



A Study on UPI system and Customer Experience

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ABSTRACT

UPI (Unified Payments Interface) is a simple payment tool created by NPCI (National Payment Corporation of India) that is based on IMPS (Immediate Payment Service) system. It helps in combating black money and corruption as the same happens mostly on cash. UPI means lesser cash transactions and a potential reduction in the unbanked population. The main objective of this study is to understand the adoption of UPI system in India. Primary data through the mode of questionnaire was obtained from sixty-six respondents of different age groups using convenience sampling method. The study concluded UPI is one of the most convenient modes of payment in existence today. One of the easiest ways to make payments these days is with UPI. With UPI, smartphones will soon be the main payment device, completely changing the landscape of digital payments. There is plenty of room for growth for UPI in the nation as smart phone adoption increases. The vision behind the nationwide implementation of UPI is finally moving towards the reaping stage as UPI is rapidly eliminating the cash economy in our nation and bringing about a far more transparent system.

1. Introduction

The National Payment Corporation of India (NPCI) was established in April 2009 with the goal of integrating all of the payment mechanisms that are now in use in the nation and standardising them for

retail purchases. The aim of its formation was also to deal with black money and corruption that's happen mostly on cash. UPI is a simple payment tool created by NPCI that is based on IMPS system. NPCI developed UPI, a straightforward payment method built on the IMPS technology. UPI functions like an email ID for money and can be used on smartphones.

The UPI app can handle various expenses like paying utility bills, over-the-counter payments, barcode (scan and pay) based payments, donations, school fees, and other such unique and innovative use cases instead of paying cash. It allows a consumer to have multiple virtual addresses for multiple accounts in various banks. Immediate money transfer can be through mobile device round the clock 24*7 and 365 days. It enables bill sharing with friends, avoidance of cash on delivery hassle, running to an ATM to fetch cash, utility bill payments, barcode (Scan and Pay) based payments, donations, collections and disbursements scalable. One can also raise a complaint from mobile application directly. UPI implies lesser cash transactions and potentially leads to a reduction in the unbanked population. The expected growth by the year 2024-25 is as much as 59%.

1. Literature Review

Pardhasaradhi M. (2015) found that China was listed among the top 16 non-cash marketplaces in the world, while India was not. There has been a rise in the use of debit cards at ATMs relative to credit cards. Bappaditya M. Y. (2016) revealed that there is a very weak association between cashless payments and income as well as between education level. Gaonkar B.S. (2018) highlighted the advantages of cashless transactions: improved ease of tracking, transparency, efficiency, convenience, etc. Kumar et al. (2018) stated that electronic transactions have increased now a days as the Indian population has accepted popular instruments like credit and debit cards, net banking, and e-wallets. Dinesh, T. M., et. al, (2018) revealed that demonetization had a significant impact on digital payments.

According to, Lonare, et al. (2018), metropolitan areas have a higher percentage of users than tier-2 cities. The adoption of electronic wallets was found to be significantly influenced only by "simplicity" or ease of usage. From the vendor's perspective, e-wallet adoption is far lower than anticipated.

Chattopadhyay et al., (2018) found that convenience between cash and cashless means of transaction was not observed to differ significantly. Additionally, shopkeepers think that dealing with cash is simpler for them than with cashless systems. Sumathy M and Vipin KP (2017) found there is not a significant disparity in the awareness of digital payment systems between males and females.

Furthermore, there was no correlation between the respondents' degree of education and awareness of digital payment systems. Chen and Nath (2008) indicated that a stronger inclination to use m-Payment would result from perceptions of compatibility, speed, and convenience of transactions. Compatibility has the strongest association with intention to adopt m-payment.

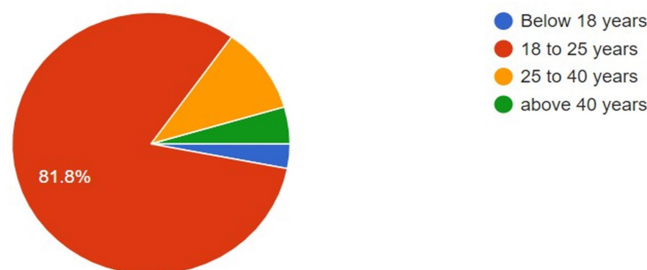
2. Research Methodology

A thorough investigation or inquiry, particularly via the pursuit of new facts, is called research. The main objective of this research is to understand the adoption of UPI system in India. Primary data through the mode of questionnaire (Google Forms) was obtained from sixty-six respondents of different age groups using convenience sampling method. Convenience sampling help to gather market research data from a convenient sample of respondents. It is the most often used sample technique since it is very quick, simple, and affordable. Respondents can be easily contacted to participate in the sample. Ms Excel was used to conduct analysis of data. Charts, graphs, etc have been use to present the data analysis.

3. Data Analysis and Interpretation

The following section will discuss, analyse and interpret the data collected during the course of the project.

Q1. What is the age group of the respondents?



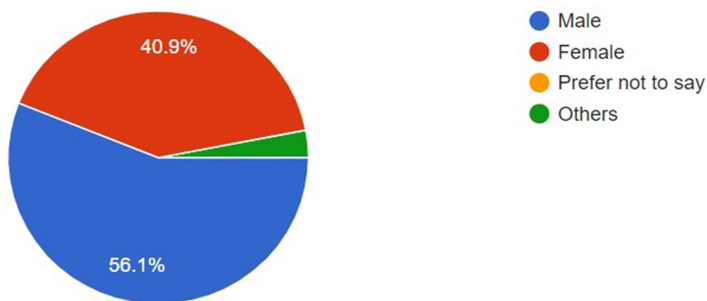
Of the total 66 responses –

- *3% (2 of 66) were below 18 years of age*

- **81.8% (54 of 66) were between 18-25 years of age**
- **10.6% (7 of 66) were between 25-40 years of age**
- **4.5% (3 of 66) were above 40 years of age**

Thus, we can say that majority of the users of UPI belong to the 18-25 age group. Only 3% of the users were minors (below 18 years of age). Also, users above the age of 40 formed a small section of the respondents. Thus, we can say the young population, who are more aware of the technology and are comfortable with technology, tend to use UPI over the middle-aged population.

Q2. What is the gender group of the respondents?

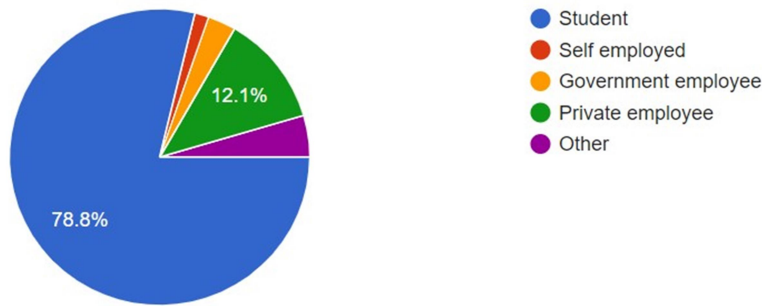


Out of the total 66 respondents-

- **56.1% (37 of 66) were males**
- **40.9% (27 of 66) were females**
- **3% (2 of 66) were others**

Thus, we can say that UPI is easy to use as the user base includes a diverse group of people from all genders.

Q3. What is the occupation of the respondents?

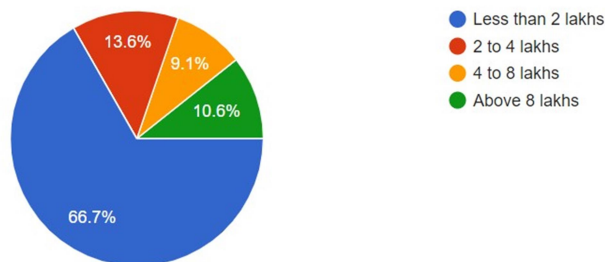


Out of the total 66 respondents-

- **78.8% (52 of 66) are students**
- **1.5% (1 of 66) are self-employed**
- **3% (2 of 66) are government employees**
- **12.1% (8 of 66) were private sector employees**
- **4.5% (3 of 66) were others**

We can conclude that major user group of UPI is students, followed by private sector employees. It can be seen that self-employed people are the most hesitant group in terms of using UPI.

Q4. What is the annual income of the respondents?



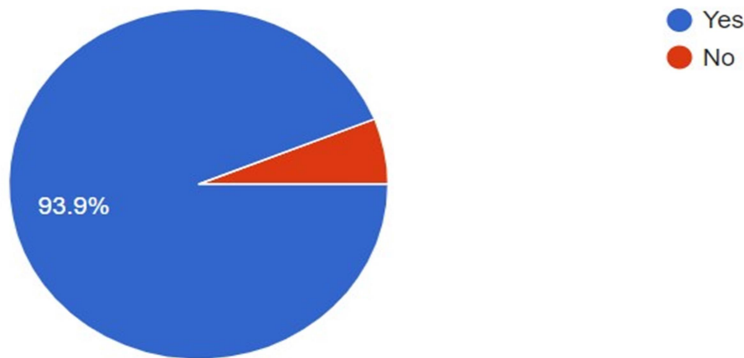
Of the total 66 respondents:

- **66.7% (44 of 66) earned less than 2 lakhs annually**
- **13.6% (9 of 66) earned between 2-4 lakh annually**

- **9.1% (6 of 66) earned between 4-8 lakh annually**
- **10.6% (7 of 66) earned above 8 lakhs annually**

Majority of the respondents earned less than 2 lakhs, as the majority of the respondents are students. Also, we can see, as the income increases, UPI usage decreases among the respondents.

Q5. Do you use digital payment methods?

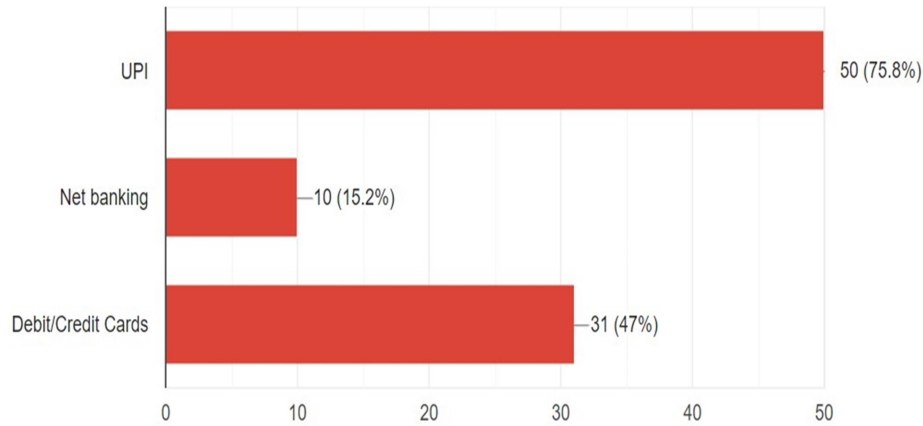


Of the total 66 respondents:

- **93.9% (62 of 66) use digital payment methods**
- **6.1% (4 of 66) do not use any digital payment methods**

With the increasing use of internet and increasing use of smartphones, we can see a major chunk of the population using digital payments over the traditional cash payments, but still a small fraction of the population is hesitant towards the shift.

Q6. Which mode of digital payment do you prefer?



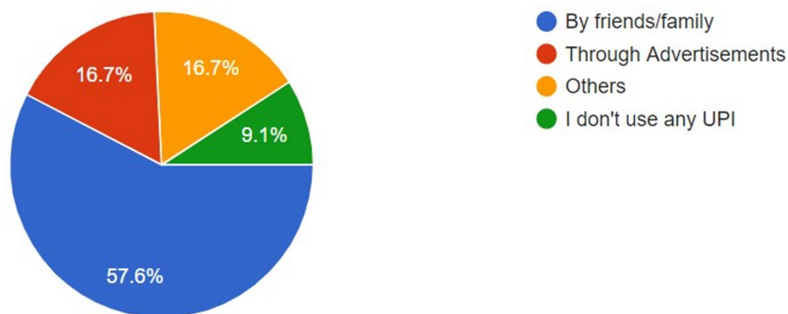
Of the total 66 respondents:

- ***75.8% (50) respondents use UPI***
- ***15.2% (10) respondents use net banking***
- ***47% (31) respondents use debit/credit cards***

Due to ease of use, UPI is the most preferred digital payment method, followed by debit/credit cards, while net banking is the least preferred method among the respondents. The above question was a check-box type question; hence the respondents could record more than one response.

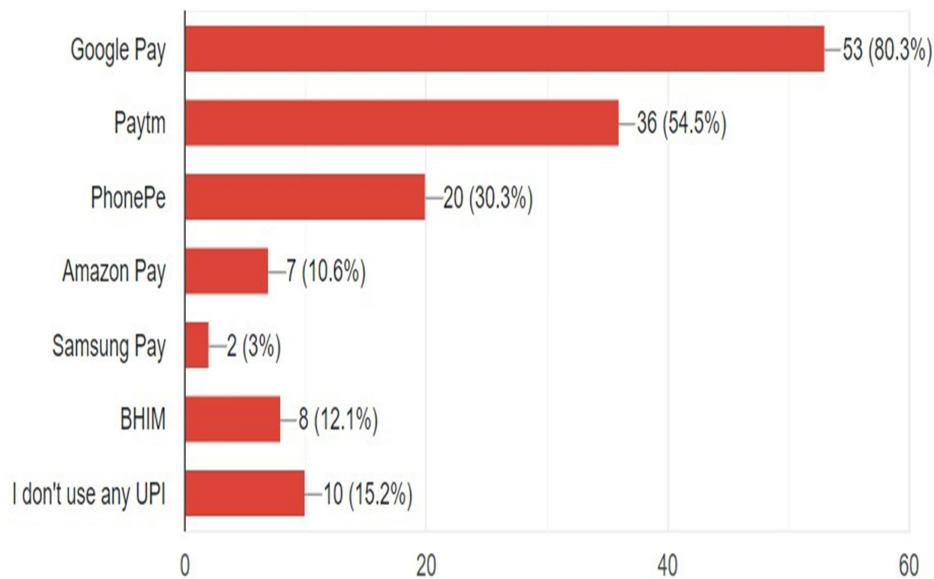
We can see that 25 of 66 respondents i.e., 37.8% of the respondents used more than one digital payment method. We are sure that apart from UPI, people also use other digital payments methods. Some people prefer to use more than one digital payment method to make their life easier.

Q7. If you use UPI, how were you introduced to UPI services?



Of the 66 respondents: 57.6% (38 of 66) were introduced to UPI by their friends or family. 6.7% (11 of 66) were introduced to it through advertisements. 16.7% (11 of 66) were introduced to it through other means. Also, 9.15% (6 of 66) do not use UPI. So, majority of the respondents were introduced to UPI either by their friends or family. If friends or family use certain products or technologies, it inculcates a sense of trust towards that product or technology, hence, one is more likely to use the same. Of the remaining, 16.7 % were introduced to UPI through advertisements or other means.

Q8. Which UPI apps do you use?



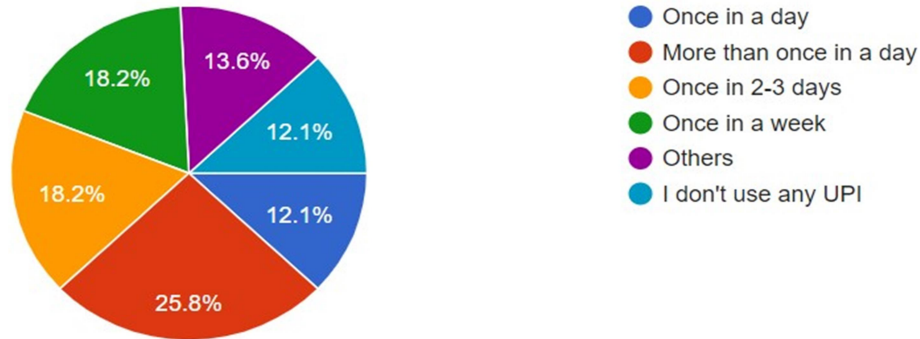
Of the 66 respondents:

- ***80.3% (50) respondents use GooglePay***
- ***54.5% (36) respondents use PayTm***
- ***30.3% (20) respondents use PhonePe***
- ***10.6% (7) respondents use AmazonPay***
- ***3% (2) respondents use SamsungPay***
- ***12.1% (8) respondents use BHIM***
- ***15.2% (10) respondents do not use any UPI***

We can see that GooglePay is the most popular UPI platform, followed by PayTm, PhonePe, BHIM, AmazonPay and SamsungPay. PayTm, PhonePe and BHIM are based out of India, while others are not. The above question was a check-box type question; hence the respondents could record more than one

response. Of the total, 56 of 66 use one or more UPI apps. Since we have 126 responses from 56 respondents, we can conclude at least 14 use more than 2 UPI apps.

Q9. How frequently do you make payments through UPI?

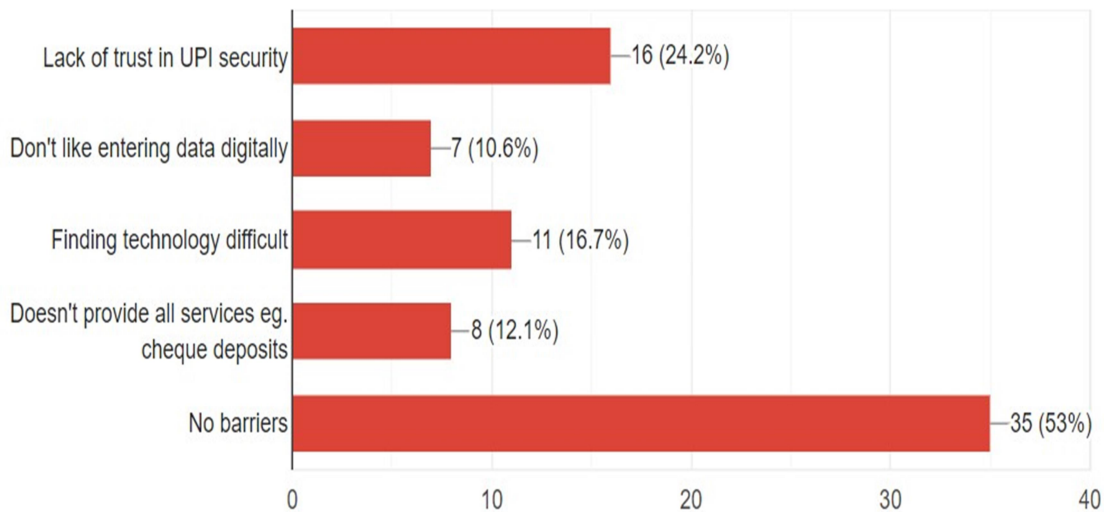


Of the 66 respondents:

- *12.1% (8 of 66) respondents use UPI once in a day*
- *25.8% (17 of 66) respondents use UPI more than once in a day*
- *18.2% (12 of 66) respondents use UPI once in 2-3 days*
- *18.2% (12 of 66) respondents use UPI once in a week*
- *13.6% (9 of 66) respondents use UPI less frequently*
- *12.1% (8 of 66) respondents do not use any UPI*

Majority of the respondents (25.8%) use UPI more than once a day, while many use UPI at least once a day once in 2-3 days. Thus, we can see that UPI is becoming the most popular form of payment in our day-to-day life. But the complete shift may take some more time as many (13.6%) respondents use UPI less frequently and 12.1% do not use UPI at all.

Q.10 What are the major barriers in using UPI services?

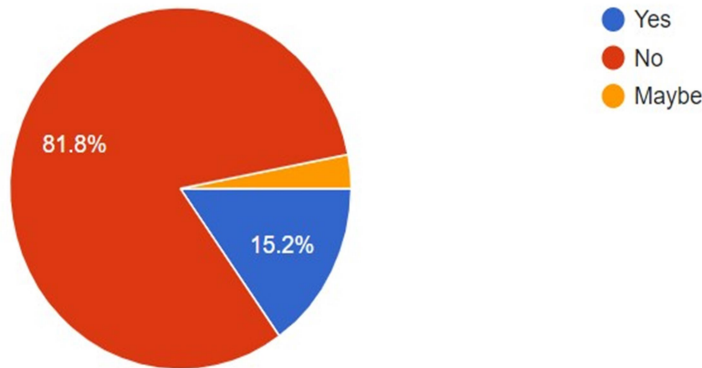


Of 66 respondents:

- ***24.2% (16) respondents face lack of trust in UPI security.***
- ***10.6% (7) respondents don't like entering their data digitally***
- ***16.7% (11) respondents find technology difficult***
- ***12.1% (8) respondents think UPI doesn't provide all services***
- ***53% (35) respondents think that there are no barriers***

Majority of the respondents (53%) do not face any issue while using UPI. Of the issues faced, lack of trust in UPI security is the most common issue, which is faced by 24.2% of the respondents. Also, some users want UPI to increase the number of services provided for their ease. The above question was a check-box type question; hence the respondents could record more than one response. We have 77 responses from 66 respondents. Thus, we can say that at least 11 respondents face more than one issue.

Q11. Have you ever been a victim of fraud?

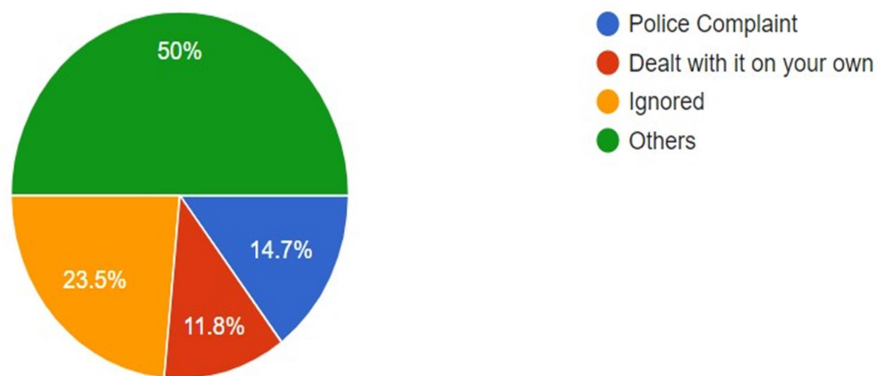


Of the 66 respondents:

- **81.8% (54 of 66) have never been a victim of fraud**
- **15.2% (10 of 66) have been a victim of fraud**
- **3% (2 of 66) are not sure whether they've been a victim of fraud or not**

From the above results, we can see that UPI is a safe platform to use, as 81.8% of the respondents have never been a victim of fraud. While 15.2% of the respondents have been a victim of fraud, the reason may be unknown. Also, 3% of the respondents were unsure, whether it was a fraud or some other issue.

Q12. If yes, how did you deal with the fraud?



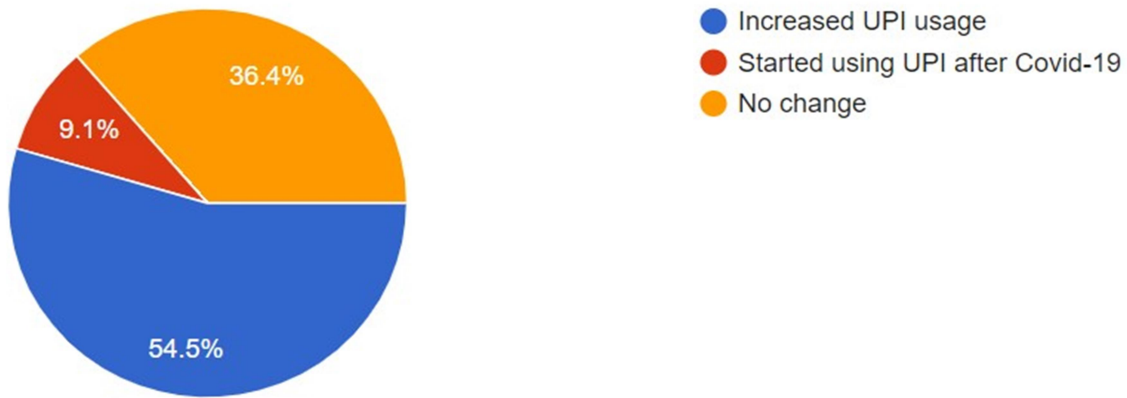
Of the total respondents:



- **14.7% (5) respondents filed a police complaint**
- **11.8% (4) respondents dealt with the fraud on their own**
- **23.5% (8) respondents ignored their issue**
- **50% (17) respondents used some other method to deal with the fraud**

We can see that majority of the respondents either ignore the issue or dealt with it on their own. While other respondents filed a police complaint.

Q13. How has the Covid-19 situation affected your usage of UPI?



Of the 66 respondents:

- **54.5% (36) respondents increased their UPI usage**
- **9.1% (6) respondents started using UPI after covid-19**
- **36.4% (24) respondents reported that there was no change in the UPI usage**

Due to Covid-19, people became more concerned about hygiene and their safety. UPI being a touchless payment option, many people either started using UPI. Thus, Covid-19 pandemic can be credited with the boom in the UPI usage.

4. Findings of the Study

- Majority of the users of UPI belong to the 18-25 age group.



- The young population, who are more aware of the technology and are comfortable with technology, tend to use UPI more as compared to the middle-aged population.
- Major user group of UPI is students, followed by private sector employees. It can be seen that self-employed people are the most hesitant group in terms of using UPI.
- As the income increases, UPI usage decreases among the respondents.
- With the increasing use of internet and increasing use of smartphones, we can see a major chunk of the population using digital payments over the traditional cash payments, but still a small fraction of the population is hesitant towards the shift.
- UPI is the most preferred digital payment method, followed by debit/credit cards, while net banking is the least preferred method among the respondents.
- Some people prefer to use more than one digital payment method to make their life easier.
- Majority of the respondents were introduced to UPI either by their friends or family. If friends or family use certain products or technologies, it inculcates a sense of trust towards that product or technology, hence, one is more likely to use the same
- GooglePay is the most popular UPI platform, followed by PayTm, PhonePe, BHIM, AmazonPay and SamsungPay.
- UPI is becoming the most popular form of payment in our day-to-day life.
- Majority of the respondents (25.8%) use UPI more than once a day, while many use UPI at least once a day once in 2-3 days.
- UPI is a safe platform to use, as 81.8% of the respondents have never been a victim of fraud.
- Some users want UPI to increase the number of services provided for their ease.
- Lack of trust in UPI security is the most common issue.
- Majority of the respondents either ignore the issue or dealt with it on their own.
- After Covid-19, people have become more concerned about hygiene and their safety. UPI being a touchless payment option, many people started using UPI.

5. Limitations of the Study

Although sincere attempts have been made to remove discrepancies as much as feasible, the study's limitations would have prevailed. Some of them are:

- The research was over a short duration.
- The sample size was limited.
- Some respondents might not be motivated to provide accurate information, so the information they provided may be biased.

6. Conclusion

UPI, the innovation in the current payments system in India is one of the most advanced, innovative and financially inclusive platforms in the world. UPI has tackled the five Cs: Coverage, Convenience, Confidence, Cost, and Convergence, which formed the foundation of India's payment vision. However, confidence in the existing digital payments system is not absolute due to security concerns. But in UPI, strict sender authenticity and receiver identification requirements have to be met.

One of the easiest ways to make payments these days is with UPI. UPI was designed with the goal of simplifying the payment process. It has eliminated all of the inefficiencies of the current infrastructure, making payments as easy as making phone calls.

Also, in comparison to the existing payment methods, due to its low processing fees and plenty of value-added services that facilitate the integration of payments with other financial services, UPI is incredibly economical.

With the introduction of UPI, smartphones will soon be the dominant payment device, completely changing the landscape of digital payments. There is enormous room for UPI to grow across the nation as smart phone adoption continues to rise. With UPI rapidly terminating the cash economy in our nation and ushering in a much more transparent system, the objective behind the countrywide implementation of UPI is finally moving towards the reaping stage.

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