards. However, many of them were not fully aware of newer or more complex frauds such as SIM swap or QR code scams.

The correlation analysis revealed that awareness and risk perception have only a weak relationship, meaning that being aware of frauds does not always make people feel more at risk or more cautious. Similarly, the experience of facing a fraud did not strongly affect preventive actions, which means that even those who had experienced fraud did not always improve their safety habits. On the other hand, frequent users of digital payments showed slightly higher awareness, suggesting that experience with digital platforms helps in understanding basic risks.

Overall, the study concludes that awareness alone is not enough to prevent digital payment frauds. Many users know about frauds but do not regularly follow safe practices like avoiding public Wi-Fi, updating passwords, or checking transaction alerts. There is a visible gap between awareness and actual behaviour.

To build a safer digital payment environment, it is important for banks, fintech companies, and government agencies to work together in conducting awareness programs, improving cybersecurity systems, and making fraud reporting simple and effective.

In summary, while India is quickly moving towards a cashless and digital economy, maintaining trust and safety in digital payments is still a big challenge. Continuous education, awareness campaigns, and strong security policies are essential to protect consumers and promote secure digital payment practices in the future.

References

Crasta, S., & Janefer, C. (2024). E-Commerce Frauds: Awareness and Preventive Measures. *Kristu Jayanti Journal of Management Sciences (KJMS)*, 85-94.

Singh, K., Mistrean, L., Singh, Y., & Barak, D. (2023). Fraud prevention in digital payment systems and cybersecurity education for customers of nationalized financial institutions. In *Development Through Research and Innovation* (pp. 98-115).

Pandey, S. K. (2022). A study on digital payments system & consumer perception: an empirical survey. *Journal of Positive School Psychology*, *6*(3), 10121-10131.

Hirapara, D., Sheth, K., & Vidani, J. (2024). A Study on the Awareness of Various Digital Payment Frauds Among Gen-Zs in Ahmedabad City.

Rebeka, S. R., & Jaikala, L. (2023). *A study on customer awareness on cyber security and digital payment fraud prevention in nationalized banks.* Journal of Harbin Engineering University, 44(8), 459–471.

Gombár, M. (2019). Analysis of respondents' opinions and attitudes toward the security of payment systems. *Entrepreneurship and Sustainability Issues*.

Kim, C., Tao, W., Shin, N., & Kim, K. S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic commerce research and applications*, *9*(1), 84-95.

Swaraj, A., & Bohara, A. (2024). A Comprehensive Study on Security Measures and Consumer Awareness with Special Reference to UPI in India. *Library of Progress-Library Science, Information Technology & Computer*, *44*(3).

Parvathy, V., & Durairaj, D. (2021). A study on users' perception and awareness towards digital payment security threats among youngsters in Chennai, Tamil Nadu, India. *Asian Review of Social Sciences*, *10*(2), 30-34.

Ruangmei, T., & Gethe, R. A STUDY ON MODES OF DIGITAL PAYMENT SYSTEM, ANALYSIS OF FRAUDS OCCURING THROUGH DIGITAL PAYMENT SYSTEMS.

Rawat, P. (2024). Consumer Perception And Adoption Of Digital Payment Methods: A Study On Trust And Security Concerns. *Educational Administration: Theory and Practice*, *30*(4), 6022-6029.

Shree, S., Pratap, B., Saroy, R., & Dhal, S. (2021). Digital payments and consumer experience in India: a survey based empirical study. *Journal of Banking and Financial Technology*, *5*(1), 1-20.

Fernandes, L. (2013). Fraud in electronic payment transactions: Threats and countermeasures. *Asia Pacific Journal of Marketing & Management Review. ISSN*, *2319*, 2836.

XIAN, L., HIA, L., & YI, V. L. Y. (2023). AWARENESS ON ONLINE FINANCIAL SCAM: A STUDY IN MALAYSIA.

Dewatwal, S. B., & Gupta, K. (2021). Digital payment frauds-an evaluative study of awareness and digital literacy. *International Journal of Management IT and Engineering*, *11*(11), 60-66.

Basha, M. Z. N., & Shah, S. W. (2021). *A study on awareness and consumer perception on use of digital payments system in India with special reference to Chennai. International Journal of Research Publication and Reviews, 2*(10), 1054–1062.

Aljaradat, A., & Shukla, S. K. (2025). Trust and cybersecurity in digital payment adoption: socioeconomic insights from India. *Journal of Business and Socio-economic Development*.

SANJANA, M., & FRANCIS, A. S. D. A. (2024). *A STUDY ON THE LEVEL OF AWARENESS OF ONLINE BANKING FRAUDS AMONG THE MIDDLE-AGED CATEGORY WITH SPECIAL REFERENCE TO KUMBALANGI PANCHAYATH* (Doctoral dissertation, St. Teresa's College (Autonomous) Ernakulam).

YOGANANDHAM, G. MITIGATING ECONOMIC AND FINANCIAL RISKS: THE IMPORTANCE OF REGULATION AND CONSUMER AWARENESS IN COMBATING CREDIT CARD FRAUD.

Edburg, B. F., Umadevi, K., Vidya, M., & Kumar, P. R. (2024). Role of UPI application usage and mitigation of payment transaction frauds: An empirical study. *MDIM Journal of Marketing Research & Practices*.

Putrevu, J., & Mertzanis, C. (2024). The adoption of digital payments in emerging economies: challenges and policy responses. *Digital Policy, Regulation and Governance*, *26*(5), 476-500.

Annexure/Appendices

Questionnaire

Dear Respondent,

I am Sanika Kalke pursuing my M.B.A from M.E.S. Institute of Management and Career Courses, Pune. As a part of my curriculum this study is being conducted purely for the academic purpose.

This questionnaire aims to explore consumer awareness, preventive actions, and risk perceptions regarding digital payment frauds.

All the information provided by you will be kept completely confidential.

Thank you in advance for your participation. I am extremely appreciative of your time and effort.

SECTION A – DEMOGRAPHIC PROFILE

1. Name (Optional): _____

2. Gender
   a) Male
   b) Female
   c) Other

3. Age Group
   a) Below 20
   b) 21-30
   c) 31-40
   d) 41-50
   e) Above 50

4. Highest Educational Qualification
   a) 10^{th}
   b) 12^{th}
   c) Graduate
   d) Post Graduate

e) Other (Please specify): _____

5. Occupation
   a) Student
   b) Working Professional
   c) Business Owner
   d) Homemaker
   e) Retired
   f) Other: _____

6. Yearly Income
   a) Below 2,50,000
   b) 2,50,000 – 5,00,000
   c) 5,00,000 – 10,00,000
   d) 10,00,000 – 25,00,000
   e) Above 25,00,000
   f) Prefer not to say

SECTION B – Usage of Digital Payments

7. How frequently do you use digital payments?
   a) Daily
   b) 2-3 times a week
   c) Weekly
   d) Occasionally
   e) Rarely

8. Which of these digital payments are you AWARE of?
   a) Credit/Debit Cards
   b) Point of Sale
   c) UPI
   d) Internet Banking
   e) Mobile Banking

f) Prepaid Cards
g) Mobile Wallets
h) AEPS (Aadhar enabled payment system)
i) Other:

9. Which of these do you save/invest in?
   a) Bank savings account
   b) Bank fixed deposit
   c) Stocks/Equity
   d) Mutual funds
   e) Insurance
   f) Provident fund
   g) NSC (National Savings Certificate)
   h) Government Bond
   i) Real estate
   j) Gold

10. What advantages do they give you?
    a) My money is safe here
    b) I can get high returns
    c) I can withdraw money anytime
    d) I do not know the advantages

SECTION C – Preference and Perception on Cash and Digital Payment Systems

11. How would you rate your experience or opinion of using cash/digital payments for transactions?

    Cash

    Digital payments

    a) Bad
    b) Okay
    c) Good

12. What are the main HURDLES in the adoption and usage of digital payments for you?

a) Technological Problems
   (Poor internet connectivity, lack of devices)
b) Discomfort using technology
   (I am not comfortable using mobile phone/computer)
   (I get overwhelmed with the number of apps and websites providing the service)
c) Transaction cost is high
d) Lack of trust in online payments (unsafe, risky, declined transactions)
e) The KYC process is difficult to get done
f) Language is a barrier
g) It is not accepted everywhere
h) I do not relate to any of the above statements

SECTION D – Behavioural aspects/habits of spending

13. How frequently do you utilize the following digital payment methods?
    Internet banking (NEFT, RTGS, IMPS)
    Mobile banking (NEFT, RTGS, IMPS through mobile app of your service provider)
    Pre-paid cards (Gift cards, travel cards, Sodexo, Bank pre-paid cards etc.)
    Mobile wallets (PayTM, PhonePe etc.)
    AEPS (Aadhar enabled payments system, payment requires Aadhaar Card, fingerprint etc.)
    a) Do not use
    b) Occasionally use
    c) Regularly use

14. What mode of payment do you primarily use for the following types of purchases or transactions?
    Grocery
    Other consumables (clothes, footwear, stationery)
    Online Shopping, Ordering food online
    Utilities (Electricity, gas etc.)
    Hotels/Restaurants
    Durables (Microwave, TV etc.)

Petrol pump/Taxi

Financial Transactions (banks, insurance, mutual funds, stocks)

Gold

a) Cash/ Cash on delivery
b) Digital Payments
c) Both

15. Since the COVID-19 pandemic, has your use of digital payments increased?
    a) Yes, the increase is permanent
    b) No, I have gone back to using cash more
    c) Do not know

SECTION E – Awareness and Experience related to fraud

16. Are you aware about the digital payment frauds?
    a) Yes
    b) No
    c) Not sure

17. If yes, which of the following frauds are you aware of?
    a) Phishing (Fake Email/Links)
    b) OTP Fraud
    c) SIM Swap
    d) QR Code Swam
    e) Fake Apps/ Payment Requests
    f) Other:

18. Have you received any awareness messages from your bank or payment app about frauds?
    a) Yes, Frequently
    b) Sometimes
    c) Rarely
    d) Never
    e) I do not check

19. What is your experience with Digital payments FRAUD (e.g. on-call fraudsters, phishing etc.)?
    a) I have been a VICTIM to digital payment frauds
    b) I have RECEIVED such calls/mails/texts but carefully AVOIDED it
    c) I HAVE NOT received such calls/mail/texts
    d) I know someone who has been a victim

20. If you have been a victim or carefully avoided the fraud, then was the case reported to the concerned authority?
    a) Does not apply to me
    b) No, I did not report it
    c) Yes, I reported it

21. If you have AVOIDED or been a VICTIM to such a fraud, then have you REDUCED your digital payments usage?
    a) YES, I have completely switched to cash/cheque
    b) YES, I have reduced the use of digital payments
    c) NO, It has not affected the use of digital payments but I am more careful now
    d) It does not apply to me

SECTION F – Preventive Actions by Consumers

22. Which safety practices do you follow? (Select all that apply)
    a) Do not share OTPs or Passwords
    b) Regularly check bank statements
    c) Use trusted apps only
    d) Enable app locks and multi-factor authentication
    e) Avoid public Wi-Fi for transactions
    f) Others:

SECTION G – Feedback on Awareness Campaigns

23. From which of the following sources do you mostly get your information about digital payments?

a) News (Newspaper, TV, Internet)
b) Ads on Internet or TV
c) YouTube, blogs
d) Bank Employees, Customer care
e) RBI's/NCPI's website, Service provider's website
f) Friends/Family
g) None

Data Coding Sheet

Variable	Coding
02. Gender	1=Male
	2=Female
	3=Other
03. Age Group	1=Below 20
	2=21-30
	3=31-40
	4=41-50
	5=Above 50
04. Education	1=10th
	2=12th
	3=Graduate
	4=Post Graduate
	5=Other
05. Occupation	1=Student
	2=Working
	3=Business
	4=Homemaker
	5=Retired
	6=Other
06. Income	1=Below 2.5L
	2=2.5–5L
	3=5–10L
	4=10–25L
	5=Above 25L
	6=Prefer not to say

07. Frequency of Digital Payment	1=Daily			
	2=2-3 timesa week			
	3=Weekly			
	4=Rarely			
		If Selected	If Not Selected	
08. Digital Payments Aware of	Credit/Debit Cards	1	0	
	Point of Sale	1	0	
	UPI	1	0	
	Internet Banking .	1	0	
	Mobile Banking	1	0	
	Prepaid Cards	1	0	
	Mobile Wallets	1	0	
	AEPS	1	0	
	Other	1	0	
		If selected	If not selected	
09. Save/Invest in	Bank savings account	1	0	
	Bank fixed deposit	1	0	
	Stocks/Equity	1	0	
	Mutual Funds	1	0	
	Insurance	1	0	
	Provident fund	1	0	
	NSC (Nationa savings certificate	1	0	
	Government bond	1	0	
	Real estate	1	0	
	Gold	1	0	

		If selected	If not selected	
10. Advantages they give you	My money is safe here	1	0	
	I can get high returns	1	0	
	I can withdraw money anytime	1	0	
	I do not know the advantages	1	0	
11. Experience or opinion of using cash/digital payments for transactions	Cash - 1=Bad			
	2=Okay			
	3=Good			
	Digital Payments - 1=Bad			
	2=Okay			
	3=Good			
		If selected	If not selected	
12. Main HURDLES in the adoption and usage of digital payments	Technological Problems (Poor internet connectivity, lack of devices)	1	0	
	Discomfort using technology	1	0	
	Transaction cost is high	1	0	
	Lack of trust in online payments (unsafe, risky, declined transactions)	1	0	
	The KYC process is difficult to get done	1	0	
	Language is a barrier	1	0	
	It is not accepted everywhere	1	0	
	I do not relate to any of the above statements	1	0	
13. Frequency of following digital payments method	Internet banking (NEFT, RTGS, IMPS)	Do not use	Ocassionally us	Regularly use
	Mobile banking (NEFT, RTGS, IMPS through mobile app of your service provider)	1	2	3
	Pre-paid cards (Gift cards, travel cards, Sodexo, Bank pre-paid cards etc.)	1	2	3
	Mobile wallets (PayTM, PhonePe etc.)	1	2	3
	AEPS (Aadhar enabled payments system, payment requires Aadhaar Card, fingerprint)	1	2	3

		Cash/Cash on deliver	Digital Payment	Both
14. Mode of payment for following transactions	Grocery	1	2	3
	Other consumables (clothes, footwear, stationery)	1	2	3
	Online Shopping, Ordering food online	1	2	3
	Utilities (Electricity, gas etc.)	1	2	3
	Hotels/Restaurants	1	2	3
	Durables (Microwave, TV etc.)	1	2	3
	Petrol pump/Taxi	1	2	3
	Financial Transactions (banks, insurance, mutual funds, stocks)	1	2	3
	Gold	1	2	3
15. Post covid change	1=Yes, the increase is permanent			
	2=No, I have gone back to using cash more			
	3=Do not know			
16. Awareness of Frauds	1=Yes			
	2=No			
	3=Not sure			
		Aware	Not Aware	
17. Frauds aware of	Phishing (Fake Email/Links)	1	0	
	OTP Fraud	1	0	
	SIM Swap	1	0	
	QR Code Scam	1	0	
	Fake Apps/ Payment Requests	1	0	
	Other:			

18. Awareness Messages Received	1=Yes, Frequently		
	2=Sometimes		
	3=Rarely		
	4=Never		
	5=I do not check		
19. Experience with Fraud	1=I have been a victim to digital payment frauds		
	2=I have received such calls/mails/texts but carefully avoided it		
	3=I have not received such calls/mails/texts		
	4=I know someone who has been a victim		
20. Was the cases reported or not	1=No, I did not report it		
	2=Yes, I reported it		
	3=Does not apply to me		
21. Effect on Usage	1=Yes, I have completely switched to cash/cheque		
	2=Yes, I have reduced the use of digital payments		
	3=No, It has not affected the use of digital payments but I am more careful now		
	4=It does not apply to me		
		If selected	If not selected
22. Preventive actions	Do not share OTPs or Passwords	1	0
	Regularly check bank statements	1	0
	Use trusted apps only	1	0
	Enable app locks and multi-factor authentication	1	0
	Avoid public Wi-Fi for transactions	1	0
	Other	1	0

23. Source of information on digital payment	1=News (Newspaper, TV, Internet)
	2=Ads on Internet or TV
	3=YouTube, blogs
	4=Bank Employees, Customer care
	5=RBI's/NCPI's website, Service provider's website
	6=Friends/Family
	7=None