

**OPPORTUNITIES AND CHALLENGES OF
UNIFIED PAYMENT INTERFACE (UPI)
SYSTEM IN TRIVANDRUM DISTRICT**

PROJECT REPORT

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award of Degree of Bachelor of Commerce

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CERTIFICATION

This is to certify that the project report entitled "OPPORTUNITIES AND CHALLENGES OF UNIFIED PAYMENT INTERFACE (UPI) SYSTEM IN TRIVANDRUM DISTRICT" is a bonafide record of work done by Ms. Divya S, Ms. Vaishnavi Vijayakumar, Ms. Aavani M Gireesh, Ms. Kalyani U, and Ms. Sneha A V in partial fulfillment for the Award of the Degree of Bachelor of Commerce under my supervision and guidance.

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EXECUTIVE SUMMARY

Banking sector plays the most important role in our financial transactions. Nowadays UPI Payments are becoming more popular in this world. All most all the transactions are being done through the various UPI Payment applications like Google Pay, PhonePe, Paytm etc. Our topic for the study is ‘Opportunities and challenges of unified payment interface (UPI) system in Trivandrum district’

The objectives of the study were to understand the growth of UPI payment system in India, factors influencing the customers while using UPI Payments and also the challenges faced by customers while using UPI Payments. The study consists of both primary and secondary data. Convenient sampling method is used. The present study is limited to a sample of 100 respondents of Trivandrum City. Samples were collected through questionnaire.

Nowadays the technology usage is increasing and growing at much faster pace. The common people are slowly moving towards the UPI Payment. The percentage of UPI payment is significantly increasing from the period it was started. It was found in the study that most users belong to the student age group. Their main purpose of using UPI is to transfer the money. Users prefer UPI because of the speed of transaction and convenience in its usage. It was found that google pay is the most used UPI application in Trivandrum.

This empirical study addressed the problems of users of UPI Payment application like exceeding the transaction limit, fear of losing money, connectivity issues, delayed OTP, Security concerns, Inability of users without smartphones etc. The system of UPI is not much known in rural areas which put away major part of society away from the advantages of UPI. The results of the study will provide a better understanding and awareness of UPI payment among the people.

From the study it can be concluded that UPI Payments are becoming popular nowadays. They provide convenience to users as they can do the transaction at any time even without cash in hand. There are so many problems which they face while using the UPI which must be addressed by the concerned authority like NPCI in order to facilitate smooth and hassle-free cashless payment in the economy.

CHAPTER – 1

INTRODUCTION

1.1 INTRODUCTION

UPI or Unified Payments Interface is an immediate real-time payment system that helps in instantly transferring the funds between the two bank accounts through a mobile platform. Hence, UPI is a concept that allows multiple bank accounts to get into a single mobile application. It is a single-window mobile payment system developed by the National Payments Corporation of India (NPCI). It eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction. UPI uses existing systems, such as Immediate Payment Service (IMPS) and Aadhaar Enabled Payment System (AEPS), to ensure seamless settlement across accounts. It facilitates push (pay) and pull (receive) transactions and even works for over-the-counter or barcode payments, as well as for multiple recurring payments such as utility bills, school fees, and other subscriptions. The system is said to be a safe and secure method of transferring money between two parties and eliminates the need to transact with physical cash or through a bank. The pilot system was launched in India on April 11, 2016. Banks across the country started to upload their interface in August 2016.

UPI is a simpler process of making the payment than online bank payment. For making bank payment online, a person must enter 4 important pieces of information of the person to whom he/she is making the payment: bank account number, bank account type, name of the bank, and IFSC Code of the bank's branch. It has played a crucial role in India's move towards a cashless economy by providing a secure digital wallet for easy bill and merchant payments. The UPI system is hailed as one of the most successful real-time payment (RTP) systems in the world since it has been adopted in India. This innovative payment interface offers simplicity, safety, and security to P2P as well as P2M (person to merchant) transactions in India.

This interface is based on the two Factor Authentication with a seamless single click payment. This feature of UPI is aligned with the regulatory guidelines that make it the safest. two Factor Authentication is quite similar to OTP. Here, MPIN will be used

instead of OTP. The interface is regulated by the Reserve Bank of India (RBI), India's central bank, and funds sent between accounts. There are various 3rd party apps like Google Pay, PhonePay, Paytm, Amazon Pay, WhatSapp Pay etc.

1.2 REVIEW OF LITERATURE

1. Irene Govender and Walter Sihlali (May 2014) conducted a study on the topic “Mobile Banking Adoption among University Students”. Questionnaires were used to capture the data for the study. Their perceived competency of mobile knowledge was above average. By using regression analysis, it was found that the main two predictors – perceived value and trust, significantly impacted one’s behavioral intention to use m-banking. The risk of fraud, hacking and privacy issues was of concern. Other factors such as gender, age and race weren’t significant to continue using m-banking. In particular, m-banking service providers need to enhance authentication mechanisms to avert fraudulent activity and allay fears of privacy issues so that trust may be increased and hence m-banking adoption rates increase.
2. Bijin Philip (March 2019), in his study “Impact of UPI in customer satisfaction” has aimed to identify the customer preference towards UPI and to know the impacts in customer satisfaction. The researcher used ANOVA test. Its result shows that no significant differences are perceived by the respondents on occupation basis. However significant differences are perceived by respondents on education basis. This shows that educated persons are more inclined to use UPI services.
3. I. N. Suresh Kumar, Suseela Menon (January 2020) in their study “Impact of UPI on customer Satisfaction and Role of National payment Corporation of India in Promoting digital Transactions” focused on customer perception towards UPI services and made an attempt to analyze customers' problems regarding the usage of UPI services. The data for the study was collected through questionnaire, from academic journals, books and websites. Chi-square test, t test, ANOVA and correlations are used for data analysis. It was clear that lack of e literacy is the major challenge faced by customers with mean 3.48

followed by complexity in operation. Technological issues are the least ranked challenge with a mean score of 2.68.

4. Courtney Elizabeth Cleveland (2016) in the paper “A study on how mobile banking has affected banking industry” seeks to investigate if banks improve financial performance as well as customer conversion and retention due to mobile banking. Studies commissioned by the banking community regarding consumer behavior, academic papers and publications were researched. It was found that the growth in data transmission technology, mobile devices and app development were instrumental in the growth of mobile banking.
5. Prof. Janmejy V. Shukla and Dr. Dileep Kumar Singh, (August 2020) in their paper “A study of mobile banking & its impact on consumer satisfaction with reference to Nagpur area”, focused on the barriers for adopting Mobile Banking Services. Secondary data was collected from websites, reports of RBI, research papers & journals. Primary data was collected through Questionnaires. Out of 100 respondents randomly selected using convenience sampling, 80 m-banking users, 46 respondents think that insufficient knowledge is the major barrier for adopting M-banking service, 18 respondents think Internet Banking is more Popular, 9 respondents think that Fear of Losing Phone & Data is the barrier.
6. Mala Goplani, Akash Gupta (2021), in their paper “Study on the Use of UPI Payments among the Youth” used the Survey method and Convenience Random Sampling method to fetch the results from the youth in Trivandrum with the help of a structured questionnaire. The secondary data has been collected from research articles, journals, writ-up theses and web sources. The resulting data showed that most of youths considered UPI payments as the most easy and convenient mode of payments. There are varied benefits that are derived from the usage of such apps like they are convenient to use, saves time, 24 hours accessibility, etc. Only a few numbers of people are still found to be the Non-users of Digital apps due to some reasons such as not having bank accounts, lack of trust in online system, a threat of being hacked, and non-access to smart phones.

7. Dr.S. Subbalakshmi and Mrs. Sukanya (2021), in their paper “A study on the customer’s perception towards UPI Payments”, shows that the customers are very satisfied with the speed of transaction and felt convenient to make payment through the payment apps. Primary data was collected through a well-structured questionnaire through convenient sampling method distributed to sample size of 100 people in and around Trivandrum City. The customers felt that the apps were very friendly and easiness in performing the transactions. Certain areas which were found to be improved are the network issues, problem of double payment while scanning QR code etc.. Improvement can be still to be made in the security levels while using the UPI apps so that more people start using the UPI Payment apps.
8. Anjan A and Shreelakshmi Bhat (2022), in their paper “A study on Upsurge of a Small Scale Businesses through UPI in Trivandrum City” used random sampling method with a well-structured questionnaire among 80 respondents as primary data. Data has been analyzed using percentage and ranking method. The research was conducted among the various types of merchants like Mobile shops, Grocery shops, Pharmaceutical, General stores etc. It was found that Grocery shops were the most involved in the UPI payments followed by Pharmaceutical and General Stores.. The most important factor that influenced the merchants to use UPI was that they need not visit the banks frequently. UPI enables the smallest merchant to start accepting digital payments without any POS machine.
9. Dinesh M Kolte and Dr. Veena R Humbe (2021) conducted a study on UPI Payment System among the students. Primary data was collected through well-structured questionnaire through convenient sampling method distributed to sample size of 200 people. The objective was to know which UPI Payment app was used by the students the most. It is observed that Scan & Pay feature is popular than Send Money feature and Request Money feature is least used. It is found that students are passionate real-time payments and its settlement in bank account. It is also observed that students are commonly use UPI/BHIM for ₹1 to ₹ 10,000/- payments. The researcher reveals that the most commonly used UPI/BHIM App are the 3rd Party Apps like PhonePe.

10. Sagar Brid, Kajal Agrahari and Mrs. Priya Chandran (2021) conducted research on mobile banking application usage among various sectors of the society. Primary data was collected through well- structured questionnaire through convenient sampling method to a sample size of 100 people. The research focused on the study of various mobile banking applications which is used by different sectors of society. It was observed that the respondents belonged to class of students, Govt employees, Business men and women etc. It was also noticed that most used UPI application was Paytm. From the comparative study it is identified that Paytm application offer maximum services than any other application. This is the reason Paytm has maximum users.
11. Abdul Latheef and Ghulam sahib (May 2020) conducted “A study on the impact of mobile banking on customer's satisfaction”. The study endeavors to explore the influence of mobile banking on satisfaction of mobile banking users in Sukkur Singh. The data are collected through sampling method. It was found that mobile banking factors are positively and significantly associated with customer's satisfaction. It was concluded that the mobile banking factors like perceived usefulness, ease of users, credibility and customer attitude can influence customer's satisfaction hence bringing more customers to bank.
12. Mr Sunny Gupta and Dr Dinesh Chand (August 2021) conducted a study on the topic “impact of UPI on customer satisfaction and to identify the preference of customers towards the usage”. The study analysed the usage of UPI services among customers and their preference towards it. The data were collected through direct interview, journals, books and websites. It was found that customers mostly approaching UPI facilities are due to purchase transactions and fund transfer. It is clear that customer has a positive attitude towards UPI services and educated persons are those inclined to use the UPI services due to their smartphone access and internet connectivity.
13. Anjali.R and Suresh.A (January 2017) in their study on "customer satisfaction of Bharat interface for money (bhim) speaks on the application of BHIM. The data were collected through structured questionnaire. Correlation and regression were used for data analysis. The study showed that speed of

transaction, ease of use and customer service has an effect on customer satisfaction. The study concluded that speed is the strongest predictor of customer satisfaction.

14. Dr C Poorna Pushpakala (January 2021) studied on the awareness and customer satisfaction of UPI for digital payment which aimed to identify the customer's preference to UPI with reference to Ambasamudram area. The primary data were collected through structured questionnaire. The secondary data were collected from books, journals and websites. The collected data were analyzed using F Test and Kendall's co efficient of concordance. It was found that denomination of currency and advertising about UPI motivates people to use UPI. It was concluded that the modern society was more interested in making payments through UPI rather than liquid cash.
15. Manoj Kumar Goyal and Dr Nikhil Monga in their paper "study on perception and attitude of customers towards UPI" shows that the customers are very satisfied with the convenience and speed of UPI. The primary data were collected from 100 customers residing in urban, semi urban and rural areas of India. Secondary data were collected through online journals etc. The study showed that the UPI are the revolution in banking sector as the customers may make payment from anywhere which saves a lot of time and money. It also showed that 85 Per cent of semi-rural population is aware of e-banking services.
16. Raja Joe (January 2012) studied on "Global e-banking scenario and challenges in banking system". This paper is an attempt to explore the various levels of internet banking services provided by banks using secondary data. It also compares the traditional banking systems with net banking. It lists out the various advantages of internet banking and the successful security measures adopted by different banks for secured banking transactions.
17. Van B, Paul, Velosco, Francisco M and Oliveira (January 2012) conducted a study on the topic "P-Innovation by users in Emerging Economies: Evidence from Mobile Banking Services". This paper examined the extent to which users in Emerging economies innovate and whether these innovations are meaningful on a global stage. Analysis of this study shows that 85 Per cent of

innovations in this field originated in emerging markets. The researcher also concludes that at least 50 Per cent of all the mobile financial services were pioneered by users, approximately 45 Per cent by producers, and 5 Per cent jointly by users and producers.

18. Dube T, Kosmas N, Collins M (March 2011) studied on “Adoption and use of Mobile Banking Services in Zimbabwe”. The findings showed that although mobile banking was first launched in 2004, the services were still in its infancy. Evidence showed that accessibility and affordability were the major drivers to the adoption of mobile banking. The research confirmed the assertion that the appeal is more about accessibility and affordability in developing countries. The study recommends an increased awareness campaign by banks and development of policy and regulation for electronic banking.
19. Kala Devi Aishwarya C S (2022) conducted a study on usage of UPI payment. The data was collected using sampling method, questionnaire and primary secondary data. The study found that the driver and barrier of UPI payment adoption by people and provide a theoretical explanation of how the adoption of UPI payment experience of people. In this study it is found that the awareness of UPI payment services among people is very high. Customers are very much satisfied by UPI services and the security system can be strengthened to avoid cyber threat in future.
20. Prof Trilok nath shukla(2016), in their research paper entitled " mobile wallet: present and the future" found that in future, digital payment will have a major contribution in shopping experience of customer. Security and easiness to use payment system will not be enough to attract customers. Apart from this, it will require cash back, loyalty program etc. The marketers should grab this opportunity by partnering with various digital payment companies to attract customers.
21. Dr.M Senthil (2018) conducted the study based on customer satisfaction towards Paytm user. This research focus on Paytm services user in general. The scope of the research will describe the relationship between Paytm services on safety and security, transaction speed, convenience transfer of fund etc.. This

can directly influence on the customer satisfaction level and intention to use. The data are collected using sampling, primary and secondary data, functional analysis. It can be concluded that. Paytm use will be tremendous growth in the forthcoming year, to the usage of Paytm spread among people in India due to the government policy of demonetization.

22. Nidhi Singh and Neena Sinha (2019) conducted a study on mobile banking and its impact on customer banking transaction. Exploratory and descriptive research was used to collect relevant data. The scope of this research was based on shifting the focus from tradition banking to technology banking. This facility removes the space and time constraints from various banking transaction. Bank use mobile banking as innovative strategies to outperform in this competitive market. It can be concluded that bank are taking various technology initiative to provide financial services. To achieve growth bank must understand their customer's perception about mobile banking.
23. Kala Devi Aishwarya C S (2022) conducted a study on usage of UPI payment. The data was collected using sampling method, questionnaire and primary secondary data. The study found that the driver and barrier of UPI payment adoption by people and provide a theoretical explanation of how the adoption of UPI payment experience of people. In this study it is found that the awareness of UPI payment services among people is very high. Customer are very much satisfied by UPI services and the security system can be strengthened to avoid cyber threat in future.
24. Oliveira T, Eric V, (2011), Users as service innovators. The case of banking services. Found that 55 Per cent of today's computerized banking services were first developed and implemented by non bank firms for their own use and 44 Per cent of today computerized banking services were first developed and implemented by individual service users rather than by commercial finance service providers.
25. Mas L, Dan R (2011), scaling Mobile money Retail payment system requires scale to get off the ground and and struggle to grow incrementally. Mobile

money deployments need to reach a critical mass of customers as quickly as possible, lest they get stuck in the 'sub scale trap'.

1.3 OBJECTIVES

- 1.** To understand the growth of UPI payment systems in India
- 2.** To analyse the factors influencing customers while using UPI payments
- 3.** To analyse the quality of service provided by UPI payments.
- 4.** To study the challenges faced by customers while using UPI payments.

1.4 STATEMENT OF THE PROBLEM

We are living in a world which is growing and developing without any limitations. Now the banking fields achieved development up to higher extent. Buying and selling, transfer of money, balance of enquiry, Bill Payment is done through internet and day by day it is increasing and the e-banking offers a wide variety of services.

At present India is growing in mobile wallet services like Google Pay, Paytm, PhonePe, BHIM etc. In the financial year 2022, PhonePe held 46 percent share of unified payments interfaces (UPI) usage in India, followed by Google Pay with 34 per cent. The main attraction of these wallets is making fast and quick transactions, time saving, less costly etc... The technology usage is increasing and growing at much faster pace. The common people are slowly moving towards the UPI Payment. The percentage of UPI payment is significantly increasing from the period it was started. It shows a tremendous increase in UPI payment.

Besides these advantages there are various limitation which creates problems among the users to use the UPI system like lack of smartphone, exceeding transaction limit, fear of losing money, security concerns, connectivity issues, delayed OTP etc... The system of UPI payment is not much known in the rural area which puts away a major part of population away from these advantages of UPI.

Hence this study is done to analyse the factors influencing customers while using UPI payments, the most used UPI payments application and the challenges faced by customers while using UPI payments.

1.5 SIGNIFICANCE OF THE STUDY

Today's world is engrossed with technology. Financial transactions with liquid cash are now replaced by virtual payments. All the transactions are done with a single click. Due to the advancement in technology, UPI Payments are becoming the mainstream mode of payment. Users can use their smartphones, tablets and computers to make UPI payments. People use UPI payments in day-to-day transactions.

There are various UPI Payment applications like Google Pay, PhonePay, Paytm etc. for e-transactions. These UPI payment apps provide various facilities to its users like scan and pay, two factor authentication, biometric security like fingerprint, face recognition as well. There are various attractive offers provided by these UPI payment apps. The research was conducted to analyse the usage of the various UPI payment applications among citizens.

1.6 SCOPE OF THE STUDY

This research will describe the UPI payment transactions based on its various uses like shopping, ticket booking, transfer of funds etc. It will also provide details on various benefits like speed of transaction, security, convenience, customer service etc. These are some of the things which can influence the customer's perceptions on further use of UPI payments application. The respondents of this research include students, Govt employees, private employees and other various fields as well... This research focuses on various UPI payment users with respect to Trivandrum district. The objective of present study is to know about the various UPI payment applications used by the people and the various features and benefits derived therefrom. The present study is limited to a sample of 100 respondents of Trivandrum City.

1.7 RESEARCH METHODOLOGY

- **Research design**

The present data is descriptive and analytical in nature and based on data collection and analysis

- **Sampling design**

The population is infinite so far convenience sampling technique is used for the study. A total number of 100 respondents were selected from TVM city for the purpose of study.

- **Data collection**

The current study is based on both primary and secondary data. The primary data has been collected from the sample respondents by using questionnaire. The secondary data was collected from internet, magazines, books, journals, websites etc.

- **Data analysis**

The data collected were analysis using percentages, graphs, tables etc.

1.8 TOOLS USED FOR ANALYSIS AND PRESENTATION OF STUDY

The data collected were tabulation and analyzed by using mathematical tools like percentage average was used for the purpose of study were made with the help of pie charts, bar diagrams.

1.9 LIMITATIONS OF THE STUDY

- The population contains people who are not aware of various UPI payment applications.
- People use more than one UPI applications at a time which causes difficulty in analysing the most used UPI Payment application.

- Sample used for study is small.
- Customer's purpose of use changes from time to time.

1.10 CHAPTERISATION

Chapter 1 – Introduction

Chapter 2 – UPI payment system in India

Chapter 3 – Analysis and interpretation

Chapter 4 – Findings, suggestions and conclusions

CHAPTER –2

UPI PAYMENT SYSTEM IN INDIA

The concept of Internet banking has been simultaneously evolving with the development of the World Wide Web. Programmers working on banking data bases came up with ideas for online banking transactions, sometime during the 1980s. The first home banking service was offered to consumers in December 1980 by United American Bank, a community bank with headquarters in Knoxville, Tennessee. In the year 1981, New York tested the first Online banking system with four of its major banks namely Chase Manhattan, Citibank, Chemical and Manufacturers Hanover. Customers had to use a terminal, keyboard and computer monitor or television and access the accounts with the help of a landline phone. But this was not widely accepted.

In the year of 1994, Stanford Federal Credit Union offered Internet banking for the very first time. In 1995 Presidential Bank was the first bank to give access to its customers online. Other banks soon followed suit. The first videotext banking service in France was launched on December 20, 1983, by CCF Bank (now part of HSBC). Videotext online Banking services eventually reached 19 Per cent market share by 1991. In 1998, ICICI Bank introduced internet banking to its customers.

In April 2009, National Payment Corporation of India (NPCI) was formed to integrate all the payment mechanisms in India and make them uniform for all retail payments. By March 2011, RBI found out that in India, only six non-cash transactions happen every year by an individual citizen while 10 million retailers accepted card-based payment. Around 145 million families have no access to any form of banking. There is also the problem of tackling black money and corruption that happens mostly in cash.

RBI in 2012 released a vision statement for a period of four years that indicated commitment towards building a safe, efficient, accessible, inclusive, interoperable and authorized payment and settlement system in India. It is part of the Green Initiative to decrease the usage of paper in domestic payments market. UPI was officially launched in 2016 for public use. Under RBI guidance, NPCI became the primary body tasked with developing a new payment system that is simple, secure, and interoperable. UPI works on four pillar push-pull interoperable model where there will be remitter/beneficiary front end PSP (payment service provider) and remitter/beneficiary back end bank that settles

the monetary transaction for the users. According to CEO of Netmagic Solutions, UPI became one of the most successful deep-tech innovations coming out of India.

In December 2019, noting the success of UPI, Google suggested Federal Reserve Board to follow UPI as example in developing FedNow, a real-time payment system for United States. With exponential growth of UPI, India became the world's largest real-time payment market with 25.50 billion annual transactions in 2020 per data from ACI Worldwide and Global Data, ahead of China and United States.

As per the Economist Intelligence Unit Report 2021, UPI made India a leader in global real-time payment market followed by China and South Korea. After the decision of Ministry of Finance to nullify merchant discount rate (MDR) in 2019 from UPI, the number of low value transactions skyrocketed making huge gains on real-time transaction volume data. Nations such as Brazil, Bahrain, Saudi Arabia, Singapore, United States and European Union are now trying to emulate the success of UPI in their own market.

From January 1, 2019, UPI became a popular payment option for initial public offerings (IPOs). The transaction limit was enhanced from ₹100,000 to ₹200,000 in March 2020. From December 2021, RBI again increased the limit to ₹500,000 for Retail Direct Scheme and IPO applications. To make UPI economically feasible for payment companies, RBI is considering merchant discount rate (MDR) on future UPI transactions. In its first monetary policy for financial year 2022–23, RBI proposed card less cash withdrawal facility from ATM using UPI based QR code. In partnership with NSDL Payments Bank and NPCI, Tone Tag launched VoiceSE which will enable 400 million feature phone users to make UPI payment using voice in Hindi, Tamil, Telugu, Malayalam, Kannada, and Bengali languages.

2.1 Definitions

- **“Merchant”** means a merchant accepting UPI based payments from its customers towards sale of goods and services by such merchant.
- **“NPCI”** means National Payments Corporation of India, a company incorporated in India under Section 25 of the Companies Act, 1956.

- **“Payer”** means a person holding a valid and active Account and who intends to pay money to the Beneficiary through the App.
- **“Features”** means the features extended or enabled by NPCI such as UPI Payments (both pay and collect or pull transaction), Bill Pay, nearby, offers and such other features or services as may be extended or enabled by NPCI in the future, on the App.
- **“Transaction”** means a payment initiated through the App for debiting the Payer’s Account and a corresponding credit to the Beneficiary’s Account. A Transaction could be either a UPI Payments based pay or collect payment transaction.
- **“Transaction Amount”** means the amount entered by the Payer or the Beneficiary in the App at the time of initiating a Transaction, that is to be transferred from the Payer’s Account to the Beneficiary’s Account as a part of such Transaction.
- **“UPI PIN”** means authentication credentials set by the User, which shall be entered by the User in the App for authentication and completion of the Transaction through the App.
- **“UPI Payments”** means Unified Payment Interface (UPI) based payment facilities offered to you/User by your Issuing Bank or Beneficiary Bank (i.e., pay someone (push) or collect from someone (collect or pull) transaction), that are enabled on the App to enable a User to make UPI based payments through the App.
- **“UPI ID”** or **“Virtual Payment Address”** or **“VPA”** means a unique payment identifier issued to a User that, among other things, can be used to identify the User’s Account linked by the User to such UPI ID for carrying out Transaction.

2.2 DEVELOPMENT OF UPI PAYMENTS



2.2.1 UPI 2.0

On 16 August 2018, UPI 2.0 was launched which enabled users to link their overdraft accounts to a UPI handle. Users were also able to pre-authorise transactions by issuing a mandate for specific merchant. This version also included a feature to view and store the invoice for the transactions. An AutoPay facility for recurring payments was also added. As of August 2021, State Bank of India, Bank of Baroda and Paytm Payment Bank are live on UPI AutoPay each registering 660,000, 204,000, and 186,000 mandates, respectively. From 15 March 2022, Government removed the need of debit card for UPI registration.

From 8 June 2022, RBI allowed linking RuPay credit cards with UPI. Customers can now make credit card payments using UPI, in the absence of a physical card. NPCI is working on a real-time feature that will reduce the 24 hours time period taken by banks to unblock funds over time-out or transaction decline to 30 seconds. The service was officially launched on 20 September 2022. On 7 December 2022, RBI announced that UPI will upgrade from single-block-single to single-block-multiple debit for recurring transactions and investments in securities. The feature will help the user block funds for specific purpose and release it when needed.

2.2.2 UPI 123PAY

RBI governor, Shaktikanta Das launched the service called UPI 123PAY on 8 March 2022, with an aim to help almost 400 million feature phone users in the country. Till now, UPI payments were only possible through payment applications on smartphones and USSD-based service for feature phones. But as per deputy governor T Rabi Shankar the latter has been found to be cumbersome due to the unavailability of the services on several mobile networks.

UPI 123PAY has four options for payment.

- 1) App based functionality where a mobile phone manufacturer can install UPI app through over-the-air programming, that can be used for payment.
- 2) Missed called based in which customer can use dedicated merchant payment number by giving a missed call. The incoming authentication call will ask for PIN verification to complete the transaction.
- 3) Interactive Voice Response (IVR) based where the payment transaction will complete using pre-defined phone numbers.
- 4) Payment in offline mode through sound-based proximity data communication.

As per NPCI, some of the early use cases involve FASTag recharges, insurance payments, and EMI collections. As of 20 September 2022, Ultracash Technologies in collaboration with Bharat Petroleum helped 200,000 active users make LPG booking and payment through UPI 123PAY.

2.2.3 e-RUPI



e-RUPI or e₹UPI (portmanteau of electronic Rupee and UPI) developed in collaboration with Department of Financial Services, Ministry of Health and Family Welfare and National Health Authority. It was introduced from 2 August 2021. e-RUPI is to ensure leak proof delivery of welfare services and bypassing middle man to decrease corruption. Private sector can use the service for their own corporate social responsibility initiative (CSR). e-RUPI is basically e-voucher based on QR code or SMS string that can be delivered through mobile phone.

2.2.4 UPI LITE

NPCI called this feature UPI Lite. It can scan QR code without the need of an internet connection. In phase 1, UPI Lite will process the debit transaction offline while the credit will happen when the device goes online. But the final goal is to achieve both credit and debit transaction through offline mode. The upper limit of UPI Lite On-Device wallet is ₹2,000. Additional factor authentication or UPI AutoPay feature will be used to securely load the desirable amount.

2.2.5 123Pay

The UPI service is not limited to smartphones; it has now been introduced on feature phones as well. This service is known as UPI 123Pay. Features of UPI 123Pay are mentioned below:

- The service in the feature phones does not require internet connectivity.
- It can be accessed via USSD *99#.
- The service can be accessed through an app, missed call, interactive voice response, or OEM.
- No fee is charged for using UPI 123Pay.
- Like UPI, fund transfer through UPI 123Pay is instantaneous.
- The mobile number of the account holder should be linked with the bank account.
- It is available round the clock 24×7 and 365 days.

2.3 “On-Device wallet” – UPI Lite for Small Value Transactions

UPI has become one of the most preferred digital payment mode for Indian citizens because of ease and convenience, superior user experience, security and interoperability. To realize the vision of billion-a-day payments within the next 3 to 5 years, NPCI has been aggressively innovating and adding new features in UPI from time to time to expand its usage.

Various studies on payment systems have observed that about 75 Per cent of the total volume of retail transactions (including cash) in India is below ₹100 transaction value. Further, 50 Per cent of the total UPI transactions are having a transaction value of up to ₹200/-. To process billion-a-day transactions, entire UPI ecosystem will have to invest heavily in infrastructure upgrade. Large banks have already implemented upgrades, such as separate financial and meta transactions infrastructure, separate endpoints for payment service provider (PSP) / issuer and to provide better technical up time for UPI services, and such banks are getting ready to process three times of current volumes.

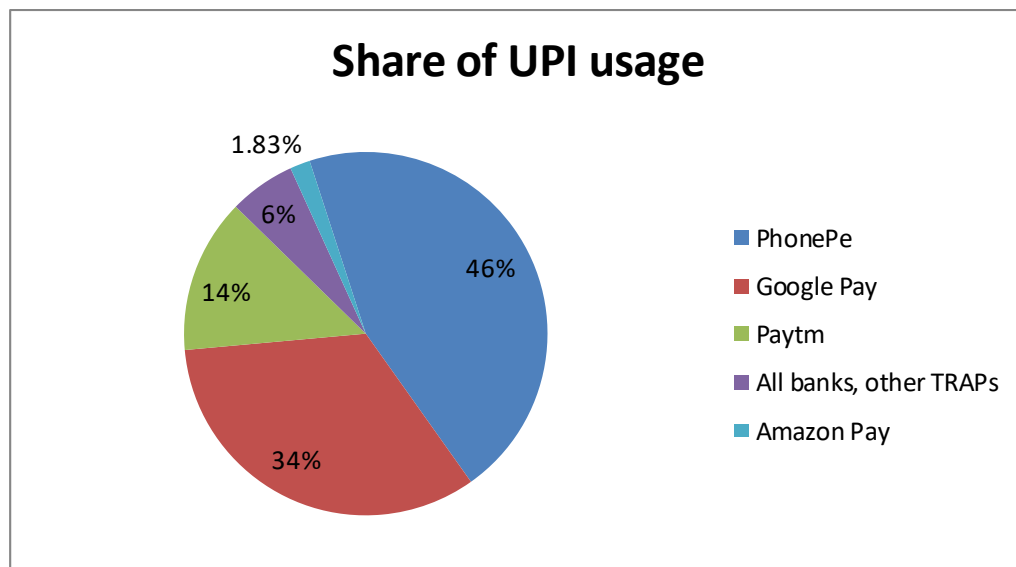
NPCI called this feature UPI Lite. It can scan QR code without the need of an internet connection. In phase 1, UPI Lite will process the debit transaction offline while the credit will happen when the device goes online. But the final goal is to achieve both credit and debit transaction through offline mode. The upper limit of UPI Lite On-Device wallet is ₹2,000. Additional factor authentication or UPI AutoPay feature will be used to securely load the desirable amount.[67] Since 50 Per cent of UPI transactions are below ₹200 with a higher frequency rate, the per transaction limit will be maximum ₹200, as it creates a large backlog of volume which increases the failure rate and affects the stability of the entire payment network. To save electricity consumption and computing power of banks, UPI mobile apps will have to support on-device wallet features as per the RBI directive from December 2021. The in-built wallet will help in low-value instant payment by using the infrastructure of the mobile app developer, thus decreasing the load on banks through decentralization of back-end infrastructure and resources.

On September 20, RBI governor Shaktikanta Das officially launched UPI Lite at Global Fintech Fest 2022. Canara Bank, HDFC Bank, Indian Bank, Kotak Mahindra Bank, Punjab National Bank, State Bank of India, Union Bank of India and Utkarsh Small Finance Bank enabled UPI Lite feature on BHIM. Paytm Payments Bank on 15 February 2023 went live with UPI Lite feature.

2.4 Growth of UPI during 2020-23

In the financial year 2022, PhonePe held 46 percent share of unified payments interfaces (UPI) usage in India, followed by Google Pay with 34 percent. Leading fintech players have been key drivers of UPI adoption in India. Unified payment interface (UPI) is a product of the National Payments Corporation of India (NPCI) and was launched in 2016. It allows users of payment service providers like PhonePe or GooglePay to use NPCI as switch to connect with banks and transfer money. It is more user-friendly than older transaction modes such as IMPS.

CHARACTERISTICS	SHARE OF UPI USAGE
PhonePe	46%
Google Pay	34%
Paytm	14%
All banks, other TRAPs	6%
Amazon Pay	1.83%



Source : Statista 2022

Government of India is committed to expand digital transactions in the Indian economy, and thereby enhance the quality and strength of the financial sector, as well as

ease of living for citizens. Digital payment transactions have significantly increased as a result of coordinated efforts of the Government as a whole, along with all stake holders concerned, from 2,071 crore transactions in FY 2017-18 to 8,840 crore transactions in FY 2021-22. During last five years, various easy and convenient modes of digital payments, including Bharat Interface for Money-Unified Payments Interface (BHIM-UPI), Immediate Payment Service (IMPS), and National Electronic Toll Collection (NETC) have registered substantial growth and have transformed digital payment ecosystem by increasing person-to-person (P2P) as well as person-to-merchant (P2M) payments. BHIM UPI has emerged as the preferred payment mode of the citizens and has recorded 803.6 crore digital payment transactions with the value of ₹ 12.98 lakh crore in January 2023. The total number of digital payment transactions undertaken during the last five financial years and the current financial year are as under:

Financial Year (FY)	Total number of digital transactions (in crore) #
2017-18	2,071
2018-19	3,134
2019-20	4,572
2020-21	5,554
2021-22	8,840
2022-23	9,192*

* Data till 31st December 2022

Source : RBI

2.5 Which apps are UPI compatible?

- PhonePe
- Paytm
- BHIM app
- MobiKwik

- Google pay Uber
- Chillr
- Paytm Payments Bank
- SBI Pay
- iMobile
- Axis Pay
- Bank of Baroda (BOB) UPI

2.5.1 PhonePe

This is one of the most popular payment apps that allows users to transact using the UPI interface. This is considered to be one among the most preferred apps for UPI. The app was founded in 2015 and is powered by Yes Bank.

2.5.2 Paytm

This mobile wallet app company has also collaborated with the UPI platform to provide customers the facility to transact and transfer funds in an easier manner. Customers can add money into their Paytm wallets with the UPI ID. Along with other payments options such as debit/credit card , net banking, etc., UPI is also one among them. Customers can also initiate collect money requests through Paytm with UPI. After the remitter accepts the payment request, the money is added to the Paytm wallet

2.5.3 BHIM App



The BHIM (Bharat Interface for Money) app has been developed by the National Payments Corporation of India (NPCI). This app is known for its simplicity. It also offers a very secure interface. The payment interface comes with all the essential features and is known for its good user experience. Funds transfers can be initiated either through VPA, QR code or bank account number and IFSC Code.

2.5.4 MobiKwik

This Indian payment network also joined the UPI interface. All Mobikwik customers can use UPI to add money into their wallet. They already provided various services such as fund transfer using debit card / credit card, net banking, cash pickup and cash deposit. The e-wallet service provider also has tied-up with various e-commerce merchants.

2.5.5 Google Pay



Launched by technology giant Google, the GPay app is one of the other apps that will provide customers the facility of using UPI. What makes this app different is that it is available in many Indian languages such as Telugu, Tamil, Marathi, Kannada, Gujarati, Bengali, and Hindi.

2.5.6 Uber

Now, Uber has included UPI as one of the modes of payment. You can pay for your Uber rides with this interface.

2.5.7 Chillr

This payments app has made available UPI as one of its payment methods. This app had been providing fund transfer facility through IMPS before it joined the UPI bandwagon.

2.5.8 Paytm Payments Bank



Paytm Payments Bank will now include the Unified Payments Interface (UPI) system as one of its features. The facility will soon be launched for all account holders

after testing and fixing bugs. The feature is likely to be made available in the next few weeks. Paytm Payments Bank UPI will allow customers to transfer funds with a UPI ID to all merchants or account holders without any hassle, at the click of a button. The interest rate offered by the payments bank is around 4 Per cent.

2.5.9 SBI Pay

This is a State Bank of India (SBI) app that is specially built for UPI requirements. The main advantage of this app is that even those who do not hold an account in SBI can use the app to send and receive money using a VPA. The app is very simple to use and one can easily register for the service after downloading the app.

2.5.10 iMobile

The UPI interface can be used through the iMobile and Pockets app offered by ICICI Bank. The app can be downloaded from Google Play store. To send money through this app, you have to go to the 'Funds Transfer' option and click on the UPI method.

2.5.11 Axis Pay

Axis Bank is one of the other banks that has launched a UPI enabled platform for its customers. This comes with a very user-friendly interface and various other features.

2.5.12 BOB UPI

The BOB UPI app has been launched by Bank of Baroda and can be downloaded from Google Play Store. One of the advantages of this app is that it provides customers certain additional features that are not available on other UPI apps. Around 52 banks in the country have collaborated with UPI to provide customers the service. While most banks have developed their own UPI app in their existing mobile apps, other banks do not have UPI, while some banks have partnered with third parties to provide customers' access to UPI.

2.6 Role of UPI in payment transactions :

- **UPI is Universal**

A single UPI app can be used for different bank accounts. You simply need to link your multiple bank accounts to your UPI-based application. You can use any bank account to make payments because all the accounts can be accessed from a single place.

- **Multiple Choices**

You can use any UPI to access multiple bank accounts. If you are using an Axis Bank UPI app, you can access any other bank account (say, SBI account or ICICI account). While choosing a UPI app, check the ease of use, the interface, and availability of the desired virtual payment address.

P.S. Though there are multiple choices available, it is not advisable to change the UPI app frequently because you will need a new VPA every time you change a UPI app.

- **Smooth & Easy to Use**

Making a payment through UPI is easy.

- For paying merchants: You simply need to provide VPA to the merchant and a message will be prompted at the smartphone. Now, you simply have to approve the payment amount, followed by entering the PIN. The payment is done to the merchant.

- For transferring funds: First, open the UPI App and provide the 4-digit passcode. Choose the payee to whom you want to make the payment, enter the payment amount, and enter MPIN.

- **Instant Transfer & Round-the-Clock Availability**

You can make payments or transfer funds instantly with UPI 24×7. It is faster than both NEFT and IMPS. While NEFT can take up to 12 hours for money transfer, IMPS has at least 30 minutes waiting period for IMPS registration. However, UPI is available instantly.

- **Transaction is Free**

Finance minister Nirmala Sitharaman has said that no fee will be charged for making payments through UPI.

- **UPI is better than Wallets**

Wallets don't pay any interest for keeping your money. When you use UPI, the money remains in the respective bank account itself. So, you keep getting the interest on the money you keep in the bank account. That's why UPIs are better than wallets.

2.7 Participants in UPI :

- **Payer PSP**

The Payer PSP is the Remitter PSP that provides the PSP app to the Remitter.

- **Payee PSP**

Payee PSP refers to the beneficiary PSP, which enables UPI transactions to receive funds from the beneficiary.

- **Remitter Bank**

A Remitter Bank is a bank that holds the payer's bank account and receives the Debit of the UPI instruction from the payer to be executed in real-time.

- **Beneficiary Bank**

Beneficiary Bank refers to the bank that holds the receiver's bank account and receives the credit of the UPI instruction from the payer to be done, either in real-time or periodically through a settlement process.

- **NPCI**

The National Payments Corporation of India (NPCI) is an umbrella organisation responsible for operating retail payments and settlement systems in India. NPCI is a joint initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association (IBA), established under the Payment and Settlement Systems Act, 2007, to build a highly secure payment and settlement infrastructure in India.

- **Bank Account Holder**

A bank account holder is someone in whose name a bank account is operated

- **Merchant**

A merchant is a person who sells directly to the public, either in a store or via the internet.

2.8 Benefits of UPI :

2.8.1 To the banking sector :

- **Interoperability**

Due to the platform bringing the entire Indian banking ecosystem together, interoperability will take place. All payment system players will have access to each other and the barriers between closed systems will be lifted. Hence, the simplicity arbitrage will be removed. A single or two factor authentications will be enabled, making sure that all payment apps are secure.

- **Cost-Savings**

A big dilemma for banks is that the cost per transaction remains high. This is true for even low value transactions. There is also no room for error as banks are shamed when transactions fail. However, with UPI, this can cease to be a problem. Its launch will encourage low cost and high volumes of payments.

- **Reduction of Merchant Acquisition Costs**

Due to the unified payments platform, merchant acquisition costs will significantly go down. This is simply due to the leveraging of the system. No longer will merchants need to purchase and install point of sale equipment. Instead, merchants can simply install apps on smartphones and continue selling. This will be a game changer for merchants that can't afford large equipment or expenses.

- **Serving a Wider Audience**

UPIs will allow individuals to operate their businesses in a seamless way. This is a big leap for an economy like India. It will allow many more people to launch their businesses. Thus, the entry barriers for startups and new businesses will come down.

- **Convergence on a Common Platform**

All the key stakeholders, including the consumer, the merchant and the bank will operate at a single platform. Hence, it will allow for cross pollination of ideas, services, apps, etc. It will cause different systems and services to be combined. This way, banks will be able to offer better discounts, services, prizes, points, etc

- **Foster Innovation**

Perhaps, the most important benefit that UPI will give to the Indian banking ecosystem is that it will foster innovation. It's a platform that will shift the banking sector into the future. Much like how the arrival of the iOS and Android operating systems brought forth a new chapter in smartphones. Before that, Nokia was king, but they lagged in terms of their Symbian Operating System.

2.8.2 To the merchants :

- **Useful for small transactions**

Unlike debit card transactions, UPI payments have made it possible for small shopkeepers and consumers to carry out low-cost transactions. Additionally, UPI transactions are completely free of cost, whereas Visa and MasterCard still charge 1-2 Per cent of the amount as payment to the merchant.

- **Easy Integration**

India's best UPI payment gateways are well-known for their quick and seamless integration into websites and apps. Apart from being developer-friendly, they also come with robust APIs and powerful libraries and plugins supporting all major platforms and languages.

- **Real-time bank settlement**

A UPI system offers your online business quick, real-time settlements for all the payments you receive from your customers. Further, you benefit from its higher success rate based on dynamic switching between gateways/card networks and intelligent routing.

- **Privacy of bank account**

With UPI systems, fund transfers are possible without disclosing your bank account number or card details, limiting the probability of fraud. Also, the authentication takes place on your smartphone by punching in the UPI PIN so you can easily make it discrete while on your mobile.

- **One app, many accounts**

UPI has empowered business owners to access all their bank accounts in one single place. Linking all your bank accounts to a single UPI app eliminates the need to use different apps for each account. However, you will have to choose a default bank account so that if anyone makes a payment to your UPI ID, the money goes directly to that account number.

- **Better than wallets**

Wallets don't allow business owners to earn any interest on the balance. But when you use a UPI interface, the money remains in the respective bank account itself. This way, you benefit from the interest on the money you keep in the bank account.

- **Smooth and easy to use**

Making payments to your merchants and vendors through UPI is easy. You simply need to provide a virtual payment address or VPA to the merchant, and a message will be prompted on the smartphone. Once you approve the payment amount and enter the PIN, the payment is complete.

2.8.3 To the customers :

- A single mobile application enables access to multiple bank accounts.
- The UPI system allows money transfers round the clock, every day of the year, through mobile devices.
- Two-factor authentication is provided with a single click – in compliance with regulatory guidelines, but it also provides seamless, single-click payment capabilities.

- A virtual address is used for Pull & Push to provide incremental security since the customer does not need to enter sensitive information like credit card numbers or CVV code.
- After making a UPI payment, you can share bills with your friends.
- It is an excellent alternative to cash on delivery hassles or running to the ATM to pay in cash.
- Payments by merchant through single applications or in-app purchases.
- Several types of payments can be made using it, such as utility bills, over-the-counter payments, or barcode (scan and pay) payments.
- There are no fees involved in the use of the app. It can be used to pay utility bills, over-the counter payments, barcode (Scan and Pay) based payments. It can be used for making donations, collections. Direct complaints can be logged using the app.

2.8.4 To the Nation :

- UPI will make the payment systems fully inter operable across all payment system players without having silos and closed systems, removing simplicity arbitrage, by enabling one click for two factor authentication, that some pure play remittance players have been using.
- UPI will serve wider audience through offering a ‘collect’ feature, improves the entry barrier for startups and smaller businesses, allowing even an individual to function as a businesses (by themselves) solving their problems of collecting money for products and services.
- This innovation will bring all the key stakeholders such as the consumer, the merchant and the banks on a common platform, creating a plethora of services that are unheard of in today’s global payment offerings. UPI is a big leap for a growing economy like India. Consumers would be able to transact without the paper money and without facing a number of barriers.

2.9 Disadvantages of UPI :

- **Hack UPI account**

This is the first cons of UPI payment. if you pay with First Time UPA or you do not know about it, please once will know about it once. How to pay with Unified Payments Interface. And do not tell your personal information such as the date of birth, the UPI PIN and any other information to any other person, so that your account will be safe.

- **Payment delay**

The UPA is a very fast and safe medium, but sometimes it takes a lot of time to send the payment after the bank's server down. And sometimes it's time for more than 48 hours, so do not be afraid of your payment.

- **Mobile hang problem**

If you want to pay by the UPA, then you do not need any UTI support app, which you have to install in your Android smartphone and if you are continuously using it, take your mobile's RAM too much.

- **One time Transfer Limit**

If you want to transfer payments in the UPI, then you can transfer up to ₹ 100,000 as much as possible. If you have to transfer more than once, you can send it one by one.

- **Low number PIN**

This is the last cons of UPI payment. You must know that you have to transfer money from the Unified Payments Interface pin is also known as the UPI PIN and it is very small digit ie 4 or 6 digits while having a small digit, it is not safe.

2.10 How to generate UPI – PIN?

To use UPI as a payment mode, one has to sign-up for the service through a UPI app. This can be done on mobile banking of your particular bank or a third-party UPI app. After that, here are steps to be followed to generate a UPI PIN:

Step 1: Go to the UPI app of your choice – iMobile, SBI YONO, BHIM, Google Pay, etc

Step 2: Scroll to the ‘Bank Account’ section on the app. This section shows all the bank accounts linked with this particular app

Step 3: Select the bank account for which you want to set a UPI PIN. You will see a ‘SET’ option in case you have never set a UPI PIN for the bank account

Step 4: Enter the ‘Last six digits’ and ‘Expiry date’ of your Debit/ATM card

Step 5: Now, you will receive an OTP from your bank on the registered mobile number. In the next screen, enter the OTP and the UPI PIN you want to set for the account and click ‘submit’

2.11 Transfer Money through UPI

- Open the UPI-based app where you have registered on your smartphone.
- Log in to the app using the m-PIN or UPI PIN
- Select the “Transfer/Send Money” option
- Enter the beneficiary’s VPA/account details/mobile number
- Enter the amount to be transferred
- Enter the UPI PIN to confirm the payment
- Money is transferred instantly and a confirmation message is sent to the user’s mobile number.

2.12 Request Money through UPI

- Open the UPI-based app where you have registered on your smartphone
- Log in to the app using the m-PIN or UPI PIN
- Select the “Request Money” option
- Enter the payee’s VPA/Select the payee’s VPA from the existing list
- Enter your UPI PIN to generate a request
- A payment request will be sent directly to the payee

- The payee can make the payment directly by clicking “Approve” and entering his UPI PIN

2.13 Bill Payment through UPI

- Once logged in to your UPI-based app, select the option “Bill Payment”
- You will have to add a biller to avail this service
- Enter the amount that you have to pay the bill for
- Enter the UPI PIN to make the transaction
- Your payment will be credited to the biller instantly
- You can pay bills for mobile post-paid, water, electricity, DTH, broadband, gas, etc.

2.14 What is UPI AutoPay

As the name suggests, UPI AutoPay is an automatic bill payment service that schedules a predetermined date to pay a recurring bill. UPI AutoPay allows users to enable recurring e-mandate for multiple financial purposes such as payments of mobile bills, electricity bills, EMI payments, entertainment/OTT subscriptions, insurance payments, mutual fund SIP payments, and more.

2.15 How to Find UPI ID

To find your UPI ID, you need to follow the steps mentioned below:

- Open your UPI app
- Tap on your photo in the profile section
- Tap on the bank account
- Tap the bank account whose UPI ID you want to view
- You will find the associated UPI ID under ‘Manage UPI ID’s section

2.16 How to Reset UPI PIN

In case you forgot the UPI PIN, follow the steps mentioned below to reset UPI PIN:

- Go to your UPI app
- Tap on your photo in the top-right section
- Tap on the bank account under payment methods
- Tap on the bank account you want to edit
- Tap on the 'Forgot UPI PIN' option
- Enter the last 6 digits of your debit card and the expiry date (MM/YY)
- You can create a new UPI PIN
- An SMS will be sent on your registered number for OTP authentication

2.17 How can we use UPI without a debit card?

- Go to the 'Add UPI ID' option in your preferred UPI mobile application. Remember to select the bank account associated with your Aadhaar number.
- After determining whether your UPI ID is available, create it based on the app's requirements.
- Choose the 'Aadhaar-based verification' option and agree to the terms and conditions.
- To validate your Aadhaar number, enter the first six digits and click 'confirm'.
- Set the four or six-digit UPI pin, which may differ depending on the UPI application.
- You will receive a One-Time Password (OTP) on your registered mobile number, which is linked to your Aadhaar card, which you must enter into the app's specific tab.
- To finish the registration process, enter the UPI PIN you created earlier and click 'confirm'.

After that, you can start using the UPI app to make payments.

2.18 What is the UPI complaint number?

You can reach out to the BHIM toll-free number 18001201740 or can call on the helpline number 022- 45414740 for any queries or complaints on your UPI transaction.

2.19 Types of UPI Enabled Banks

UPI-enabled banks can be categorized under three broad heads depending upon the platform they chose to adopt in order to provide UPI-enabled services to their customers. They are as follows:

- **Banks with UPI apps**– Almost all major banks fall under this segment. These banks have either developed a new UPI app or have integrated the UPI in their existing smartphone applications. Banks like ICICI Bank, HDFC Bank, Axis Bank, SBI and PNB fall under this category and operate their individual mobile banking applications.
- **Banks without UPI app**– There are still a few banks who have neither developed their own UPI app nor have they partnered with a third party application to execute UPI enabled services.
- **Banks with Third-party UPI app**– These type of banks lend their UPI system to other mobile app developers. These developers, in turn, create a platform such as an e-wallet where a user can create a virtual account and utilize the services of online funds transfer. Banks like YES Bank, Axis Bank and HDFC Bank have partnered with several apps in this regard.

2.20 Which banks work with UPI?

1. State Bank of India
2. ICICI Bank
3. HDFC Bank
4. Indusind Bsnk
5. Yes Bank
6. Kotak Mahindra Bank
7. Union Bank of India
8. Indian Bank
9. Federal Bank
10. Airtel Payments Bank

11. DBS
12. Paytm Payments Bank
13. Canara Bank
14. Bank of Boroda
15. Bsnk of India

2.21 The UPI transfer limit in different Apps?

BANK NAME	UPI APP NAME	TRANSACTION LIMIT
State Bank of India	SBI Pay	Rs. 1,00,000
ICICI Bank	iMobile Pay	Rs. 1,00,000
HDFC Bank	HDFC BanK MobileBanking	Rs. 1,00,000
Axis Bank	BHIM Axis Pay	Rs. 1,00,000
Bank of Baroda	BHIM Baroda Pay	Rs. 1,00,000
Canara Bank	BHIM Canara eMPower	Rs. 20,000
Central Bank of India	BHIM Cent UPI	Rs. 2,00,000
Punjab National Bank	BHIM PNB	Rs. 1,00,000
HSBC	HSBC SimplyPay	Rs. 1,00,000
IDBI Bank	BHIM PayWiz by IDBI Bank	Rs. 1,00,000
Kotak Mahindra Bank	BHIM Kotak Pay	Rs. 1,00,000
YES Bank	BHIM YES Pay	Rs. 1,00,000

Karur Vysya Bank	BHIM KVB Pay	Rs. 1,00,000
Jammu and Kashmir Bank	BHIM JK Bank UPI	Rs. 2,50,000
Equitas Small Finance Bank	Equitas UPI	Rs. 1,00,000

2.22 Top UPI payment frauds:

- **Phishing Scam**

This is a scam in which payment links are sent by fraudsters in the form of an SMS. These fake bank URLs will look almost identical to the original URL. Upon clicking on that link, it will take you to the UPI payment app on your phone, where any app can be chosen for an auto-debit. Upon giving permission, the money will be deducted from the UPI account immediately.

- **Remote screen monitoring**

Downloading an unverified app from the app store can sometimes result in a privacy breach and data leak. These third-party apps can collect personal information from your phone and access UPI app information, which can lead to UPI fraud.

- **Deceptive UPI handles**

Fraudsters are always coming up with new ways to deceive people, and one of them is using social media. On social media, there may be false pages with names that sound similar to real ones, and people may fall for it. It's risky to put your personal information on such sites. You can be cheated using screenshots of your UPI handles. It is wise not to upload these in the public domain.

- **Fake Calls**

Fraudsters will contact you claiming to be bank employees, asking for your UPI pin, or requesting you to download a third-party app for verification purposes. This provides them access to your personal information and account information. It's better to ignore such inquiries unless they are from verified sources.

- **Money Mule**

Money Mule is a more sophisticated scam in which fraud rings get the victim's data and then transfer money to an intermediary account to store the plunder. This account serves as one of the money mules, storing funds obtained from many victims.

- **SIM Cloning**

SIM cloning is a relatively new innovation that has exploded in popularity since banks made OTP essential. A scammer can even modify the UPI PIN if he/she clones your SIM. To reset the PIN, the fraudster obtains the victim's bank account information and ID proof.

2.23 UPI safety tips.

- **Always Have a Screen Lock:**

Having a screen lock on your smartphone is a crucial step; ensure that your smartphone has some password protection, even if it is as simple as a PIN code or pattern. However, if you're an Android user, you must have a password, pin, pattern, or the easiest fingerprint.

- **Don't share UPI Pin with anyone:**

The UPI PIN is an essential part of any transaction, so keeping it to yourself should be a priority. Memorise the pin and don't share it with anyone. You must also not let anyone take a peek at your pin while you're making a payment; ensure your secrecy.

- **Try not to use multiple payment app:**

Though there is no harm in using multiple payment apps, it's advisable not to use too many even though you're following all the UPI safety tips. Using this many UPI applications will not just create complexity, but it will be tough for you to manage the payments and accounts.

- **Do not fall prey to Scammers and click on any link:**

Once you click on these links, the scammer will ask you to input your UPI pin to get the money; however, the moment you enter the pin, the requested amount will be transferred to the scammer's account.

- **Check the registered identity on the UPI ID to make sure it is correct**

As soon as your UPI app detects the QR code or as soon as you manually enter a number or VPA for payments, the registered identity of the recipient appears on your device's screen. Before allowing the transaction to proceed, it is usually a good practice double-checking if the registered identity is accurate by questioning the involved individual. In this manner, you may ensure that the amount is being sent to the correct recipient.

CHAPTER – 3

ANALYSIS AND INTERPRETATION OF DATA

The UPI has wider coverage in our modern world. This study is an attempt to analyses the level of customer satisfaction while using UPI, the quality of its services, to find out the most used UPI apps, to understand the growth of UPI and to find challenges faced by the customers while using UPI.

For making analysis, primary data and secondary data was used. Convenient sampling method is used and 100 samples are collected from the population. The population is infinite so that convenience sampling techniques is used for study. Data is collected through questionnaire.

The collected data was analyses and interpreted by using tools like percentage, average, ranking etc. and it was presented by using table, pie charts and diagram etc.

TABLE 3.1
AGE WISE CLASSIFICATION

AGE	FREQUENCY	PERCENTAGE
1-20	45	45
21-40	41	41
41-60	14	14
Above 60	0	0
TOTAL	100	100

Source: Primary data

The table 3.1 shows that 45 Per cent of the respondents are of the age group between 1 and 20. 41 Per cent of the respondents are of the age group between 21 and 40. 14 Per cent of the respondents are of the age group between 41 and 60.

FIGURE 3.1
Age wise classification

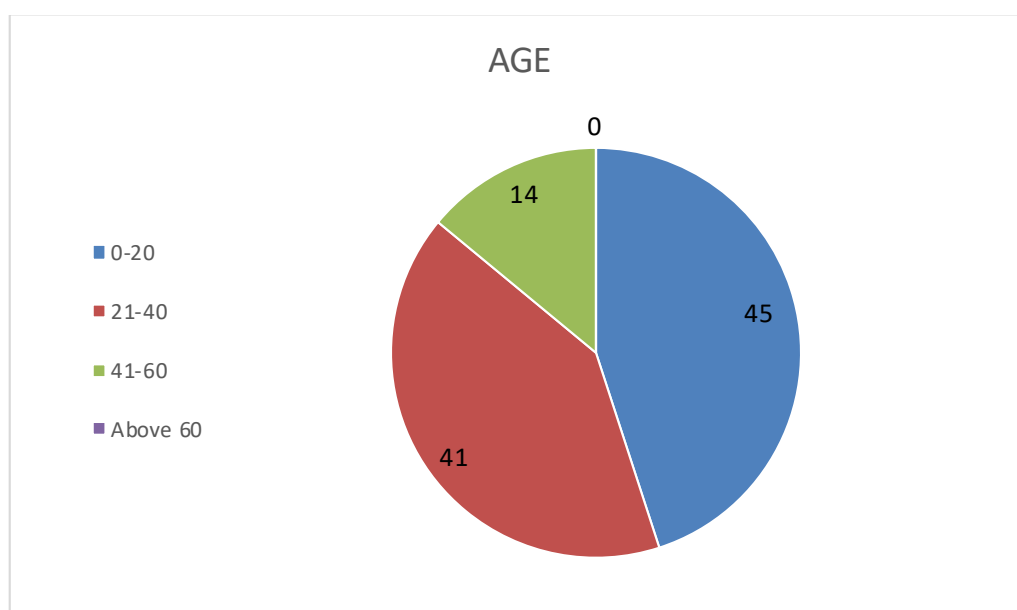


TABLE 3.2
GENDER WISE CLASSIFICATION

GENDER	FREQUENCY	PERCENTAGE
MALE	14	14
FEMALE	86	86
PREFER NOT TO SAY	0	0
TOTAL	100	100

Source: Primary data

The table 3.2 shows that out of the 100 respondents, majority of the respondents are females. It consisting of 86 Per cent and the male respondents constitute only 14 Per cent. This is shown in the following pie chart.

TABLE 3.3
BANK WISE CLASSIFICATION

BANKS	FREQUENCY	PERCENTAGE
SBI	51	51
CANARA BANK	12	12
FEDERAL BANK	8	8
INDIAN BANK	4	4
VIJAYA BANK	0	0
ICICI	2	2
HDFC	5	5
OTHERS	18	18
TOTAL	100	100

Source: Primary data

The table 3.3 shows that out of the 100 respondents, majority of the respondents have bank account in SBI bank(51 Per cent). It is followed by canara bank with 12 Per cent and federal bank with 3 Per cent.

FIGURE 3.2
Bank wise classification

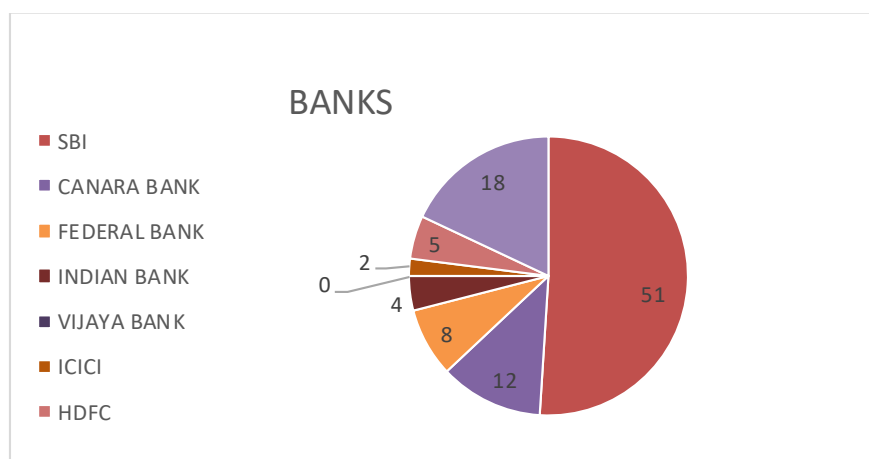


TABLE 3.4
PROFESSION WISE CLASSIFICATION

PROFESSION	FREQUENCY	PERCENTAGE
Govt employee	5	5
Pvt employee	17	17
Self-employee	2	2
Business	2	2
Student	67	67
Others	7	7
TOTAL	100	100

Source: Primary data

The table 3.4 shows that most of the UPI users are students (67 Per cent). The second higher user of the UPI is private employees consisting of (17 Per cent). The least number of respondent belongs to the category of business (2 Per cent) and self-employed (2 Per cent). 5 Per cent of the respondents are Govt. employees. This is shown in the following pie chart.

Figure 3.3
Profession Wise Classification

PROFESSION
100 responses

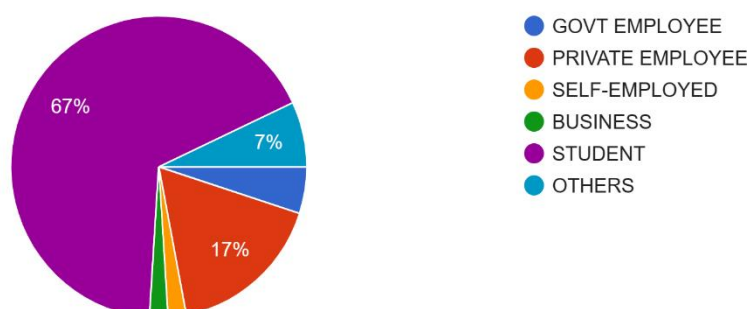


TABLE 3.5
INCOME WISE CLASSIFICATION

INCOME	FREQUENCY	PERCENTAGE
UPTO 50000	53	53
50000-100,000	10	10
100,000-150,000	4	4
150,000-200,000	7	7
ABOVE 200,000	26	26
TOTAL	100	100

Source: Primary data

The table 3.5 shows that 53 Per cent of the respondents who use UPI belong to the income upto 50,000. 10 Per cent of the respondents have income between 50,000 and 100,000. 4 Per cent of the respondents have income between 100,000 and 150,000 . 7 Per cent of the respondents have income between 150,000-200,000. 26 Per cent of the respondents have income above 200,000.

Figure 3.4
Income wise classification

ANNUAL INCOME

100 responses

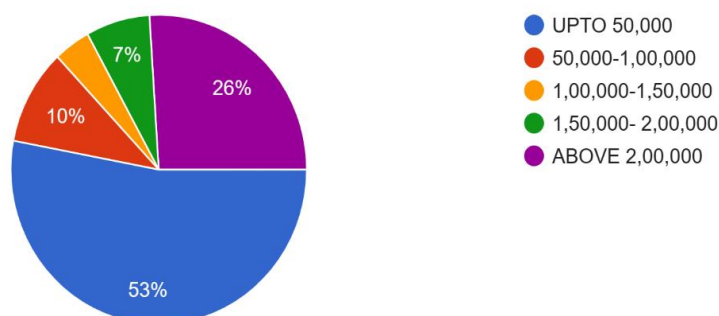


TABLE 3.6
MAIN PURPOSE OF USING UPI PAYMENTS

PURPOSE	FREQUENCY	PERCENTAGE
MONEY TRANSFER	49	49
BILL PAYMENT	29	29
RECHARGE	36	36
CASHBACK OFFERS	2	2
ALL OF THE ABOVE	41	41
TOTAL	100	100

Source: Primary data

The table 3.6 shows that out of 100 respondents, the purpose of using UPI for 49 Per cent is money transfer, 29 Per cent is bill payment, 36 Per cent is recharging, 2 Per cent is cash back offers. 41 Per cent of the respondents use UPI for all of the above purposes.

FIGURE 3.5
Main purpose of using UPI payments

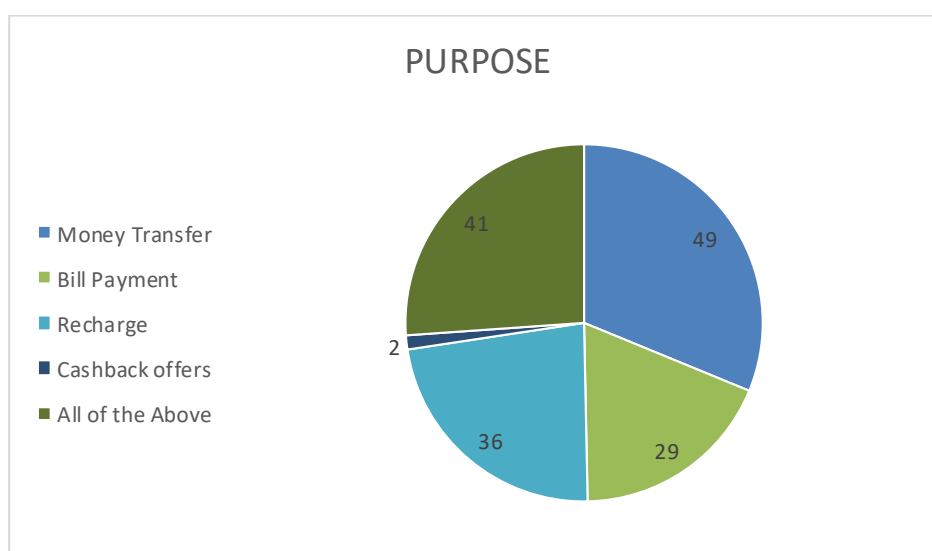


TABLE 3.7
REASONS FOR PREFERING UPI

REASON FOR THE PREFERENCE	FREQUENCY	PERCENTAGE
SAFETY	16	16
SPEED OF TRANSACTION	60	60
BETTER CONNECTIVITY	14	14
CONVENIENCE	72	72
CASHBACK OFFERS	9	9
TOTAL	100	100

Source: Primary data

The table 3.7 shows that out of 100 respondents, reason for 16 Per cent of respondents preferring UPI is safety. 60 Per cent is speed of transaction, 14 Per cent is better connectivity, 72 Per cent is convenience, 9 Per cent is cash back offers.

FIGURE 3.6
Reasons for preferring UPI

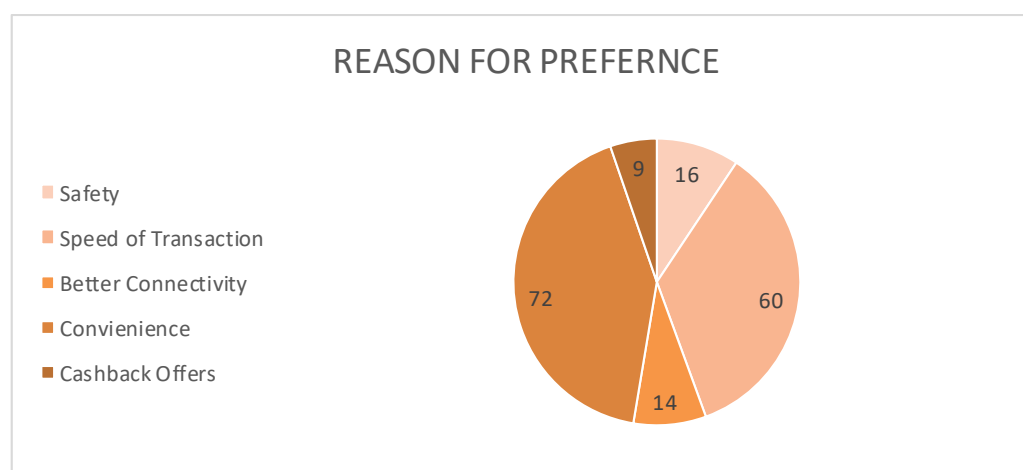


TABLE 3.8
MOST USED DEVICE FOR MAKING UPI
TRANSACTIONS

DEVICES	FREQUENCY	PERCENTAGE
SMARTPHONES	97	97
TABLETS	1	1
COMPUTERS	2	2
TOTAL	100	100

Source: Primary data

The table 3.8 shows that, out of 100 respondents, 97 Per cent of them use smartphones for making UPI transactions. Only few of them use tabs and laptops for making UPI transactions.

TABLE 3.9
IS THERE ANY ISSUES WITH THE USE OF UPI

OPINION	FREQUENCY	PERCENTAGE
YES	56	56
NO	44	44
TOTAL	100	100

Source: Primary data

The table 3.9 shows that out of 100 respondents, 56 Per cent of them agreed to the query that is there any issues with the UPI. Rest of the respondent disagreed.

TABLE 3.10
MOST USED UPI APPLICATION

APPS	FREQUENCY	PERCENTAGE
GOOGLE PAY	56	56
PAYTM	15	15
PHONEPE	15	15
BHIM	4	4
SBI YONO	5	5
OTHERS	5	5
TOTAL	100	100

Source: Primary data

The table 3.10 shows that out of 100 responses, google pay is the most used app with a frequency of 56, which is followed by paytm and phonepe (15 Per cent), SBI Yono with 5 Per cent and BHIM App with (4 Per cent)

FIGURE 3.7
Most used UPI application

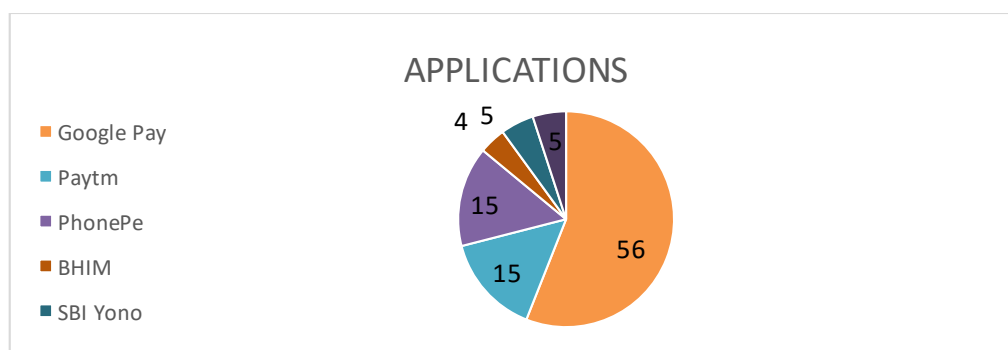


TABLE 3.11
ISSUES FACED WHILE USING UPI

ISSUES	FREQUENCY	PERCENTAGE
Delayed OTP	10	14
Security concerns	14	12
Losing of money	12	10
Connectivity issues	44	44
Exceeding the transaction limit	10	10
Inability of users without smartphones	10	10
TOTAL	100	100

Source: Primary data

The table 3.11 shows that, out of 100 responses, the biggest issue related to UPI is connectivity issues with a frequency of 44. It's followed by security concerns (14 Per cent), losing of money (12 Per cent), delayed OTP, exceeding the transaction limit and inability of users without smartphones with a frequency of 10.

FIGURE 3.8
Issues faced while using UPI

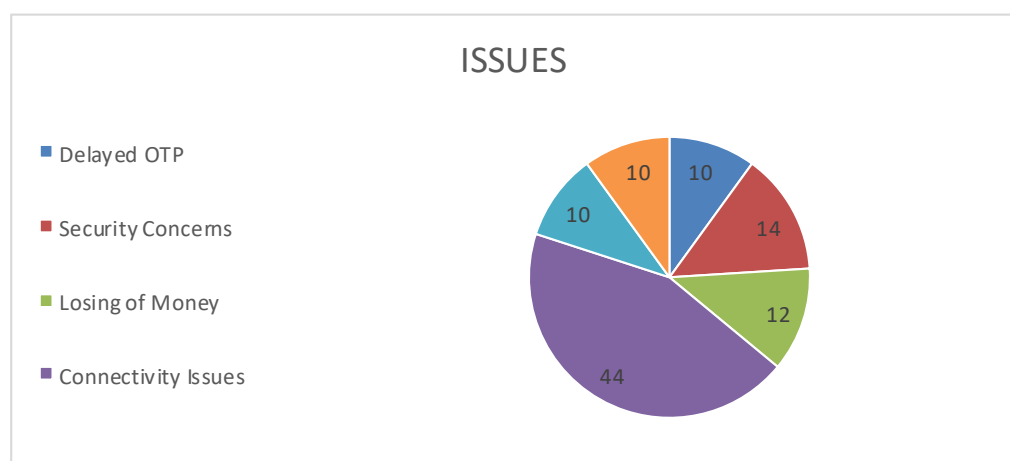


TABLE 3.12
CUSTOMERS BELIEF ABOUT UPI SECURITY

OPINIONS	FREQUENCY	PERCENTAGE
STRONGLY AGREE	6	6
AGREE	47	47
NEUTRAL	45	45
DISAGREE	1	1
STRONGLY DISAGREE	1	1
TOTAL	100	100

Source: Primary data

The table 3.12 shows that, out of 100 responses, 47 Per cent strongly agree with UPI security, 45 Per cent neither agree nor disagree. 6 Per cent strongly agree and 1 Per cent of the respondents disagree with the belief about UPI security.

FIGURE 3.9
Customer's belief about UPI security

Q7. Do you strongly believe that transactions are secured?

100 responses

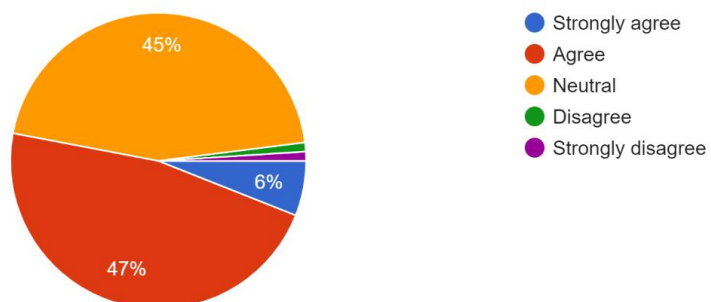


TABLE 3.13
HOW EASY IT IS TO USE UPI PAYMENTS

YES/NO	FREQUENCY	PERCENTAGE
YES	89	89
NO	1	1
MAYBE	10	10
TOTAL	100	100

Source: Primary data

The table 3.13 shows that, out of 100 responses, 89 of them agreed with the easiness of using UPI. 1 Per cent disagreed with the easiness of using it. 10 Per cent has a neutral stand on it.

FIGURE 3.10
How easy it is to use UPI payments

Q8. Do you find it easy to use UPI Payments?
100 responses

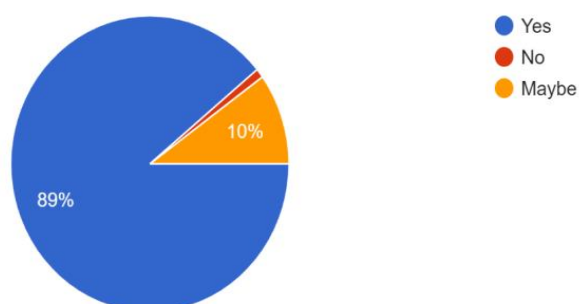


TABLE 3.14
OPINION ABOUT CUSTOMER CARE SERVICES
OFFERED BY UPI

OPINION	FREQUENCY	PERCENTAGE
EXCELLENT	5	5
GOOD	64	64
FAIR	29	29
POOR	2	2
TOTAL	100	100

Source: Primary data

The table 3.14 shows that, out of 100 responses, 64 Per cent rated good for customer care services offered by UPI. 29 Per cent rated fair grade for the same. Remaining 3 Per cent and 2 Per cent rated as excellent and poor respectively.

FIGURE 3.11
Opinion about customer care services offered by UPI

Q10. What is your opinion about customer care services offered by your UPI Payment Application?
100 responses

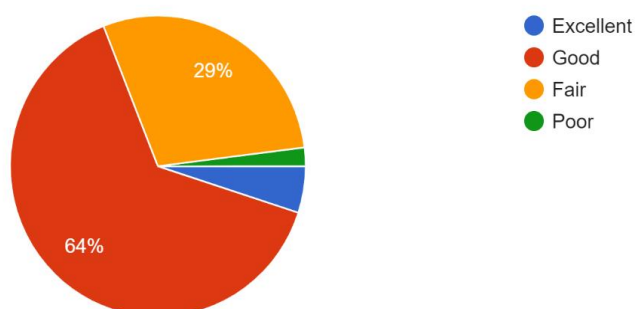


TABLE 3.15

RATING THE ENTIRE SERVICES OFFERED BY

UPI APPLICATION

BASIS	Payment offer	Customer support system	Online shopping	Security and Privacy	Discount	Speed Of Transaction
Excellent	26	20	58	35	11	53
Average	64	75	40	59	57	43
Below average	10	5	2	6	32	4
TOTAL	100	100	100	100	100	100

Source: Primary data

The table 3.15 shows that, out of 100 responses, following interpretations were found.

Payment offer:-

Out of 100 respondents, 26 Per cent rated the payment offer services as excellent, 64 Per cent rated as average and 10 Per cent rated as below average.

Customer support system:-

Out of 100 respondents, 20 Per cent rated the customer support services as excellent, 75 Per cent rated as average and 5 Per cent rated as below average.

Online shopping:-

Out of 100 respondents, 58 Per cent rated the online shopping services as excellent, 40 Per cent rated as average and 2 Per cent rated as below average

Security and privacy:-

Out of 100 respondents, 35 Per cent rated the security and privacy services as excellent, 59 Per cent rated as average and 6 Per cent rated as below average.

Discount:-

Out of 100 respondents, 11 Per cent rated the discount services as excellent, 57 Per cent rated as average and 32 Per cent rated as below average

Speed of transaction:-

Out of 100 respondents, 53 Per cent rated the speed of transaction services as excellent, 43 Per cent rated as average and 4 Per cent rated as below average

FIGURE 3.12
Rating the entire services offered by UPI application

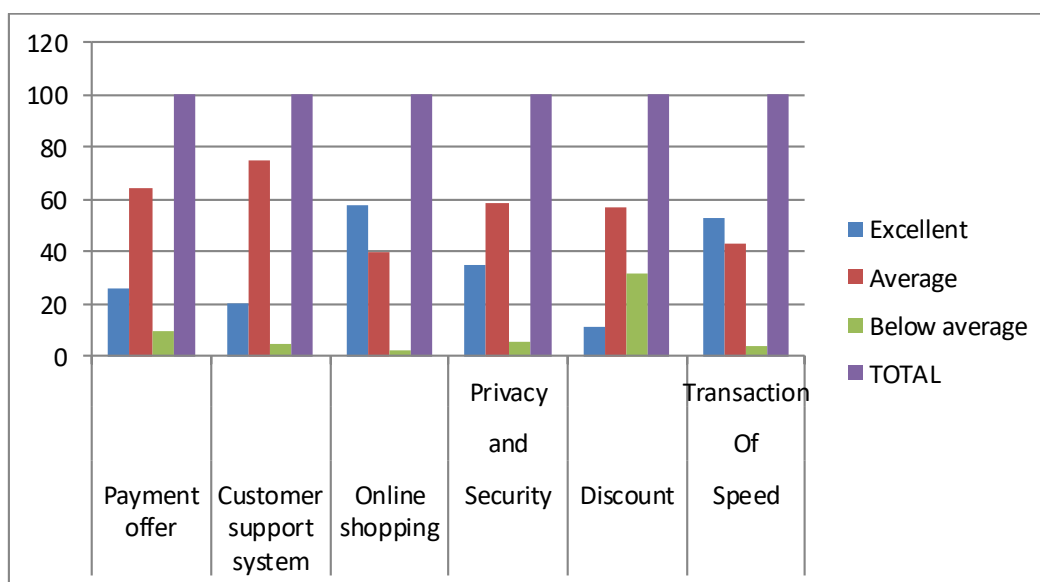


TABLE 3.16
ANALYSIS OF THE FOLLOWING THREATS OF
UPI

BASIS	Fear of sharing confidential info.	Access to info. If phone is stolen	Fear of OTP leak	Lack of info. About cyber laws	Malware and virus	Lack of customer support
Strongly agree	20	27	19	15	13	7
agree	47	44	40	44	53	46
Neutral	28	22	32	32	27	44
Disagree	5	7	9	9	7	3
TOTAL	100	100	100	100	100	100

Source: Primary data

The table 3.16 shows that, out of 100 responses, following interpretations were found.

Fear of sharing confidential info.

Out of 100 respondents, 20 Per cent strongly agreed with the fear of sharing confidential info As the threat. 47 Per cent of them agreed, 5 Per cent disagreed. 28 Per cent of them has a neutral stand.

Access to info. If phone is stolen

Out of 100 respondents, 27 Per cent strongly agreed with the Access to info. If phone is stolen As the threat. 44 Per cent of them agreed, 22 Per cent disagreed. 7 Per cent of them has a neutral stand.

Fear of OTP leak

Out of 100 respondents, 19 Per cent strongly agreed with the Access to info. If phone is stolen

As the threat. 42 Per cent of them agreed, 32 Per cent disagreed. 9 Per cent of them has a neutral stand.

Lack of info. About cyber laws

Out of 100 respondents, 15 Per cent strongly agreed with the Lack of info. About cyber laws

As the threat. 44 Per cent of them agreed, 32 Per cent disagreed. 9 Per cent of them has a neutral stand.

Malware and virus

Out of 100 respondents, 13 Per cent strongly agreed with the Malware and virus

As the threat. 53 Per cent of them agreed, 27 Per cent disagreed. 7 Per cent of them has a neutral stand.

Lack of customer support

Out of 100 respondents, 7 Per cent strongly agreed with the Lack of customer support As the threat. 46 Per cent of them agreed, 44 Per cent disagreed. 3 Per cent of them have a neutral stand.

FIGURE 3.13

Analysis of the following threats of UPI

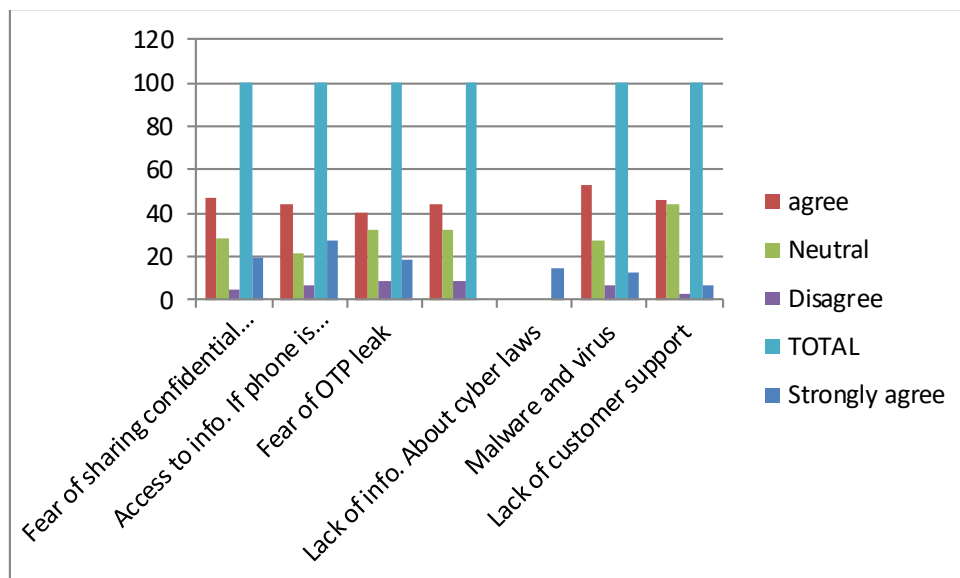


TABLE 3.17
ANALYSIS OF FUNCTIONALITIES OF UPI

BASIS	Quality of connectivity	Limit Of transaction	Accuracy Of transaction	Response to enquiries on UPI payments
Excellent	31	11	45	18
Average	65	81	49	79
Below average	4	8	6	3
TOTAL	100	100	100	100

Source: Primary data

The table 3.17 shows that, out of 100 responses, following interpretations were found.

Quality of connectivity

Out of 100 respondents, 7 Per cent rated excellent for the quality of connectivity. 65 Per cent rated as average and 4 Per cent rated as below average.

Limit of transaction

Out of 100 respondents, 7 Per cent rated excellent for Limit of transaction. 65 Per cent rated as average and 4 Per cent rated as below average.

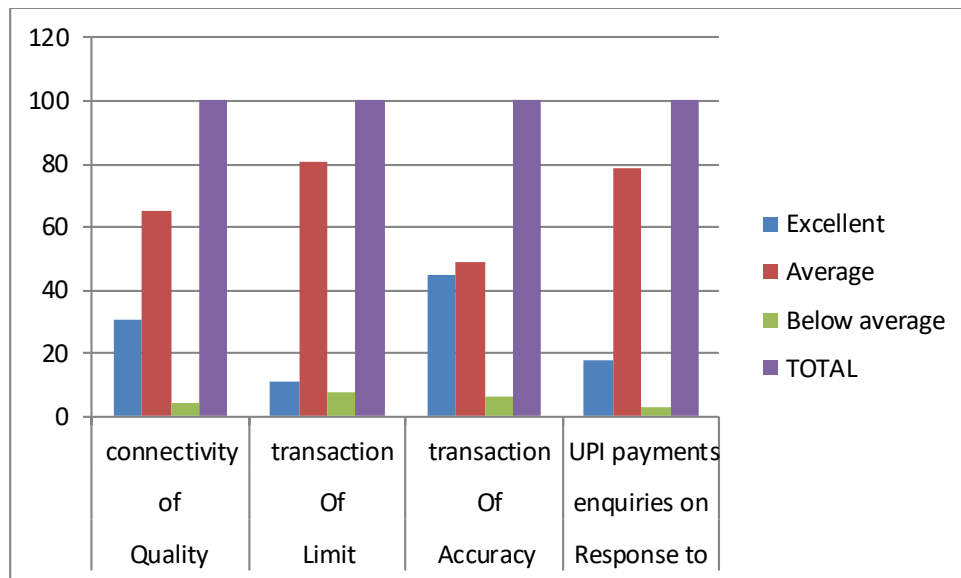
Accuracy of transaction

Out of 100 respondents, 7 Per cent rated excellent for the Accuracy of transaction. 65 Per cent rated as average and 4 Per cent rated as below average.

Response to enquiries on UPI payments

Out of 100 respondents, 7 Per cent rated excellent for the Response to enquiries on UPI payments. 65 Per cent rated as average and 4 Per cent rated as below average.

FIGURE 3.14
Analysis of functionalities of UPI



CHAPTER 4

FINDINGS, SUGGESTIONS, CONCLUSIONS

4.1 FINDINGS:

Following are the findings related with the analysis and interpretation of the primary data which was collected through the questionnaire.

- 45 Per cent of the respondents are of the age group 1 to 20
- 86 Per cent of the respondents are female
- 51 Per cent of the respondents have bank account in SBI
- 67 Per cent of UPI users are students.
- 53 Per cent of UPI users belong to the income group of up to 50,000.
- 49 Per cent of the respondents use UPI for the purpose of transferring money.
- 60 Per cent of the users prefer UPI because of the speed in the financial transaction.
- 97 Per cent of the users use smartphones for making UPI transactions.
- 56 Per cent of the users use Google pay as the UPI application.
- 56 Per cent of the users accepted that they face issues with the use of UPI.
- 44 Per cent of the users face connectivity issues while making UPI transactions.

- 47 Per cent of the UPI users believe that UPI apps provide transactional security.
- 89 Per cent of the users find it easy to use UPI payments.
- 64 Per cent of the respondents rated the customer care services offered by UPI as good.
- Most of the users have an average opinion about the entire services offered by UPI apps.
- 64 Per cent of the respondents said that the payment offers are average.
- 75 Per cent of the respondents considered the customer support system as average.
- 58 Per cent of the respondents rated online shopping as excellent.
- 59 Per cent of the respondents said that the security and privacy of UPI apps is average.
- 57 Per cent of the respondents considered the discount offers as average.
- 53 Per cent of the respondents rated speed of transaction as excellent.
- Most of the respondents agree that they have fear of threats of UPI.
- 47 Per cent of the respondents have the Fear of sharing confidential info.
- 44 Per cent of the respondents have the Access to info. If phone is stolen
- 40 Per cent of the respondents have the Fear of OTP leak.
- 44 Per cent of the respondents have the Lack of info. About cyber laws.

- 43 Per cent of the respondents have the Malware and virus.
- 46 Per cent of the respondents have the Lack of customer support.
- Most of the respondents have an average opinion about the functionalities of UPI.
- 65 Per cent of the respondents rated average for the quality of connections.
- 81 Per cent of the respondents rated average for the limit of transaction
- 49 Per cent of the respondents rated average for accuracy of transactions.
- 79 Per cent of the respondents rated average for response to the enquiries on UPI payments.

4.2 SUGGESTIONS:

Following are the suggestions gathered by connecting our interpretations, findings and objectives which can be implemented in UPI payments for its improvement.

- It's advisable to increase the maximum transaction limit.
- For increasing UPI services and its popularity, it's advisable to reduce charges and increase the offers.
- Better customer care system will be helpful to prevent complaints about UPI.
- Response to enquiries on UPI payments should be improved.
- Awareness about UPI payments should be brought. It will lead to the growth of UPI worldwide.

CONCLUSION

As smartphones become more commonly used, and their capabilities expand, they may increasingly be the means consumers use to access financial services and manage their finances. Their constant presence also makes them a potentially useful tool for the delivery of just-in-time financial information or as an aid in decision-making. Given the prevalence of mobile phones--particularly smartphones--among minorities, low-income individuals, and younger generations, mobile technology has the potential to empower consumers and expand access to financial services for underserved populations.

The use of mobile banking has increased by more than a third in the past year, and it appears likely to continue to increase as more and more consumers use smartphones. While still small, the use of mobile phones to make payments at the point of sale has increased even more rapidly. Over a quarter of mobile phone users express some interest in using their phones to make payments at the point of sale, giving mobile payments substantial growth potential as the ability to make these payments becomes more widespread.

In the today's world one word is common that is "Digitalisation" similar has been applied on Payment Industry Which has been continuously converting in to digital and is growing rapidly year-on-year. UPI payments are changing the way we send and receive money, reducing dependence on bank systems. It has simplified transactions, made them more secure, and made them easier. Using NCPI's UPI, you can make hassle-free, cashless payments, and it's relatively simple.

UPI is a grand step towards making the cashless payments faster, smoother and easier. It is said that the launch of UPI will prove to be a milestone in the transformation of modern India. It is all set to become an efficient alternative to mobile wallets. UPI is easy to use and more secure than online bank payments. So, we better start using UPI and pay/receive payments instantly. We can leverage the simplicity of the UPI payments and make the businesses go digital.

The study was majorly focused on the "Strategic analysis of UPI applications in India". The study revealed that the user base of UPI apps is increasing due to various benefits such as ease of use, speed of transaction, excellent payment offer, and satisfied transactional accuracy. It was also found that Google pay is the most used app. The

Indian digital payment system is continuously on an uptrend and is expected to remain in uptrend in future due to various benefits.

This study is conducted to examine the awareness and grievance about Google pay services in our locality, and also check the quality of Google pay services. For making analysis only primary data was used. The primary data is collected within Trivandrum district from different locality. Convenience sampling method is used and 100 samples are collected from the population to conduct study. The population is infinite so that convenient sampling technique is used for study. A total number of 100 respondents were selected from Trivandrum district for the purpose of study. The 100 respondents are chosen on convenience based data is collected to questionnaire.

The collected data was analyzed and interpreted by using tools like percentage, average etc. and it was presented by using tables, charts and diagrams.

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JOURNALS

EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal – "UNIFIED PAYMENT INTERFACE (UPI) – STIMULATES FINANCIAL INCLUSION"

APPENDIX

QUESTIONNAIRE

1. NAME: _____

2. AGE: _____

3. GENDER: _____

4. NAME OF BANK:

- ☐ State Bank of India
- ☐ Canara Bank
- ☐ Federal Bank
- ☐ Indian Bank
- ☐ Vijaya Bank
- ☐ ICICI
- ☐ HDFC Bank
- ☐ Others

5. Profession

- ☐ Govt Employee
- ☐ Private Employee
- ☐ Self-Employed
- ☐ Business
- ☐ Student
- ☐ Others

6. Annual Income

- ☐ Upto 50,000
- ☐ 50,000-1,00,000
- ☐ 1,00,000-1,50,000
- ☐ 1,50,000- 2,00,000
- ☐ Above 2,00,000

7. What is your main purpose of using UPI Payment ?
- ☐ Money Transfer
 - ☐ Bill Payment
 - ☐ Recharge
 - ☐ Cash back Offers
 - ☐ All of the Above
8. Why do you prefer UPI Payment methods?
- ☐ Safety
 - ☐ Speed of Transaction
 - ☐ Better Connectivity
 - ☐ Convenience
 - ☐ Cash back Offers
9. Which device do you use most for making UPI Transactions?
- ☐ Smartphones
 - ☐ Tablets
 - ☐ Computer or Laptops
10. Which is UPI Payment Application used by you?
- ☐ Google Pay
 - ☐ Paytm
 - ☐ PhonePe
 - ☐ BHIM
 - ☐ SBI Yono
 - ☐ Any others
11. Is there any issues with the use of UPI Payments?
- ☐ Yes
 - ☐ No

12. What are issues faced while using UPI Payment?

- ☐ Delayed OTP
- ☐ Security concerns
- ☐ Losing of Money without Knowledge
- ☐ Connectivity Issues
- ☐ Exceeding the transaction limit
- ☐ Inability of users without smartphones

13. Do you strongly believe that transactions are secured?

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree

14. Do you find it easy to use UPI Payments?

- ☐ Yes
- ☐ No

15. How satisfied are you with the payment services of your UPI Payment Application?

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Dissatisfied

16. What is your opinion about customer care services offered by your UPI Payment Application?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

17. How do you rate the entire services offered by your UPI Payment Application?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Poor

18. How do you rate the following of UPI Payment ?

	Excellent	Average	Below Average
Payment offer			
Customer Support System			
Online Shopping			
Security and Privacy			
Discount			
Refund			
Speed of Transaction			

19. How do you rate the following the threats of UPI ?

	Strongly Agree	Agree	Neutral	Disagree
Fear of sharing confidential information				
Access to information if phone is stolen				
Fear of OTP or password leak				
Lack of information about Cyber Laws				
Malware and Virus				
Lack of customer support				
Delay in transaction				

20. How do you rate the following functionalities of UPI ?

	Excellent	Average	Below Average
Quality of Connectivity			
Limit of Transaction			
Accuracy of Transaction			
Response to enquiries on UPI Payments			

21. Any suggestions for improvement of UPI Payment Application

Ans: _____