

Major Research Project Report on
EMERGENCE AND IMPACT OF UPI IN INDIA:
A study on behavioural dimensions in adoption of UPI

Submitted By

Sakshi Rathee

2K21/DMBA/109

Under the Guidance of

Mr. Chandan Sharma

Assistant Professor



DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road, Delhi-110042

CERTIFICATE

This is to certify that **Ms. Sakshi Rathee**, has completed the project titled “**EMERGENCE AND IMPACT OF UPI IN INDIA: A study on behavioural dimensions in adoption of UPI**” under the guidance of **Mr. Chandan Sharma** as part of Master of Business Administration (MBA) curriculum of Delhi School of Management, New Delhi. This is an original piece of work and has not been submitted elsewhere.

Dr. Archana Singh
Head of Department
Delhi School of Management
Delhi Technological University

Mr. Chandan Sharma
Assistant Professor
Delhi School of Management
Delhi Technological University

DECLARATION

I **Sakshi Rathee** pursuing **Master of Business Administration** 2021-2023 from **Delhi School of Management, DTU**. I hereby declare that the project report on titled “**EMERGENCE AND IMPACT OF UPI IN INDIA: A study on behavioural dimensions in adoption of UPI**” is the outcome of my own effort under the guidance of Prof. Chandan Sharma. The same report has not been submitted earlier to any Institute/University for awarding the degree of MBA or any other professional course.

Sakshi Rathee

Roll No.-2K21/DMBA/109

ACKNOWLEDGEMENT

It gives me great pleasure to express my gratitude for the support and advice I received while conducting the research. I want to thank Mr. Chandan Sharma, my faculty advisor, for helping me choose the topic " **EMERGENCE AND IMPACT OF UPI IN INDIA: A study on behavioural dimensions in adoption of UPI** " and advising me on how to properly complete my research. I appreciate their generosity in giving me their time and effort throughout; it was a pleasure working with them. I sincerely appreciate their unwavering assistance, as well as their insightful ideas and opinions, which allowed me to finish my project with all the necessary details. Last but not the least, I want to express my gratitude to my classmates for helping me to complete the project report and to the entire Delhi School of Management faculty for sharing their knowledge and experience with me.

I have given the project my all to ensure that it is completed in the best way possible and that there are no errors.

Sakshi Rathee

(Roll No. 2K21/DMBA/109)

EXECUTIVE SUMMARY

From the barter system of exchanging goods to the use of currency, mankind has evolved significantly. With further development of technology and the internet, our lives have become easier than ever, from ordering food online to paying bills in a single click, digital payments have played a very crucial role. Also, the application of technology has grown significantly in just a few decades, particularly with the increased use of smart phones. It sparked a huge increase in cashless transactions in the mobile payment sector. The astonishing change is especially prevalent in developing nations with large economies, like India. The Indian government launched the Digital India programme in 2015, following the general trend. The effort has significantly aided the nation's economic expansion.

The development of cashless transactions, however, was greatly aided by the Covid-19 and demonetization phases, and since then, online transactions have risen dramatically. In this study, we will look at the development of UPI as a payment method, how people have reacted to it, present challenges, and the future of UPI as a digital payment method.

This study intends to determine consumer perception of mobile payment experience specific to UPI mode. By comparing consumer data on gender, age, and occupation, this study concludes with characteristics associated with awareness and adoption of UPI.

This study will help us in understanding UPI and its contribution in fast, cashless transactions that affect consumers. According to the study's findings, consumers in the service sector are more inclined to embrace UPI, there are no differences between male and female consumers' attitudes towards doing so and there is no difference in the adoption attitude between younger and older population.

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Chapter 1

INTRODUCTION

Nowadays, traditional payment modes are being replaced by different types of digital payment methods that are convenient and easy. In digital process both buyer and seller use digital means to send or receive money. It's an automatic virtual process wherein the receiver and sender can avoid visiting their respective banks and still carry out the transaction. With the introduction of numerous technologically advanced products and services, India's digital payment ecosystem is expanding at an exponential rate. The Indian government's 'Digital India' initiative has emerged as one of the key catalysts. It is expected to enable digital awareness amongst people and increase the response of people in adoption of digital payment products.

1.1 Background

Digital payment refers to the transfer and reception of funds electronically. Payer and payee both send and receive money virtually. When a certain amount of money is sent to the payee, it simultaneously gets added to their wallet and the same amount gets deducted from the payer's bank account. There isn't any physical contact between them. A bank account or e-wallet account with internet connection is required to use digital payment services. The term "digital payment" encompasses IMPS, UPI, RTGS, and NEFT all of these categories.

The idea of digital payment began when the world wide web was created. Following that, companies like Amazon and PayPal emerged in the 1990s, and digital payment era got its start. At that stage, people used cash more, and digital payments were hardly used. However, after the introduction of UPI, things began to change. For the next generation to be digital, the government started various initiatives for promoting digital payments.

1.2 Demonetization Overview

We came across the term demonetization when the government suddenly withdrew the old Rs 500 and Rs 1,000 notes unavailable for general use in the future. **(Ghosh & Srivastava, 2019)**. Demonetization is about clearing a money unit, a legal tender, of its status. In November 2016, our Honourable Prime Minister made a public address informing that from the very next day onwards, the old denomination of Rs. 500 and Rs. 1000 will be discontinued.

The main objective of demonetization was, firstly to control the flow of black money in the Indian market and secondly, to increase E-transactions and encourage digital payment system which will take the country towards a cashless economy. (Trikala, 2020)

The unavailability of money for a span of fifty days changed the spending and saving habits of the Indian customer and individuals have changed to online usage of e-wallets applications which are based on online transactions and net banking (**Chaubey & Kumar 2017**). After the announcement, digital transactions increased by 250% in comparison with what the previous months had observed. In this manner, money crunch has helped the idea of credit only economy which drove individuals to go to credit only choices, for example, charge, Visas, IMPS and versatile wallets (**Roy & Sinha, 2014**)



Figure 1.2.1: Demonetization cartoon

Source: law school policy review and Kautilya society website

1.3 Introduction to UPI

RBI found that people hardly use digital modes for carrying out their money transactions. It was unable to tackle black money issues and corruption. Hence NPCI (National Payment Corporation of India) was given the task for creating a new payment system that was convenient, provided security against online theft and did faster transactions. As a result, UPI was officially launched by NPCI in 2016 (NPCI, 2021). The UPI system merges different bank accounts and features in one single platform that does seamless fund routing and carries out faster merchant payments.

In simple terms, it's an improved version of IMPS. It has grown exponentially over the years and has made India the number 1 user of digital payment services.

The digital payments as per NCBI during the last five years are as follows:

Financial Year (FY)	Total value of digital transactions (In lakh crore)	Total value of digital transactions (In US\$ million)
2017-18	1,962	2,367
2018-19	2,482	2,995
2019-20	2,953	3,563
2020-21	3,000	3,620
2021-22	3,021	3,645
2022-23	2,050	2,473

Table 1.3.1: UPI transactions in last 5 years
Source: NCBI official website

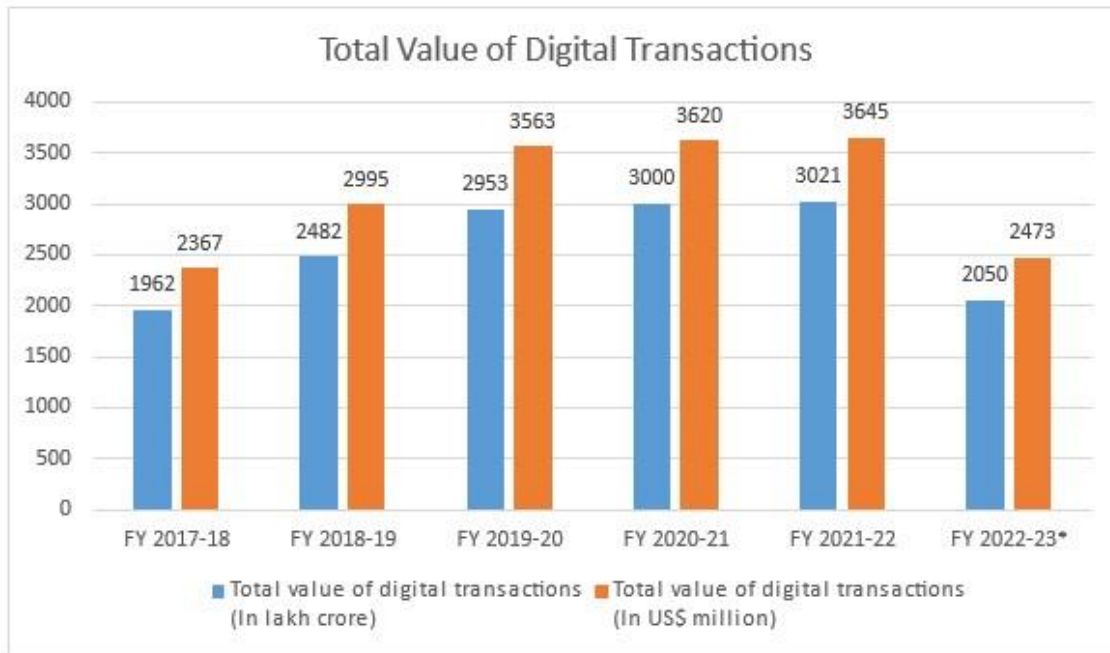


Figure 1.3.2: Value of UPI transactions
Source: Press Information Bureau

Only 93000 transactions were completed when UPI began, and 800 million in March 2019. In December 2022, UPI transactions went to 782 crores (Rs. 12.8 lakhs) and in January 2023, it has crossed 800 crore mark.

Unified Payments Interface (UPI) is a digital payment system which allows users to both receive and send money via an Online or Virtual Payment Address (VPA) (Gochhwal, 2017). UPI has devised a unique characteristic feature that builds virtual bank accounts which seamlessly helps in exchange of money without disclosing private information. All the banking apps like Hdfc bank Upi, Axis bank Upi, and almost all the other private and public banks provide the facility to use UPI services. (Thomas & Chatterjee 2017). A single mobile application with UPI service can be connected to multiple bank accounts with all the features provided by the bank for smooth fund transfers.

UPIs Top 50 Banks (Mar'23)

UPI Remitter Banks - Top 50 Banks (Mar'23)							
Sr. No.	UPI Remitter Banks (Mar-2023)	Total Volume (In Mn)	Approved %	BD %	TD%	Total Debit Reversal Count (In Mn)	Debit Reversal Success %
1	State Bank Of India	2260.05	92.46%	5.09%	2.45%	15.95	89.61%
2	HDFC BANK LTD	778.92	94.41%	4.74%	0.85%	4.53	93.27%
3	Bank of Baroda	572.31	93.72%	5.89%	0.39%	2.06	96.77%
4	Union Bank of India	538.68	94.84%	4.65%	0.51%	2.60	75.60%
5	ICICI Bank	444.82	96.09%	3.11%	0.80%	2.72	95.14%
6	Axis Bank Ltd.	413.87	95.79%	4.14%	0.07%	1.29	89.86%
7	Punjab National Bank	409.55	95.11%	4.78%	0.12%	1.75	82.94%
8	Canara Bank	405.45	93.97%	5.81%	0.22%	1.68	93.20%
9	Paytm Payments Bank	404.99	95.76%	4.03%	0.21%	1.22	78.26%
10	Kotak Mahindra Bank	404.38	93.76%	5.35%	0.89%	1.77	65.63%

Figure 1.3.4: UPI Top 10 banks
Source: NCBI official website

Benefits of UPI:

- Faster money transfers 24*7.
- A single mobile app can be used for payment across different bank accounts.
- A secure way of sending and receiving money as bank information is not entered every time a payment is being made.
- Offers and discounts on payments.
- No need to carry extra cash.

1.4 Problem Statement

To investigate the general perception of consumers towards adoption of UPI as a payment method and to study the emergence of UPI and its significant impact on Indian population.

1.5 Objectives of the study

- A. Significance of UPI in transforming India into a Cashless Economy.
- B. A study on the awareness amongst the consumers about the different digital payment modes.
- C. To determine the security level and relevance of using UPI.
- D. To find the major concern of consumers while doing cashless transactions.
- E. Customer perception toward digital payment, especially the adoption level of UPI mode.

1.6 Scope of the study

The scope of this study is to examine the sudden change in payment systems after demonetization and Covid 19. Also, to study the impact of UPI in Indian market and the change in perception of people about online transactions by moving towards cashless economy. Therefore, an understanding of the impact of this technological change is the need of the hour especially in the today's world. The review of such factors that influence the gradual shifting over the cash to cashless transformation has been carried out.

Chapter 2

LITERATURE REVIEW

Dixit R in his research paper explained the status of mobile wallets. He found that UPI payment method became major payment channel for cashless transactions, and the satisfaction level for using mobile wallet to customers is sufficient. Throughout the study, he made survey with 170 respondents which is satisfied to support the hypothesis test.

Dr. Dhani Shanker Chaubey, Piyush Kumar in their research talk about the growth of digital payments system after demonetization. People were eager to adopt the digital mode of payments but didn't want to pay extra for transactions.

Parvesh Deepak Oswal & Prof. Hanmant N. Renushe highlighted the effects of Covid 19 and its significant impact on the growth of UPI in India. They argue that installing biometric sensors in digital devices would encourage UPI transactions. Their key findings from their survey helped them highlight how promoting UPI in Asian countries can convert them into cashless society.

Bagha in his research mentioned that there are a lot of reasons why users shift towards digital payments which includes freedom for carrying out excess cash or retaining a minimum cash on yourself. People also get various offers in form of discounts and cashbacks, the ability to make payments easily.

Amanullah; Goriparthi & Tiwari mentioned that NCPI developed UPI as a single platform for carrying out all digital payments in India. They also highlighted that UPI is a platform that enables users to connect various banks at a time in a single mobile app, merging different banking features, promoting seamless all at a single place.

Thomas & Chatterjee highlighted the unique characteristics of UPI and also the fact that it works on a real-time basis wherein money is transferred instantaneously at any time, any place. All the banking apps like Hdfc bank Upi and almost all the major banks provide the facility to use UPI services.

Neema & Neema highlighted the advantages of UPI like free transactions, fast mode of transfer, multifunctional like booking flights, paying bills etc. they also mentioned the ease of use and interconnectivity between similar mobile payment apps like Google Pay, Phone Pay, Paytm etc.

Shrotriya mentioned that the way forward seems to be guided by technological changes which would bring about greater mobility and transparency in the digital world. Virtual payment system is the future and the ability to perform transactions from anywhere in the world is the biggest advantage.

Gochhwal mentioned that UPI was a technological leap into the digital payment systems wherein for the first time “pull” request from the merchant was introduced through which they can prompt or request money. Earlier, NEFT, RTGS, IMPS etc payments were only based on a “push” based request system. UPI transformed the field in this regard. They way ahead for India according to his research was by digital freedom. UPI 2.0, the next iteration in the digital payment method will have a UPI Payment Mandate, which will allow the users to make periodic recurring bills like utilities, loan EMI payments etc using a one-time authentication method.

Chapter 3

RESEARCH METHODOLOGY

In this study, a descriptive research design is employed, which is a research method that outlines the characteristic of the population or the phenomenon under consideration.

A combination of primary and secondary data has been employed in this research. For primary data collection, a questionnaire was developed using Google Forms which distributed via social media.

Also, NCBI website is used as a source of secondary data.

3.1 Sample Data: The population for present study would include people of working age group in India who indulge in money transactions for various purposes. A sample of 130 respondents asked to take part in filling of questionnaire using convenience sampling and snowball sampling. Convenience sampling (also known as Haphazard sampling) is a type of non-probability sampling where researching subjects of the population are easily accessible to the researcher (Etikan, 2016). Snowball sampling is also a non-probability sampling method in which the selected subjects reach out to their friends and family for data collection (Etikan, 2016).

3.2 Measurements: The questionnaire comprises of 4 items measured on a 5-point Likert scale. Here, the points range from 1 for strongly disagree to 5 for strongly agree. One item was coded as 5 for most effective to 1 for least effective while other was one item was coded as 5 for highly secured to 1 for least secured.

3.3 Mode of administration and tools used: The questionnaire was formed and administered through Google forms. Data collected was imported in SPSS and t-test was carried out.

3.4 Questionnaire

Questions	Options	scales
Name	Short answer	
Age group	<ul style="list-style-type: none"> • 20-29 • 30-39 • 40 above 	
Educational Qualification	<ul style="list-style-type: none"> • HSC • Graduate • Postgraduate • Working Professional 	
Gender	<ul style="list-style-type: none"> • Male • Female • Prefer not to say 	
Occupation	<ul style="list-style-type: none"> • Government Employee • Corporate Employee • Business 	
Income per annum	<ul style="list-style-type: none"> • Less than 1 lakh • 1-5 lakhs • 5-10 lakhs • Above 10 lakhs 	
How much in your opinion has Demonetization affected mobile banking in India?	1-least effective 5-most effective	Likert scale

Which mode of payment do you prefer to use generally?	<ul style="list-style-type: none"> • Mobile wallet • Net banking • Credit/debit card • UPI • Cash 	
Which app do you prefer for mobile transactions of payment?	<ul style="list-style-type: none"> • Paytm • Mobikwik • Amazon pay • Google pay • Phone pay • BHIM • other 	
Why do you prefer a certain payment mode?	<ul style="list-style-type: none"> • Cashback • Secure payment method • Fast cash transfer • Convenient mode of payment • Attractive offers 	
UPI provides a convenient way of payment	1-Strongly disagree 5-Strongly agree	Likert scale
In your opinion, how secure is UPI mode of payment	1-Least secured 5-highly secured	Likert scale
Do you feel that UPI provides flexibility and easy tracking of transactions	<ul style="list-style-type: none"> • Yes • No • Maybe 	
Will you prefer UPI rather than using cash in day-to-day transactions?	<ul style="list-style-type: none"> • Yes • No • maybe 	
Do you agree that UPI is the future of the cashless economy?	1-strongly disagree 5-strongly agree	Likert scale

3. 5 Hypothesis

The following research hypothesis was formulated:

H01: There is no significant difference in the intention for adoption of UPI among the male and female population.

H02: There is no significant difference in adoption of UPI among business sector and service sector consumers.

H03: There is no significant difference in adoption of UPI between young and old consumers.

Chapter 4

DATA ANALYSIS AND INTERPRETATION

1. Survey Analysis:

- A google form was floated amongst social media users to get structured data.
- Around 130 respondents had filled in the survey.

I.Demographics

1. Gender

Gender	Responses	% of Responses
Male	86	66.2%
Female	44	33.8%
Total	130	100%

Table 4.1.1

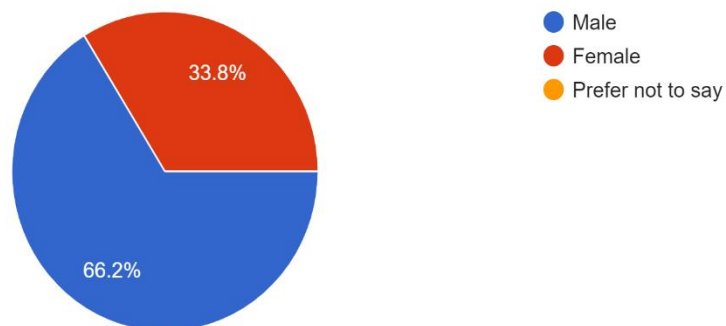


Figure 4.1.1

Interpretation:

Out of the total respondents, 86 respondents (66.2%) are male respondents, and 44 respondents are female respondents (33.8%).

2.Age (in year):

Age Group	Frequency	Percent
Below 20	7	5.4
20-29	33	25.4
30-39	33	25.4
40 and above	57	43.8
Total	130	100

Table 4.1.2

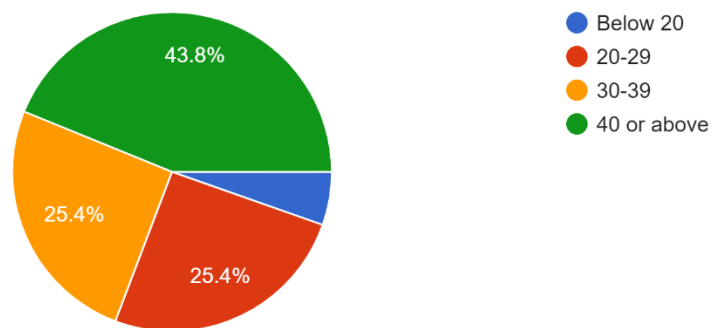


Figure 4.1.2

Interpretation:

Out of the total respondents, 7 (5.4%) are in the age group of below 20 years, 33 respondents (25.4%) are from the age group of 20-29 years, 33 respondents (25.4%) are from the age group of 30-39 years and 57 (43.8%) are from the age group of 40 above.

3. Occupation

Occupation	Frequency	Percent
Government employee	55	42.3
Corporate employee	26	20
Business	5	3.8
Others	44	33.8
Total	130	100

Table 4.1.3

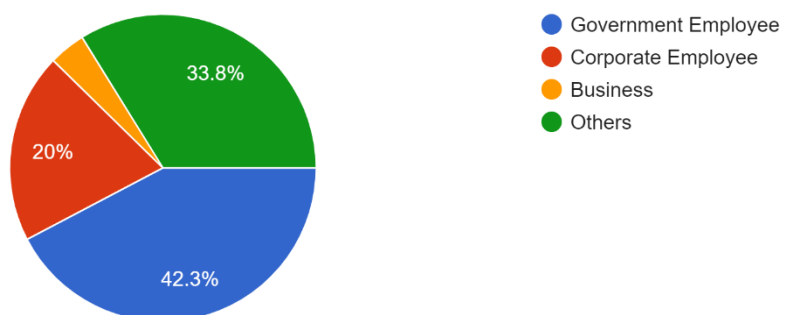


Figure 4.1.3

Interpretation:

Twenty-six of the total respondents (20%) in the figure above work in the private sector. 55 respondents (42.3%) work in the government sector. (3.8%) 5 respondents run their own businesses, while 44 respondents (33.8%), mostly students, fall into the other category.

4. Income (per annum)

Income slab	Frequency	Percent
Less than 1 lakh	30	23.1
1 lakh to 5 lakh	19	14.6
5 <u>lakh</u> to 10 lakh	49	37.7
Above 10 lakhs	32	24.6
Total	130	100

Table 4.1.4

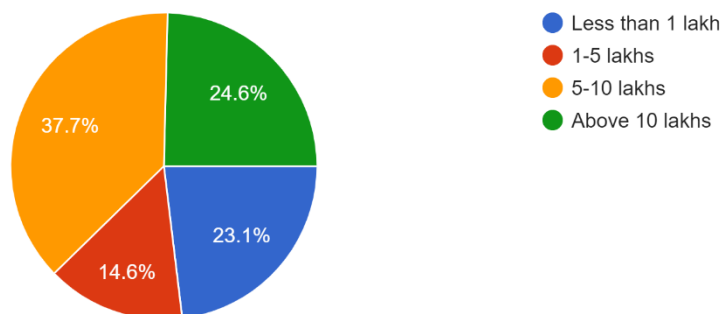


Figure 4.1.4

Interpretation:

19 of the total respondents (23.1%) in the above chart have incomes ranging from one lakh to five lakh. 49 respondents (27.2%) make between 5 and 10 lakhs per year.

(23.1%) 30 respondents earn less than one lakh rupees per year (24.6%). 32 respondents don't make more than 10 lakhs annually.

5.Educational Qualification

Qualification	Frequency	Percent
HSC	16	12.3
Graduation	55	42.3
Post Graduation	36	27.7
Working Professional	23	17.7
Total	130	100

Table 4.1.5

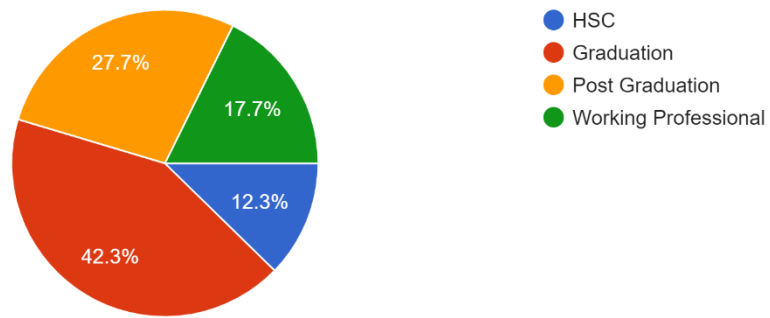


Figure 4.1.5

Interpretation:

16 of the total respondents (12.3%) in the preceding graph have completed high school. 55 responders (42.3%) have a degree. (27.7%) 36 respondents are enrolled in post-graduate programmes, while 23 respondents (17.7%) are employed as professionals.

II. Different payment methods used by the customers

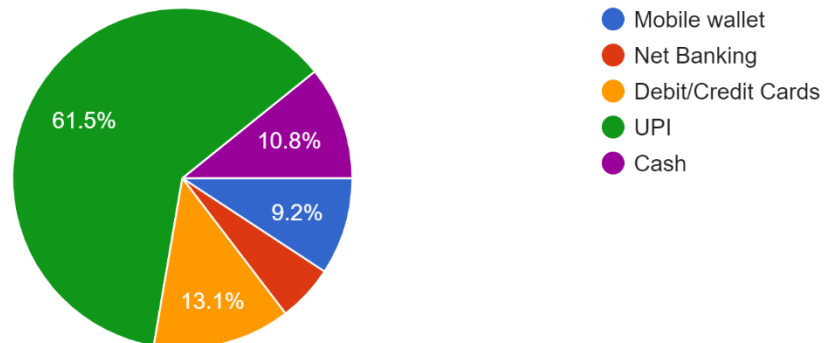


Figure 4.1.6

1. Debit/Credit cards

	Frequency	Percent
Yes	17	13.1
No	113	86.9
Total	130	100

Table 4.1.6

Interpretation:

In the table above, out of the total respondents, 13.1%, 17 respondents use credit/debit cards as a form of payment, and 113 respondents use other payment methods, accounting for 86.9% of the total respondents.

2. Cash

	Frequency	Percent
Yes	14	10.8
No	116	89.2
Total	130	100

Table 4.1.7

Interpretation:

Only 14 of the respondents (10.8%) in the above table use cash payments, while 116 respondents (89.2%) use alternative payment methods.

3. Mobile Wallets

	Frequency	Percent
Yes	12	9.2
No	118	90.8
Total	130	100

Table 4.1.8

Interpretation:

From the total respondents (9.2%) in the table above, 12 respondents (9.2%) use mobile wallets as a payment method, whereas 118 respondents (90.8%) do not.

4. UPI

	Frequency	Percent
Yes	80	61.5
No	50	38.5
Total	130	100

Table 4.1.9

Interpretation:

80 of the respondents in the above table, or 61.5% of the total respondents, use UPI as a payment method, whereas 50 respondents, or 38.5%, do not.

5. Net banking

	Frequency	Percent
Yes	7	5.4
No	123	94.6
Total	130	100

Table 4.1.10

Interpretation:

Only 7 (5.4%) of the respondents of the total respondents use the internet banking payment method, while 123 respondents (96.4%) do not.

III. Bills and utility payment:

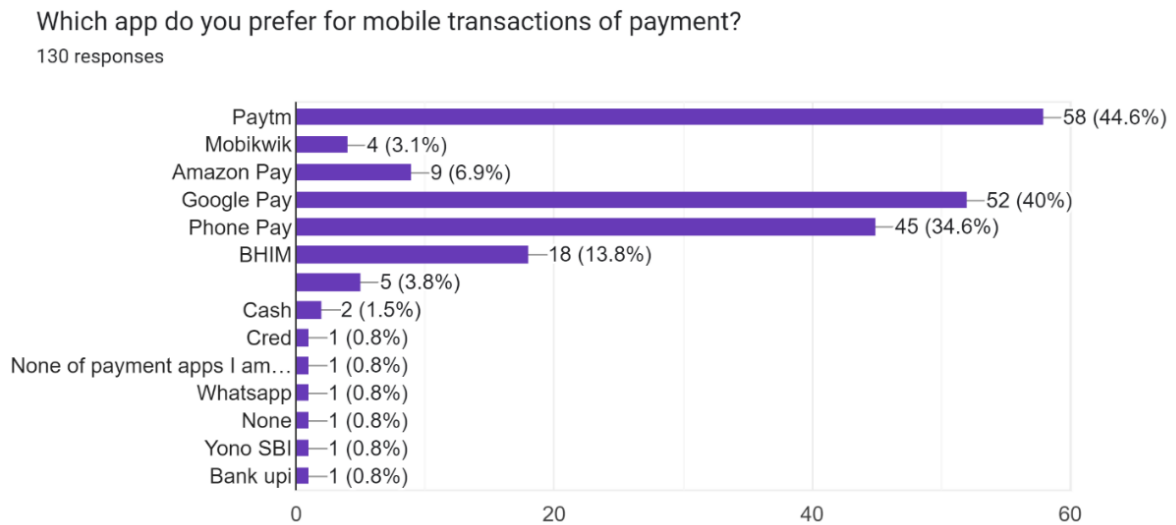


Figure 4.1.7

The most popular method for paying bills and utilities is Paytm (44.6%), with Google Pay (40%) narrowly catching up to Phone Pe (34.6%).

In this area, BHIM (13.8%) and Amazon Pay (6.4%) are emerging applications.

IV. Reason of choosing the above apps

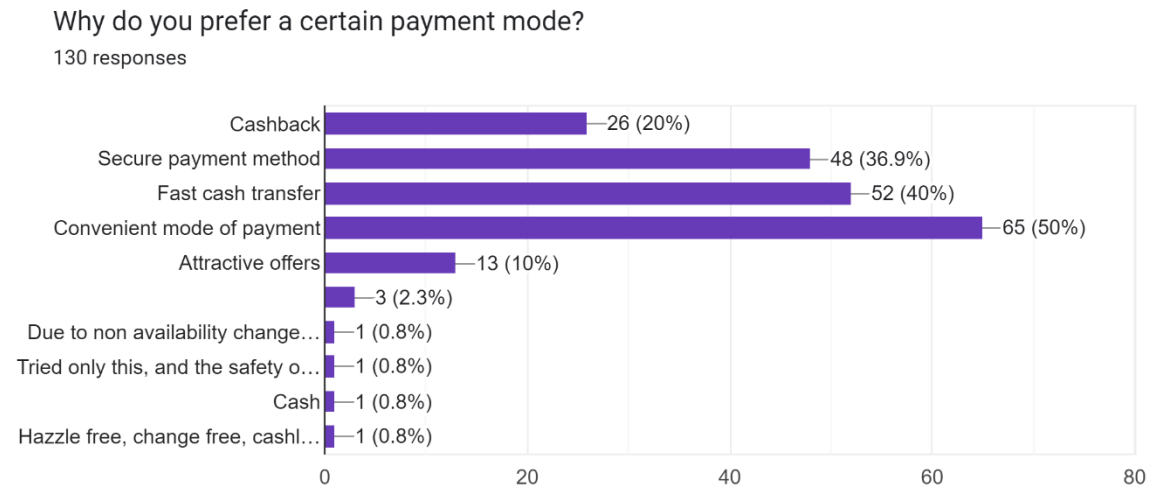


Figure 4.1.8

Convenience was cited by about 50% of consumers as the primary factor in their decision to use UPI and other digital payment systems.

40% of respondents think using these payment applications makes transactions much better and faster.

20% of people choose it for the enticing discounts and cashbacks, while 36.9% of people think that the transactions are secure.

V. Consensus about convenience

UPI provides a convenient way of payment

130 responses

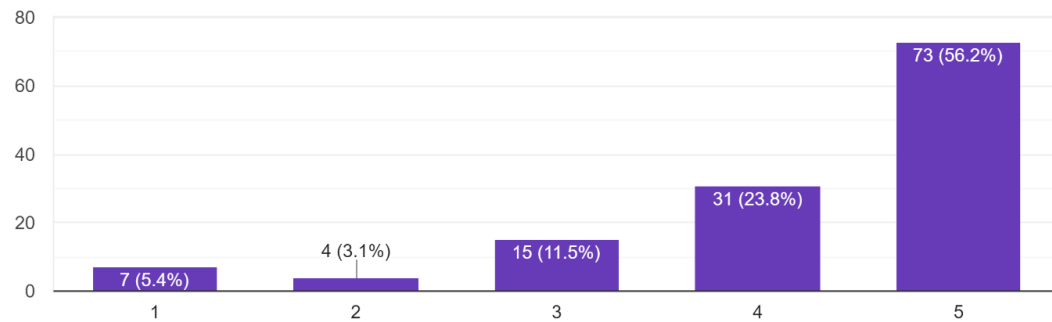


Figure 4.1.9

56.2% of consumers said that they prefer using UPI as a payment method to other options. Only 5.4% of people are doubtful of the convenience element. It can be a result of baby boomers' difficulties with technology.

VI. Security and UPI

In your opinion, how secure is UPI mode of payment

130 responses

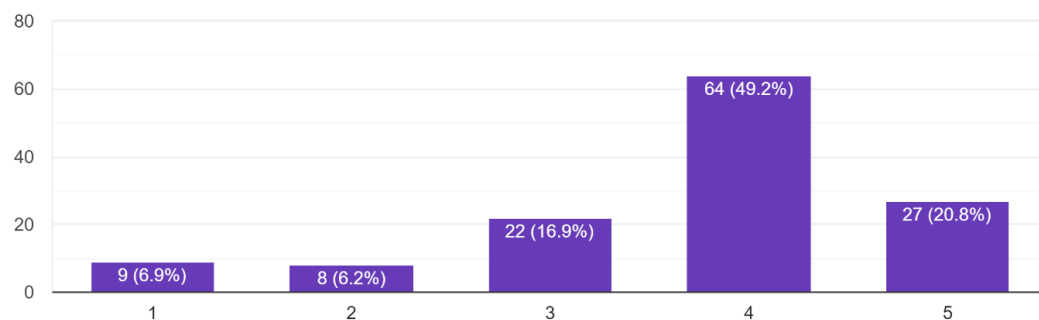


Figure 4.1.10

According to 91 respondents, the UPI technique is secure. Only 16.9% of individuals are certain that UPI is secure.

Concerns concerning the security of utilising UPI as a payment mechanism were expressed by only 17 respondents.

VII. Flexibility and Transactions tracking

Do you feel that UPI provides flexibility and easy tracking of transactions
130 responses

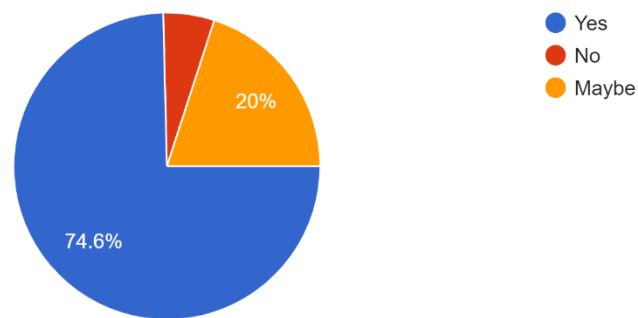


Figure 4.1.11

About 74.6% of respondents think that using UPI to conduct transactions is flexible. 20% of people are unsure. Only a small percentage of responders think UPI lacks flexibility.

VIII. UPI vs Cash transactions

Will you prefer UPI rather than using cash in day to day transactions?

130 responses

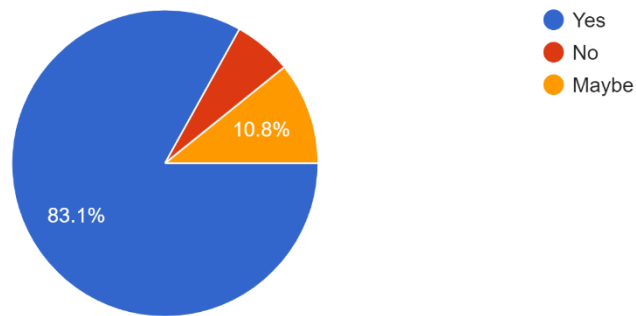


Figure 4.1.12

Majority of the respondents (approx. 83.1%) prefer UPI over day-to-day cash transactions.

IX. Thought for the future

Do you agree that UPI is the future of the cashless economy?

130 responses

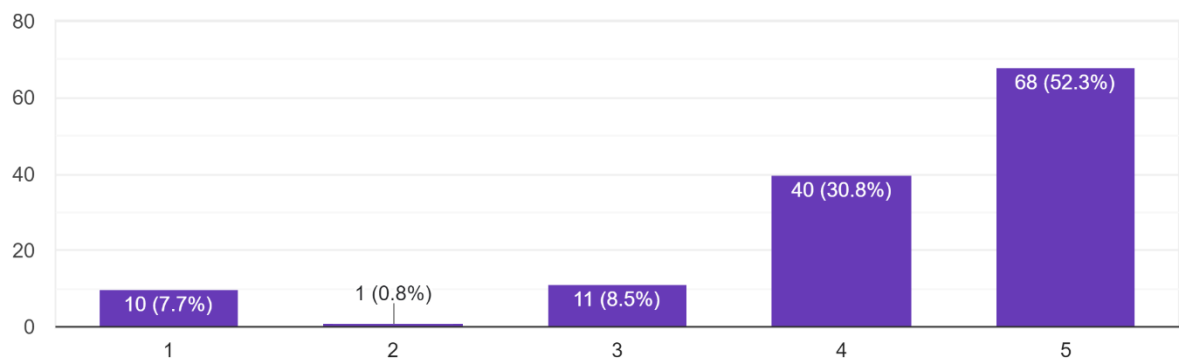


Figure 4.1.3

About 108 respondents believe that the future of cashless economy is UPI. Only 11 respondents are sceptical about the future of UPI.

2. Hypothesis Testing:

(A) Analysis of whether the gender has a significant impact on adoption of UPI service.

H0 (Null Hypothesis): There is no significant difference in the intention for adoption of UPI among the male and female population.

H1 (Alternate Hypothesis): There is a significant difference in the intention for adoption of UPI among the male and female population.

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Intention_to_use_UPI	Male	86	.20	.401	.043
	Female	45	.11	.318	.047

Figure 4.2.1

Source: SPSS output

From the figure above, it can be inferred that out of the total respondents, 86 respondents are male and 45 are female. Their respective mean, standard deviation and standard error means are depicted in the figure.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Intention_to_use_UPI	Equal variances assumed	7.11	.009	1.26	129	.211	.087	.069	-.050	.223
	Equal variances not assumed			1.35	108.7	.180	.087	.064	-.041	.214

Figure 4.2.2

Source: SPSS output

From the figure above, the p-value of Levene's test is 0.009 which is less than the standard p value of 0.05. Hence, the difference of mean is not equal to zero and the "equal variances not assumed" row will be referred. Here, the p value is $0.180 > 0.05$, **hence null hypothesis is accepted.**

(B) Analysis of whether the occupation of people has a significant impact on adoption of UPI service.

H0 (Null Hypothesis): There is no significant difference in adoption of UPI among Business sector and service sector consumers.

H2(Alternate Hypothesis): There is a significant difference in adoption of UPI among business sector and service sector consumers.

Group Statistics					
	Occupation	N	Mean	Std. Deviation	Std. Error Mean
Intention_to_use_UPI	Service sector consumers	126	.16	.367	.033
	Business	5	.40	.548	.245

Figure 4.2.3

Source: SPSS output

From the figure above, it can be inferred that out of the total respondents, 126 people are from service sector which includes government and corporate employees. Only 5 people are doing their own businesses. Their respective mean, standard deviation and standard error means are depicted in the figure.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Intention_to_use_UPI	Equal variances assumed	3.57	.041	-1.42	129	.001	-.241	.170	-.579	.096
	Equal variances not assumed			-.976	4.14	.001	-.241	.247	-.918	.436

Figure 4.2.4

Source: SPSS output

From the figure above, the p-value of Levene's test is 0.041 which is less than 0.05. Hence, the difference of mean is not equal to zero and the "equal variances not assumed" row will be referred. Here, the p value is $0.001 < 0.05$, **hence null hypothesis is rejected.**

(C) Analysis of whether the age of people has a significant impact on adoption of UPI service.

H0 (Null Hypothesis): There is no significant difference in adoption of UPI between young and old consumers.

H3(Alternate Hypothesis): There is a significant difference in adoption of UPI between young and old consumers.

Group Statistics					
	Age_Group	N	Mean	Std. Deviation	Std. Error Mean
Intention_to_use_UPI	Young	74	.16	.371	.043
	Old	57	.18	.384	.051

Figure 4.2.3

Source: SPSS output

From the figure above, it can be inferred that out of the total respondents, 74 respondents are young (up to age 39) and 57 are old. Their respective mean, standard deviation and standard error means are depicted in the figure.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Significance Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Intention_to_use_UPI	Equal variances assumed	.159	.690	-.200	129	.842	-.013	.066	-.145	.118
	Equal variances not assumed			-.199	118.6	.842	-.013	.067	-.145	.119

Figure 4.2.6

Source: SPSS output

From the figure above, the p-value of Levene's test is 0.690 which is greater than the standard p value of 0.05. Hence, the difference of mean is equal to zero and the "equal variances assumed" row will be referred. Here, the p value is $0.842 > 0.05$, **hence null hypothesis is accepted.**

Chapter 5

FINDINGS AND CONCLUSION

India is in the forefront of innovation in digital payments thanks to e-commerce, consumer behavior, government policies, and the pandemic.

By 2025, the digital payments market in India is expected to increase by more than 300%. Given India's formerly huge unbanked population, the growth of digital payments is remarkable. To create the fastest, most seamless and safe digital payment experience for the consumers, India's digital payments industry relies on banks, fintech companies, and the government.

The UPI industry has had tremendous growth since its inception. At the time of its inception, only 93000 transactions were completed which reached 800 million in March 2019. In December 2022, UPI transactions went to 782 crores (Rs. 12.8 lakhs) and in January 2023, it has crossed 800 crore mark.

5.1 Findings

Adoption of UPI (Survey Analysis):

Out of 130 respondents:

- 92% respondents believe that “UPI is a convenient way of payment”.
- 74.8% respondents have a positive view that “UPI provides flexibility and easy tracking of transactions”.
- 71% respondents believe that “UPI Payment mode is highly secure”. About 17% respondents believe “UPI is moderately secure” and 12% respondents believe “UPI is least secured” payment method.
- 79.2% respondents are agreeing to the fact that “Demonetization affected mobile banking in India”.

- 77% respondents have incorporated digital payment methods in their lives.
- People have adopted digital mode of payments as it is convenient, offers cashbacks and discounts, is fast and provides security.
- 84% respondents believe that “UPI is the future of cashless economy”.

Hypothesis Testing (Result):

Hypothesis	Statements	Decision
H01	There is no significant difference in the intention for adoption of UPI among the male and female population.	Accepted
H02	There is no significant difference in adoption of UPI among Business sector and service sector consumers.	Rejected
H03	There is no significant difference in adoption of UPI between young and old consumers.	Accepted

Figure 5.1

Source: Self Analysis

5.2 Conclusion:

UPI has become the go to payment method of almost all households in India. Compared to other digital payment methods, UPI has become consumers' favourite owing to the ease and convenience. The UPI payment mode has facilitated mobile-based money transfers between any two bank accounts across India. It also helps consumers to make payment directly from their bank accounts to local kirana walas, malls, petrol pumps, restaurants, hospitals etc. in both online and offline mode. Earlier, consumers had to punch in their account details, like account number, IFSC etc every time they made an online transaction through net banking or credit/debit cards which was quite time consuming. And the development of UPI has brought about a revolution in the digital payment system. This is the reason why people from service class have eagerly adopted UPI. Also, from the study, a substantial difference between UPI usage between business and service class people is observed.

UPI has been accepted by men and women equally and no difference has been observed in the adoption rate among the two genders.

Even With rapid digitization, it has been observed that that the respondents of all ages find UPI to be an "easy to use" tool and have embraced it gladly.

To promote cashless economy, smart phones use, banking awareness, installation of biometric sensors etc are all required. The UPI mode is gladly accepted by the Indian population and have a positive outlook on it.

In conclusion, a sizable portion of consumers continue to believe that the UPI payment method, or digital payments in general, are unsafe. This concern is valid given that digital theft is on the rise these days and that private bank information is vulnerable to hackers. In order to give people, the assurance of security and foster the trust factor, considerable effort in the area of cyber security is also necessary.

Chapter 6

LIMITATIONS AND FURTHER RESEARCH

6.1 Limitations:

- Sample size used is small for the study.
- Since, non-probabilistic sampling technique is used, sampling bias can be observed.
- Technology changes rapidly, hence, people's opinions might change.
- The study looks at the views of consumer towards UPI and not the merchant's perception.

6.2 Directions for future research

Further studies may be conducted to explore the security of digital payment methods and different platforms such as UPI itself.

As of now, the cashless economy in India is at a premature level which will change in near future. This fact will encourage more research on different aspects of cashless economy such as security, cyber sovereignty, etc.

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ANNEXURE

Questionnaire response screenshot:

	Timestamp	Name	Age Group	Education	Gender	Occupation	Income per month	How much UPI do you use	Which app do you prefer for making payments	Why do you prefer UPI	In your opinion, is UPI safe	Do you feel UPI is the future of payments	Will you prefer UPI	Do you agree that UPI is the future of payments	
2	4/10/2023 20:53	Pratibha K	20-29	Graduation	Female	Corporate	5-10 lakhs	4	UPI	Mobikwik	Attractive	4	4 Yes	No	4
3	4/10/2023 20:56	Sanchit K	30-39	Working	Male	Corporate	5-10 lakhs	5	UPI	Phone Pay	Convenient	5	4 Yes	Yes	5
4	4/10/2023 20:56	Pragya T	30-39	Working	Female	Corporate	5-10 lakhs	5	UPI	Google Pay	Convenient	5	4 Yes	Yes	4
5	4/10/2023 21:03	Vishal S	20-29	Post Graduate	Male	Others	Above 10	3	Debit/Credit Card	Paytm	Convenient	3	3 Yes	Yes	4
6	4/10/2023 21:20	Rupa L	20-29	Post Graduate	Female	Others	1-5 lakhs	3	UPI	Paytm	Convenient	5	4 Yes	Yes	4
7	4/10/2023 21:28	Shubham	20-29	Post Graduate	Male	Others	Less than 1	3	UPI	Paytm	Convenient	5	4 Yes	Yes	4
8	4/10/2023 21:35	sakshi	20-29	Post Graduate	Female	Others	Less than 1	5	UPI	Paytm, Google Pay	Cashback, Fast cash	5	4 Yes	Yes	5
9	4/10/2023 21:49	Ritika	20-29	Graduation	Female	Government	Above 10	5	UPI	Google Pay	Fast cash	4	2 Yes	Yes	5
10	4/10/2023 21:55	Pradyot S	20-29	Working	Male	Corporate	Above 10	5	UPI	Paytm	Fast cash	5	4 Yes	Yes	4
11	4/10/2023 21:55	Nishu R	20-29	HSC	Male	Business	1-5 lakhs	3	UPI	Google Pay	Secure payment	4	4 Yes	Maybe	4
12	4/10/2023 22:03	Hritik R	20-29	Post Graduate	Male	Others	Less than 1	3	Debit/Credit Card	Google Pay	Fast cash	3	3 Yes	Yes	3
13	4/10/2023 22:35	Varun R	30-39	Working	Male	Corporate	Above 10	3	UPI	Paytm, Google Pay, Phone Pay	Cashback, Fast cash	5	4 Yes	Yes	5
14	4/10/2023 22:57	Shivangi C	20-29	Post Graduate	Female	Others	Less than 1	5	UPI	Paytm	Convenient	5	5 Yes	Yes	5
15	4/10/2023 23:00	Satish K	40 or above	Post Graduate	Male	Others	5-10 lakhs	3	UPI	BHIM	Secure payment	5	5 Yes	Yes	5
16	4/11/2023 5:44	Raghuvir	40 or above	Graduation	Male	Others	1-5 lakhs	3	Mobile wallet	Phone Pay	Fast cash	3	3 Yes	Yes	3
17	4/11/2023 6:54	Mahesh J	40 or above	Graduation	Male	Government	Above 10	1	UPI	Google Pay	Fast cash	5	4 Maybe	Yes	4
18	4/11/2023 7:11	Ravi K	40 or above	Graduation	Male	Others	Above 10	3	Debit/Credit Card	BHIM	Convenient	5	4 Maybe	Yes	4
19	4/11/2023 7:31	Dharmendra	40 or above	Graduation	Male	Business	5-10 lakhs	5	Net Banking	Phone Pay	Secure payment	5	5 Yes	Yes	5
20	4/11/2023 7:34	Somiya K	20-29	Post Graduate	Female	Others	Above 10	5	UPI	Paytm, Google Pay, Phone Pay	Cashback, Fast cash	5	5 Yes	Yes	5
21	4/11/2023 8:17	Onkar S	40 or above	Graduation	Male	Others	5-10 lakhs	1	Debit/Credit Card	None of payment apps I am using	Fast cash	2	2 Maybe	Maybe	3
22	4/11/2023 8:24	Bhavuk A	30-39	Working	Male	Corporate	Above 10	5	Net Banking	Paytm, Phone Pay	Fast cash	3	1 Maybe	No	3
23	4/11/2023 8:29	Sunita	40 or above	Graduation	Female	Others	5-10 lakhs	2	Debit/Credit Card	Paytm, Phone Pay	Secure payment	5	4 Yes	Yes	4
24	4/11/2023 8:39	Monika	30-39	Post Graduate	Female	Others	1-5 lakhs	2	UPI	Paytm, Phone Pay	Secure payment	2	2 Yes	Maybe	2
25	4/11/2023 8:43	Pankaj S	40 or above	Graduation	Male	Corporate	Above 10	5	UPI	Paytm, Mobikwik, Google Pay	Fast cash	5	5 Yes	Yes	5

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