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## UPI FRAUDS A STUDY ON UPI USAGE, AWARENESS AND IMPACT IN INDIA

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### ABSTRACT

UPI, Unified payments Interface is a way of life in Digital India era beginning as a Green Initiative by RBI in 2016. Since its introduction the users are growing increasingly, and the number of frauds is also rising greatly. The big claims regarding absolute safety of UPI transactions by the third-party payment how much effective is the two-factor authentication feature of UPI in maintaining safety of the transactions is the concern of our study. Threat of fraud is definitely one of the factors affecting UPI usage and so our study tries to find out the relationship between adoption of UPI and the instances of fraud and threat of fraud amongst users. For this we have collected data from real users of UPI who are victims or successful avoiders of UPI fraud. Also, secondary data from reliable RBI sources is used for substantiating the hypothesis.

**KEYWORDS:** UPI, Cashless, Digital Payment, Green Initiative, Frauds, Safety, Phishing, Unauthorized Access, Victims and Successful Avoiders

### 1. INTRODUCTION (About UPI + UPI Fraud)

#### 1.1 About UPI

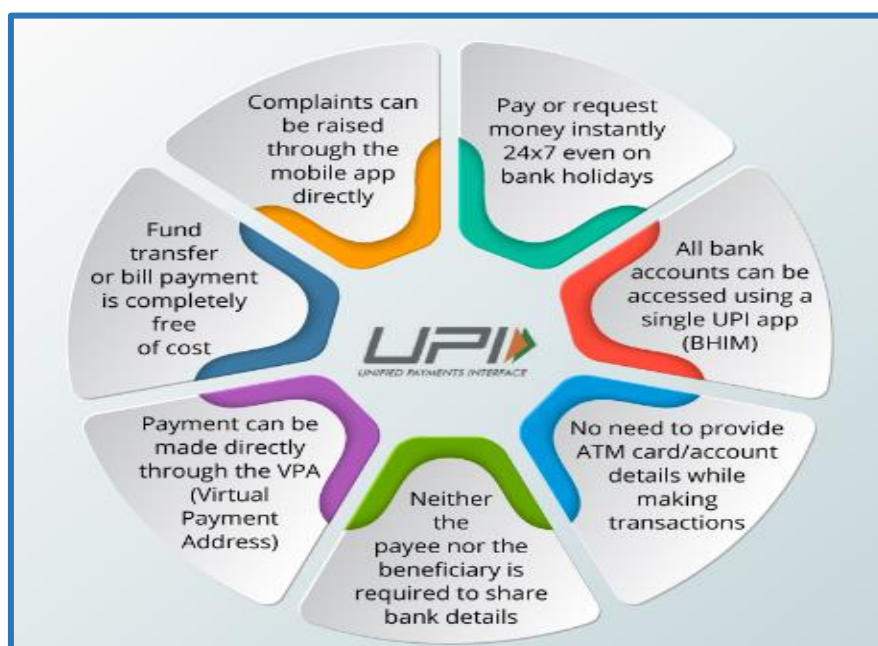
Unified Payments Interface (UPI), the Indian online payment finance genius which can perform real time payment instantly by empowering multiple bank accounts into a single mobile application. It supports interbank-

- peer to peer (P2P) transactions and,
- person to merchant(P2M) transactions.

UPI was a step towards making India Cashless- Green Initiative (Cashless Movement) in 2016. UPI was formally launched in April 2016 by National Payments Corporation (NPCI). NPCI was formed in 2008 by the Reserve Bank of India (RBI), as the umbrella organization to operate retail payments

and settlement systems. It is registered under section 8 of the Companies Act, 2013 as a nonprofit organization. The formation of UPI began since 2012 with RBI's release of 4 years vision towards the development of safe, efficient, accessible, inclusive, interoperable and authorized payment and settlement system in India.

NPCI has provided the following as uniqueness of UPI –



Source- NPCI

### 1.1.1. UPI Ecosystem and participants

To understand the UPI eco-system, we need to know about the following UPI participants-

1. Payer and Payee Payment Service Provider (PSP)- It is a third-party company that allows the businesses to accept electronic payment by providing a merchant account and payment gateway to businesses for ensuring simple and efficient payment management.
2. Remitter Bank – is the bank in which the payer has a bank account i.e. the account from which debit of UPI transaction is received on real time basis.
3. Beneficiary Bank – is the bank in which the payee has an account i.e. the account from which the credit of UPI transaction is accepted on real time basis.
4. NPCI- is the head organization facilitating UPI transactions
5. Bank Account holders- are the customers (persons) who do the UPI transaction i.e. UPI users.
6. Merchants – are the businesses who seamless fund collection from the UPI users.

### 1.1.3 UPI Transactions

<b>Financial Transactions</b>	<b>Non-Financial Transactions</b>
<ul style="list-style-type: none"> <li>➤ Pay Request- wherein the customer is pushing funds to the beneficiary.</li> <li>➤ Collect Request – where customer is pulling funds from the intended remitter.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Registration of mobile banking</li> <li>➤ One Time Password Generation</li> <li>➤ Setting and changing of PIN</li> <li>➤ Checking transaction status</li> <li>➤ Raising complaints <sup>1</sup></li> </ul>

### 1.2 UPI Fraud

The world is moving online, so are frauds.

#### 1.2.1 Types of UPI Frauds

<b>Impersonating Genuine UPI sellers</b>	Imposters sometimes impersonate the genuine UPI business people and when the person pays in such number (mostly prepaids), no delivery is received.
<b>Phishing</b>	Sometimes unsanctioned payment links, very similar to original UPI of the merchant are sent to the victim wherein there is a direction to an unauthorized debit transaction.
<b>Screen mirroring apps</b>	Some fraudsters impersonate themselves as bank or financial agents and get complete access via screen mirroring apps like any desk and carry out multiple financial transactions on the victim's mobile phone.
<b>OTP and Pin sharing fraud</b>	When the UPI users unknowingly share their OTP and PIN to the fraudsters, they fall a prey and unknowingly provide access to their UPI account
<b>Collect request</b>	Collect request option is sometimes used by the fraudsters by which they insist the victims to approve the fraudulent collect request and by entering PIN receive the money.
<b>Misleading UPI handles</b>	By creating fraud UPI social media pages for customers who have complains against UPI are provided with wrong grievance redressal and often get out personal financial information.

#### 1.2.2 Ways to stay safe against UPI Frauds

Some simple safety measures against UPI frauds are as follows-

- Do not share UPI PIN or OTP
- Do not give unknown access to your mobile or computer device
- Do not click on random links
- Regularly change your UPI pin

<sup>1</sup> . BHIM-UPI-GUIDELINES(NPCI)

- Set a unique UPI pin that is bit easy to be cracked
- Carefully go through any payment request before proceeding to pay option
- Be connected with safe and secure Wi-Fi connections
- Do not open links from open sources
- Beware of fraudulent KYC related process. Remember KYC process does not require sharing of OTP or UPI pin
- Regularly keep a check on your transaction history
- Never accept payment request that requires sharing of UPI pin or OTP
- Contact your bank immediately when you come across a fraud or suspected fraud.
- Remember that to receive payment no PIN is required
- Do not download malware apps
- Never be in a hurry for fund transfer, think and check properly before making any transfer

2

### **1.2.3 Redressal Mechanisms for victims of UPI Frauds**

NPCI under RBI's suggestion has provided for the following redressal mechanisms in case of UPI frauds-

- File complaint with the bank in which the account linked with UPI is there
- Filing complaint with the payment company and NPCI with the details of the entire chain of events.
- Approach Digital Payments Ombudsman with the fraud history
- File an FIR with the local police<sup>3</sup>

## **2. LITERATURE REVIEW**

For the purpose of this report, the researchers have gone thorough articles on SCPUS, Web of Science, Science Direct and Google Scholar. After thorough reading we have come up with the following –

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<sup>2</sup> . Customer Protection – Limiting Liability of Customers in Unauthorized Electronic Banking Transactions (rbi.org.in, 2017)

<sup>3</sup> . Dispute Redressal Mechanism (NPCI,2004-2023)

Sl. No	Details of the literature	Area of Research
1.	<p>Name- Unified Payment Interface—An Advancement in Payment Systems</p> <p>Authors- Rahul Gochhwal, Indian Institute of Management, Calcutta, India.</p> <p>Journal- American Journal of Industrial and Business Management, Vol.7 No.10, October 2017</p> <p>Methodology used- Theoretical with empirical and theoretical literature review</p>	<ul style="list-style-type: none"> <li>➤ Focuses on the details of technology behind UPI and its architecture and security systems.</li> <li>➤ Significant advancement of UPI in terms of cost, ease of use for consumers, settlement times and security</li> <li>➤ API Based structure of UPI and UPI architecture<sup>4</sup></li> </ul>
2.	<p>Name- Unified Payment Interface (UPI)- A way towards cashless economy</p> <p>Authors- Radhika Basavaraj Kakade, Prof. Nupur A. Veshne, KLS Gogte Institute of Technology, Belagavi</p> <p>Journal- International Research Journal of Engineering and Technology (IRJET) Volume: 04 Issue: 11 Nov - 2017</p> <p>Methodology used- Survey Study</p>	<ul style="list-style-type: none"> <li>➤ Studies the impact of UPI in promoting cashless economy and features of UPI</li> <li>➤ UPI will definitely change the way we are transacting now and transforming into digital payments where each</li> <li>➤ Person's smart phone will be primary device for all</li> <li>➤ payments<sup>5</sup></li> </ul>
3.	<p>Name- UPI Based Mobile Banking Applications - Security Analysis and Enhancements</p> <p>Authors- K. Krithiga Lakshmi, Himanshu Gupta and Jayanthi Ranjan</p> <p>Journal- Amity International Conference on Artificial Intelligence (AICAI), 2019</p> <p>Methodology used- Informative Research</p>	<ul style="list-style-type: none"> <li>➤ Unknown and Known Security Risks</li> <li>➤ Simple, Reliable, Centrally Certified and Secured</li> <li>➤ Architecture, Transactions, Features, Security Issues</li> <li>➤ Information security enhancement proposals regarding authentication and authorization</li> <li>➤ Does not include behavioral traits and artificial intelligence for authentication during UPI transaction</li> </ul> <p style="text-align: center;">6</p>

<sup>4</sup> . Rahul Gochhwal, Indian Institute of Management, Calcutta, India. (2017, Unified Payment Interface—An Advancement in Payment Systems)

<sup>5</sup> . Radhika Basavaraj Kakade, Prof. Nupur A. Veshne, KLS Gogte Institute of Technology, Belagavi (2017, Unified Payment Interface (UPI)- A way towards cashless economy)

<sup>6</sup> . K. Krithiga Lakshmi, Himanshu Gupta and Jayanthi Ranjan (2019, UPI Based Mobile Banking Applications - Security Analysis and Enhancements)

<p>4.</p>	<p>Name- Customer's perception of UPI as a Digital mode of payment (with reference to Coimbatore district Authors- Ms. Bugade Laxmi Arvind and Dr. R. Rajesh Journal- International Journal of Creative Research Thoughts (IJCRT), Volume 9,2021 Methodology used- Descriptive research, Survey Study</p>	<ul style="list-style-type: none"> <li>➤ Change in payment system after UPI's introduction in India by knowing</li> <li>➤ Benefits and drawback of UPI services based on customer's perception</li> <li>➤ Mobile Based Era for all transactions</li> <li>➤ Concentrates on private sector banks<sup>7</sup></li> </ul>
<p>5.</p>	<p>Name- Unified Payment Interface (UPI): A Digital Innovation and Its Impact on Financial Inclusion and Economic Development Authors- Shailesh Rastogi, Chetan Panse, Arpita Sharma, Venkata Mrudula Bhimavarapu of Symbiosis Institute of Business Management, Symbiosis International, Pune, India Journal- Universal Journal of Accounting and Finance June 2021 Methodology used- Structured equation modelling is applied for path analysis of the relevant construct.</p>	<ul style="list-style-type: none"> <li>➤ Examines the impact of UPI on financial literacy, inclusion and economic development of the poor in India</li> <li>➤ Financial literacy is significantly impacting financial inclusion which in turn is significantly causing economic development.</li> <li>➤ The significant association of financial literacy to financial inclusion is partially mediated by financial stability and the significant association of financial inclusion to economic development is also partially mediated by trust.<sup>8</sup></li> </ul>

<sup>7</sup> . Ms. Bugade Laxmi Arvind and Dr. R. Rajesh (2021, Customer's perception of UPI as a Digital mode of payment (with reference to Coimbatore district

<sup>8</sup> . Shailesh Rastogi, Chetan Panse, Arpita Sharma, Venkata Mrudula Bhimavarapu of Symbiosis Institute of Business Management, Symbiosis International, Pune, India(2021, Unified Payment Interface (UPI): A Digital Innovation and Its Impact on Financial Inclusion and Economic Development)

<p><b>6.</b></p>	<p>Name- Unified Payment Interface (UPI) platform: Conniving tool for Social Engineering Attack          Authors- Kalyani Deshpande and Leena B Dam          Journal-Pacific Business Review International, Volume 14 issue 3 September 2021          Methodology used- Descriptive research, Survey Study- Random empirical study</p>	<ul style="list-style-type: none"> <li>➤ Growth of UPI and higher frequency of data breach</li> <li>➤ Not due to default in UPI system</li> <li>➤ Tactics to deceive customers by the way of phishing, vishing, or smishing</li> <li>➤ Study is restricted to Techno- cities of India- Pune and Bangalore<sup>9</sup></li> </ul>
<p><b>7.</b></p>	<p>Name-Cashless preferences during the COVID-19 pandemic: investigating user intentions to continue UPI-based payment systems in India          Authors- Kirmani, Mohd Danish,Haque, Md. Asadul,Sadiq, Muhammad Ahsan and Hasan, Faiz          Journal- Journal of Science and Technology Policy Management,2022          Methodology used- Descriptive research with survey study</p>	<ul style="list-style-type: none"> <li>➤ User satisfaction with UPI during covid 19 and continuance intention post-COVID-19 pandemic</li> <li>➤ It is found that users who are satisfied with UPI-based transactions during the COVID-19 pandemic are likely to continue their use of this payment mode in future.</li> <li>➤ Focuses on post-adoption perceived value, perceived usefulness and post-adoption perceived risk<sup>10</sup></li> </ul>
<p><b>8.</b></p>	<p>Name- Exploring the determinants of adoption of Unified Payment Interface (UPI) in India: A study based on diffusion of innovation theory          Authors- Fahad and Mohammad Shahid Department of commerce, Aligarh Muslim University, Aligarh          Journal- Digital Business September 2022          Methodology used- DOI theory components to explore participants usage and recommendation intension on UPI</p>	<ul style="list-style-type: none"> <li>➤ Examination of factors influencing diffusion of UPI in emerging markets</li> <li>➤ Diffusion of innovative theory is used for understanding acceptance and use</li> <li>➤ Intention to use UPI and suggestions from existing users is taken into account</li> <li>➤ Findings confined to relative advantage, complexity, and observability being the main determinants of adoption of UPI<sup>11</sup></li> </ul>

<sup>9</sup> . Kalyani Deshpande and Leena B Dam (2021, Unified Payment Interface (UPI) platform: Conniving tool for Social Engineering Attack)

<sup>10</sup> . Kirmani, Mohd Danish,Haque, Md. Asadul,Sadiq, Muhammad Ahsan and Hasan, Faiz(2022, Cashless preferences during the COVID-19 pandemic: investigating user intentions to continue UPI-based payment systems in India)

<sup>11</sup> . Fahad and Mohammad Shahid Department of commerce, Aligarh Muslim University, Aligarh (2022, Exploring the determinants of adoption of Unified Payment Interface (UPI) in India: A study based on diffusion of innovation theory)



### **3. RESEARCH METHODOLOGY**

#### **3.1 Objectives of the Study**

1. To decipher relationship between adoption of UPI and instances of fraud
2. Analyze the impact of threat perception relating to fraud on adoption of UPI

#### **3.2 Data Used**

We have used both primary data and secondary data in our study to establish our objectives of study. The primary data is collected via survey through circulating questionnaire. And secondary data selected from genuine sources of Indian Bank's (both private and public) performance and RBI publications regarding instance of UPI fraud.

#### **3.3 Sample Selection**

For the purpose of our study, we have selected 70 retail customers of Indian Banks (Both private and public) as our sample from the 120 responses that we have received. Incomplete responses were rejected. To diversify we have collected responses from various age group, gender, educational qualifications, family income, occupation and place of residence.

#### **3.4 Time Period**

We have collected responses from the retail customers for 5 days- ranging from April 20, 2023 to April 25,2023.

#### **3.5 Statistical tools and techniques**

We have used the statistical tools of descriptive statistics- graphs(bar graphs ) and Pie charts, correlation and regression over the data for analysing the objectives.

#### **3.5 Research Question**

##### **Whether there is any relationship between adoption of UPI and incidences of fraud?**

- Is there any relationship between awareness and usage (adoption)of different modes of digital payment?
  - How preference and perception about digital payment system and cash is affecting adoption of UPI?
  - How hurdles in adoption of digital payment system and UPI is affecting adoption of UPI?
  - Is there any connection between Victims of UPI fraud or successful avoiders of UPI fraud and reduction of UPI transaction?
-



### 3.6 Hypothesis

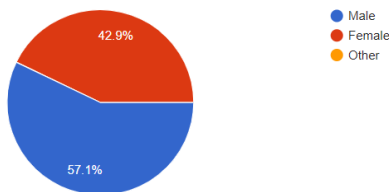
H0: There is no relationship or linkage exists between Adoption of UPI and Instance of Fraud for users

HA: Fraud or threat perception of Fraud is one of the critical factors effecting the adoption of UPI

## 4. FINDINGS AND ANALYSIS

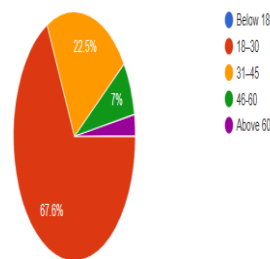
### 4.1 Demographics

#### Gender



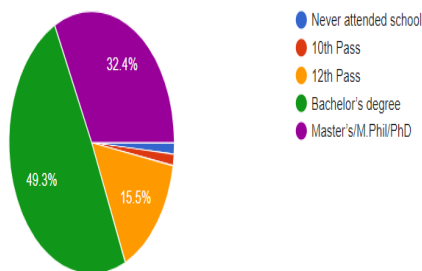
From the gender demographic of the participants in the survey it is found out that out of 70 respondents 42.9% i.e. 30 respondents are female and 57.1% i.e. 40 respondents are male

#### Age



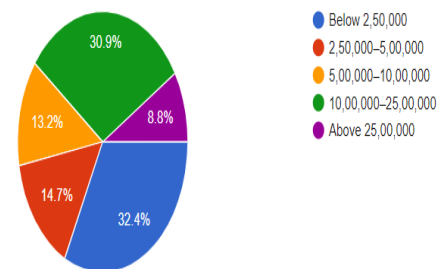
In our study we have got no respondents below the age of 18. The maximum number of respondents fall in the group of 18-30 i.e. the youth population.

#### Education



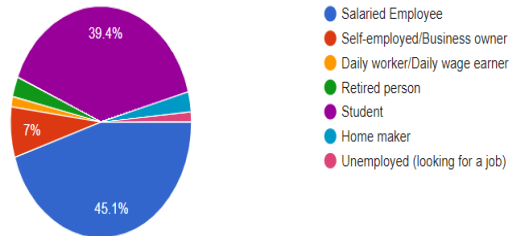
It is seen that the maximum number of respondents who participated in our survey fall in the group of Bachelor's degree in terms of qualification

#### Family Income



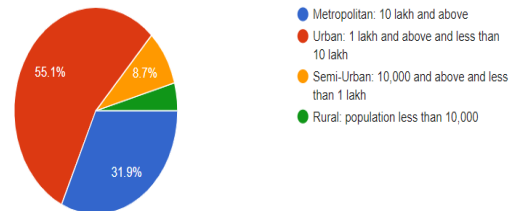
Our sample group of respondents are from varied income groups with no concentration in a particular income group.

**Occupation**



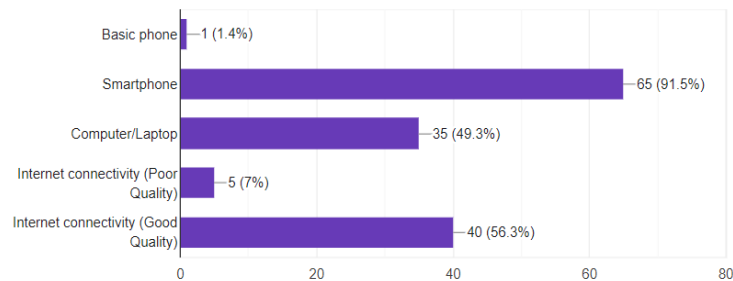
Out of the participants who use UPI as per our survey maximum are salaried employees (32), and the second are students

**Place of residence (for maximum part of last 12 months)**



As per our survey the usage of UPI in metropolitan and urban areas is much more than that of the semi urban and rural areas

**4.1.1 Access and Usage to Technology (Mobile, Computer/laptop and internet)**

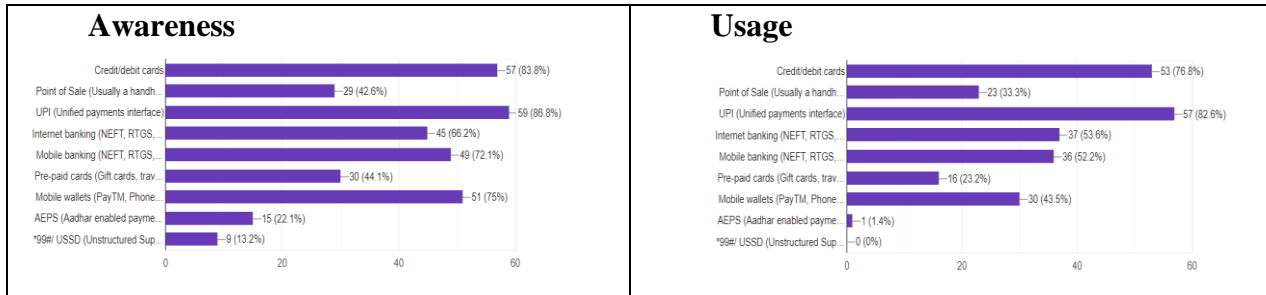


The following Bar graph from our survey shows that –

- Only 1.4% of the respondents i.e. 1 participant of our survey is now backdated and uses basic phone
- The access and usage of smart phone is 65% of the respondents, showing that now maximum number of users are having access to smart phone and India is proudly moving ahead in its Digital Journey.
- Computer / Laptop usage is 49% implying that our survey respondents are well aware of using advanced digital complex tools
- Internet connectivity poor quality is being faced by 7% of the respondents the rest are having better internet connectivity. And even 56%.3 % of the respondents have proudly responded that they have access to Good Quality internet connectivity.

#### 4.2 Awareness and Use of Different modes of digital payment

For this we have two questions specifically designed to show how much our respondents are aware of and how much they use the different modes of digital payments.



#### Correlation between Awareness and Use of Different modes of digital payment

Using CORREL () function of excel we have found out that there is a strong perfect correlation (0.958052191) between the number of respondents who are aware and the number of respondents who use different modes of digital payment in our sample. This indicates that awareness and usage go hand in hand together. With the government and non-governmental organization’s awareness campaigns and advertisements to use more digital payment methods instead of cash the number of users have really increased making a digital movement in India.

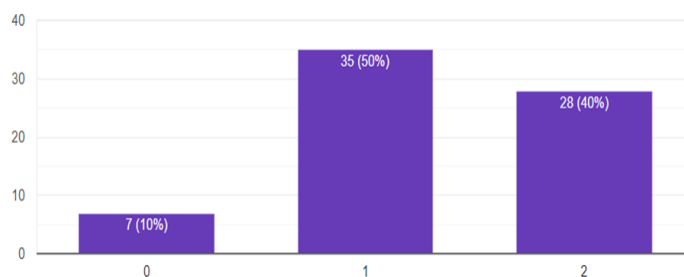
Awareness About	%	Number of respondents who are aware	%	Number of respondents who use
Credit/debit cards	83.3	57	76.8	53
Point of Sale (Usually a handheld device to insert card at point of sale)	42.6	29	33.3	23
UPI (Unified payments interface)	86.8	59	82.6	57
Internet banking (NEFT, RTGS, IMPS)	66.2	45	53.6	37
Mobile banking (NEFT, RTGS, IMPS through mobile app of your service provider)	72.1	49	52.2	36
Pre-paid cards (Gift cards, travel cards, Sodexo, Bank pre-paid cards etc.)	44.1	30	23.2	16
Mobile wallets (PayTM, PhonePe etc.)	75	51	43.5	30
AEPS (Aadhar enabled payments system, payment requires Aadhaar Card, fingerprint etc.)	22.1	15	1.4	1
USSD (Unstructured Supplementary Service data)	13.2	9	0	0
Correlation	0.958052191			

### 4.3 Preference and Perception on Cash and Digital Payment System

We have asked the respondents to rate cash and digital payment system on a scale of 3 (Bad, okay and Good) on the following variables (convenience of use, cost of usage, privacy or anonymity and safety and security). Based on the information collected through survey, the following Bar graphs are made

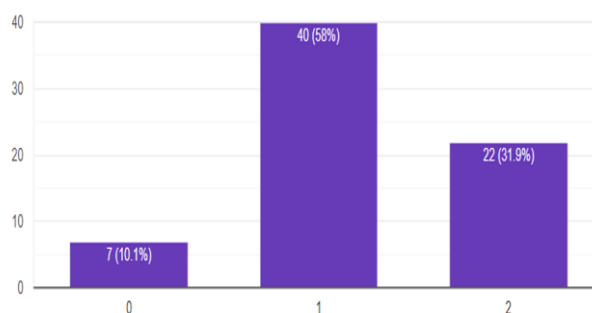
#### Preferences and perception on cash

##### 4.3.1.1 Rating cash on the basis of convenience of use



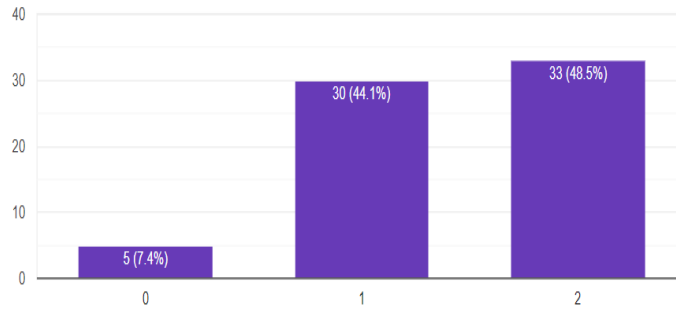
The following bar graph shows that 10% of the respondents find that cash is not convenient to use, 50% (30 respondents) are neutral (find okay) and 40% (28 respondents) find that cash is convenient to use. The majority is of the opinion that now cash is neutral (in terms of convenience) they do not find it either bad or good but are just okay with it.

##### 4.3.1.2 Rating cash on the basis of cost of usage



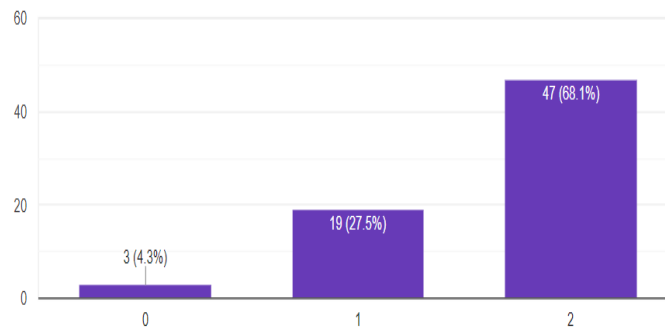
The following bar graph shows that 10% of the respondents of our sample find that cash is costly to use (i.e. they find carrying cash – hard cash is costly), 58% (40 respondents) are neutral (find okay) and 31.9% (22 respondents) opine that cash is not costly to use. The majority is of the opinion that now cash is neutral (in terms of convenience) they do not find it either bad or good but are just okay with it.

##### 4.3.1.3 Rating cash on the basis of anonymity of usage



The following bar graph shows that 5% of the respondents find that cash is bad in terms of anonymity of usage, 44.1% (30 respondents) are neutral (find okay) and 48.5% (33 respondents) opine that using cash is good on terms of maintaining anonymity. Till date majority believes that using cash maintains anonymity.

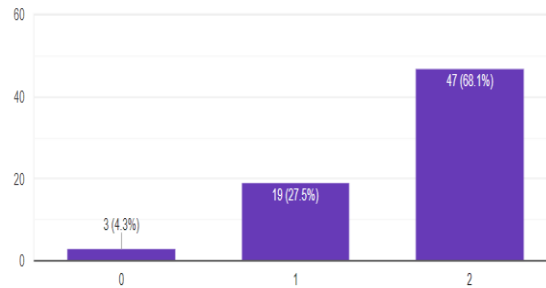
#### 4.1.3.4 Rating cash on the basis of safety and security



Out of the respondents in our sample data 4.3% are of the opinion that cash is not safe and secured way of making payment, 27.5% (19 respondents) are neutral towards cash's safety and security while 68% (47 respondents) i.e. majority of the respondents are in favour of Cash as a safe and secured mode of payment system.

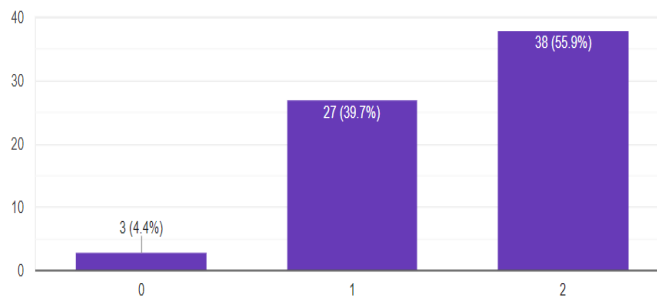
#### 4.3.2 Preference and perception on Digital Payment system

##### 4.3.2.1 Rating Digital Payment System on the basis of convenience of use



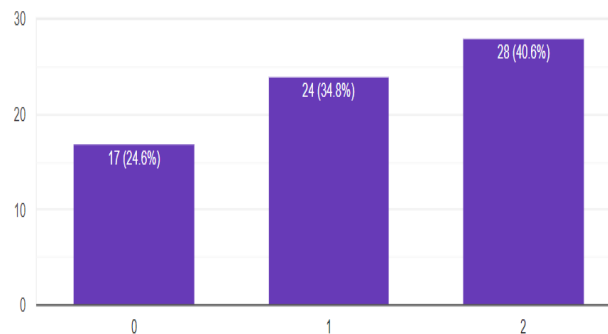
Out of the respondents 4.3% are of the opinion that digital payment system is not convenient to use, 27.5% (19 respondents) are neutral towards convenience of using digital payment system while 68% (47 respondents) i.e. majority of the respondents are in favour that digital payment system is convenient to use.

#### 4.3.2.2 Rating Digital Payment System on the basis of cost of usage



In our sample 4.4% of the respondents are of the opinion that digital payment system is costly to use, 39.7% (27 respondents) are neutral towards cost of digital payment system while 55.9% (38 respondents) i.e. majority of the respondents find that digital payment system is not costly and hence a good mode of payment.

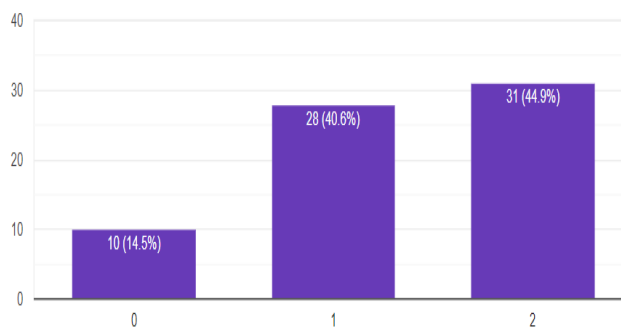
#### 4.3.2.3 Rating Digital Payment System on the basis of privacy or anonymity



Out of the respondents of our sample 24.6% (17 units) are of the opinion that digital payment system

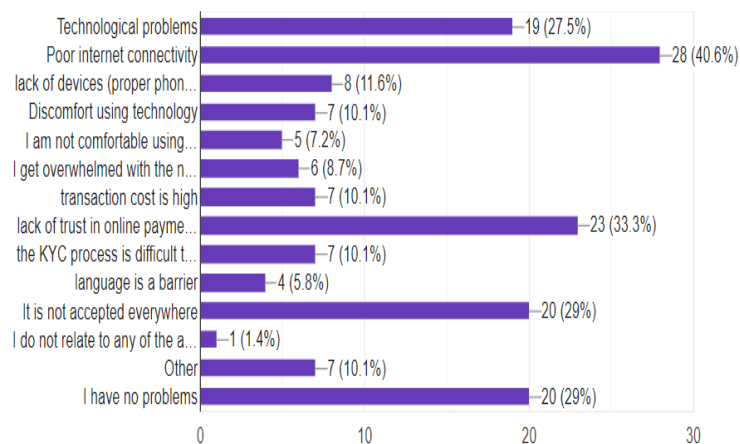
is not suitable in terms of privacy and anonymity maintenance 34.8% (24 respondents) are neutral towards privacy and anonymity of using digital payment system while 40.6%(28respondents) i.e. majority of the respondents are in favour that digital payment system is capable of maintaining privacy and anonymity of the user.

#### 4.3.2.4 Rating Digital Payment System on the basis of safety and security



In our sample, 14.5% are of the opinion that digital payment system is not safe and secured (bad in terms of safety and security) use, 40.6% (28 respondents) are neutral towards digital payment system’s safety and security while 44.9%(31respondents) i.e. majority of the respondents are in favour that digital payment system is safe and secured (Good in terms of safety and security).

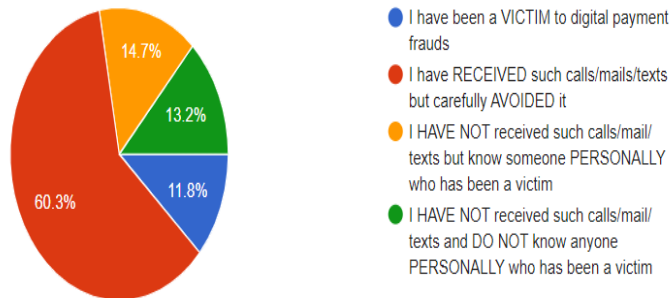
#### 4.4 Hurdles in adoption and Usage of Digital Payments



#### 4.5 Experience of Fraud

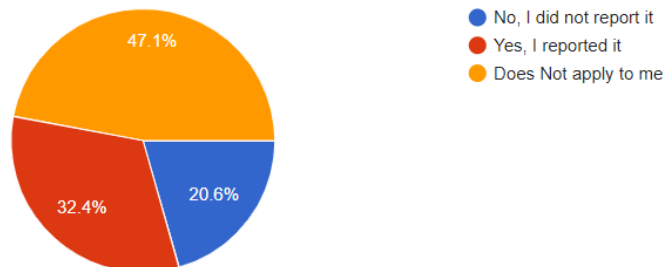
##### 4.5.1 Experience with Digital Payments (UPI) Fraud-on call fraudsters, phishing, etc.





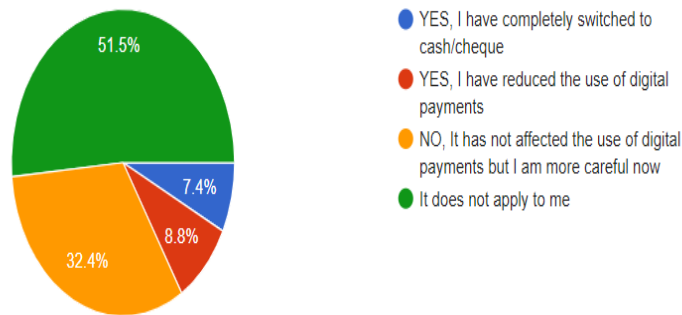
Our survey was a random survey and it is found out that 11.8% of the users of UPI are victims of fraud implying that we need more secured transaction mechanism in UPI to stop such high rate of fraudulent activities. It is worth mentioning that 60.3% of the respondents have received fraud call/s mails/texts but carefully avoided implying that financial literacy and fraud awareness has played a good role in amongst the respondents and hence they were able to avoid fraud while using UPI.

#### 4.5.2 Reporting UPI fraud to concerned authority



We are still lagging behind in terms of reporting UPI fraud as 20.6% of the respondents have declared that they have not reported the fraud when they were a victim. The redressal mechanism is either not easy or is beyond the approach. It may also be possible that these victims are not sufficiently aware of how and where to report the UPI fraud.

#### 4.5.3 Connection between Victims of UPI fraud or successful avoiders of UPI fraud and reduction of UPI transaction



It is seen that even though some of the respondents of our sample were victims of UPI or successful avoiders of UPI fraud, most of them have not completely switched to cash / cheques or reduced digital payments. The % of people who have been victims or successful avoiders of UPI fraud but have not reduced use of digital payments is significantly high implying that UPI –digital payment is now a way of life and people cannot be without it.

From the responses of the samples, it is found that there is moderately low(negative) correlation between victims and successful avoiders of UPI frauds and reduction of usage:  $-0.408141574$ . This substantiates that even the victims and successful avoiders of UPI frauds are also not ready to give up using UPI. And so there is a negative connection between UPI fraud instances and adoption of UPI.

#### 4.6 Secondary Data Analysis

Financial Year	UPI trx. Volume	UPI Value	trx.	No. of Reported Fraud	Amount involved in fraud	% Fraud by volume	% Fraud by value
FY23	8,37,511	1,39,20,41,721		0.95	44,351	0.00011%	0.0015%
FY22	4,59,675	84,17,57,248		0.84	2,257	0.00018%	0.0016%
FY21	2,23,307	41,03,65,358		0.77	2,101	0.00035%	0.0017%
FY20	1,25,186	21,31,73,014		0.69	-	0.00055%	0.0015%
FY19	53,915	8,76,97,072		0.34	-	0.00064%	0.0016%
FY18	9,049	1,09,83,180		-	-		-

<b>FY17</b>	179	6,95,214	-	-		-
<b>Total</b>	<b>17,08,822</b>	<b>2,95,67,12,807</b>	<b>4</b>	<b>48,708</b>		

**Source of Data: RBI Reports**

<b>Correlation Coefficient:</b> UPI Volume and Fraud: 0.8093 UPI Trx Value and Fraud Value: 0.8270	<b>Standard Deviation:</b> % Fraud by Volume: 0.00002 % Fraud by Value: 0.0000007	<b>Chi Square &amp; Df</b> Chi Square- 1728 Degree of Freedom: 4 Table Value $X^2 < \text{Computed Value}$ @ .05, 0.01 & 0.001
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**Inference**

- Correlation Coefficient indicates that there is high degree of correlation between UPI Value and Instances of Fraud in terms of number of transaction and value of transaction.
- Standard Deviation of % fraud by volume and value are low/ tending to zero, hence the data is evenly distributed towards mean.
- Chi-Square results reveal that the Computed Value is much higher than the Table Value at all probability levels i.e. 0.05, .01 and 0.001.
- Therefore, the null Hypothesis can be Rejected

**CONCLUSION**

With the rejection of null hypothesis, backed by the findings from our primary and secondary research it is hereby established that there is positive relationship between adoption of UPI and incidences of fraud in India. The more it is being used the more are the chances of fraud. As per NPCI's data it is found that on an average there is 45 % yearly growth on UPI transactions volume and 35 % yearly growth in value during July 2024. With rise in daily transactions there is an alarming rise in the number of UPI frauds by 85% from 7.23 lakhs in 2023 to 13.42 lakhs in financial year 2024.<sup>12</sup> This indicates that the digital ecosystem for financial payments has its biggest challenge in frauds.

RBI with implementation of Central Fraud Information Registry has adopted artificial intelligence for tracking and reporting payment frauds. The government is providing many awareness missions for UPI frauds through advertisements, mass awareness programs, campaigns to report and seek redressal for UPI frauds. The department of telecommunications through Chakshu on the Sanchar Sathi portal has enabled the users to report fraudulent communications. Although there is fear of UPI Frauds still

<sup>12</sup> . <https://www.cnbcvt18.com/business/finance/upi-fraud-cases-rise-85-pc-in-fy24-increase-parliament-reply-data-19514295.htm>

the central government is trying to reduce the number and increase in the number of UPI transactions amongst Indians through proactive measures. We cannot dream of a world without UPI now and so we definitely have to accept its greatest challenge i.e. frauds. We ourselves by remaining cautious and careful while transacting can defeat it and fight against it. The STOP-THINK –ACT<sup>13</sup> process is definitely an easy process to avoid UPI frauds in our busy daily lives. Instead of acting hastily while making payments it is always advisable to follow this procedure.

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<sup>13</sup> . <https://www.npci.org.in/upi-frauds-awareness-stop-think-act>