

A Study on Unified Payment Interface (UPI) Transactions

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Abstract

Indian banks have increasingly adopted electronic banking services such as mobile banking, ATMs, and digital payments over the past two decades. The Unified Payments Interface (UPI), introduced in 2016 as an instant real-time payment system, has become an important part of India's digital payment ecosystem. This study examines UPI awareness, user satisfaction, problems encountered, and the time taken to resolve issues. A descriptive research design was adopted, and data were collected from 119 respondents through a structured questionnaire using convenience sampling. The findings indicate that 86% of respondents were aware of UPI, while 31% preferred UPI among various digital payment methods. Chi-square analysis revealed a significant relationship between respondents' age and their satisfaction with UPI. The study recommends strengthening cybersecurity and regulatory measures to promote wider and safer adoption of UPI across India.

Key words: UPI , Digital Payments, Unified Payments Interface,

Introduction

All of the country's citizens, from rickshaw drivers to wealthy businessmen and government officials, have incorporated banking as a process or service and a place into their daily lives. The bank has evolved into a vehicle for distributing financial benefits to all parties involved, including subsidies, interest payments, incentives, etc. In India, banking has been a key tool for promoting financial inclusion.

Significant changes were made to it by organisations. Changes made since 1991 include NEFT, RTGS, IMPS, and core banking. Similar to that, the Unified Payment Interface (UPI) represents a significant turning point for the banking industry. It is a mobile banking tool that allows users to electronically send and receive money from and into their accounts using their smart phones. People were reluctant to use U P I at first, just like they would be with any new tool, but now it processes 2039 million transactions annually. This study aims to identify the user-friendliness, consciousness usage, and other issues that UPI users may encounter. The study made use of both recent and old data. This was covered in great detail in the research methodology section.

Review of literature

M.Balasubramanian and K.M Amanullah, (2019) The practice of using a mobile device for routine financial transactions, such as sending and receiving money from others, paying bills, etc., is known as mobile banking. These mobile banking transactions have multiplied dramatically since demonetization and the release of numerous UPI-based apps. The goal of the paper is to comprehend the development of UPI-based transactions in India and how it affects paperless transactions. and the issues that come with it.

Harshal Anil Salunkheet al (2019) The Indian banking system is subject to the vicissitudes of the electronic payment structure. Ten years ago, sending payments required a minimum of 5 to 10 days if we conducted any financial transactions through banks. However, thanks to the digital payment system, outflows now happen in a matter of seconds. This rebellion took place over a period of time rather than in a single day. With the aid of published data, researchers in this study focus on the ups and downs of India's digital reimbursement system. They have coloured India's progress toward digital payment. The review method is used by the researchers to differentiate between estimates of people's digital expenditures. The digital disbursement system in India has increased financial activity.

Rajat Rajeshetal (2020) Transparent and irrevocable, digital transactions and payments. This gives customers a way to develop trust in the digital payments system. India is the second-most populous nation in the world, so it's important to consider the setup of digital payment systems that are currently in place as well as how users have responded in terms of the volume of transactions that have been settled. This essay discusses the evolution of digital transactions and the various types of digital payment systems in India. The impact of the demonetization of 500- and 1,000-rupee notes on the growth of digital payments in India is depicted in the paper. The amount of recent transactions made using digital methods is examined in the paper. The challenges and effects of COVID-19 on digital payment systems are discussed in the paper's conclusion.

Research Methodology

The study used both a descriptive and analytic research design. For the research project, both recent and published data were used. Primary data were gathered using convenience sampling. Secondary information was gathered from a number of websites. Based on the standard table, a sample size of 383 was chosen. Based on the respondents' response rate, only 119 of the 383 surveys were useful. The purpose of the structured questionnaire was to gather first-hand information. For this, Google forms were utilised. The study employed simple percentage analysis, chi square, ANOVA, and multivariate methods. The data were collected over the course of a year.

Objectives of the study:

- To Ascertain Respondents' Knowledge Of UPI
- To Investigate UPI's Motivation
- To Determine the Volume Of Transactions And Usage Frequency
- To comprehend the issues respondents had using UPI and how long it took to fix those issues
- To make suggestions for ways to enhance the UPI

Hypotheses of the study:

Ho: The level of awareness of UPI does not significantly differ between age groups that are different from one another.

Ho: There is no discernible difference in the maximum number of UPI transactions carried out among different yearly income levels.

Ho: There is little difference in the level of UPI awareness across a range of educational backgrounds.

Ho: When it comes to the frequency of UPI usage, there are no appreciable differences between age groups.

Results and Discussion

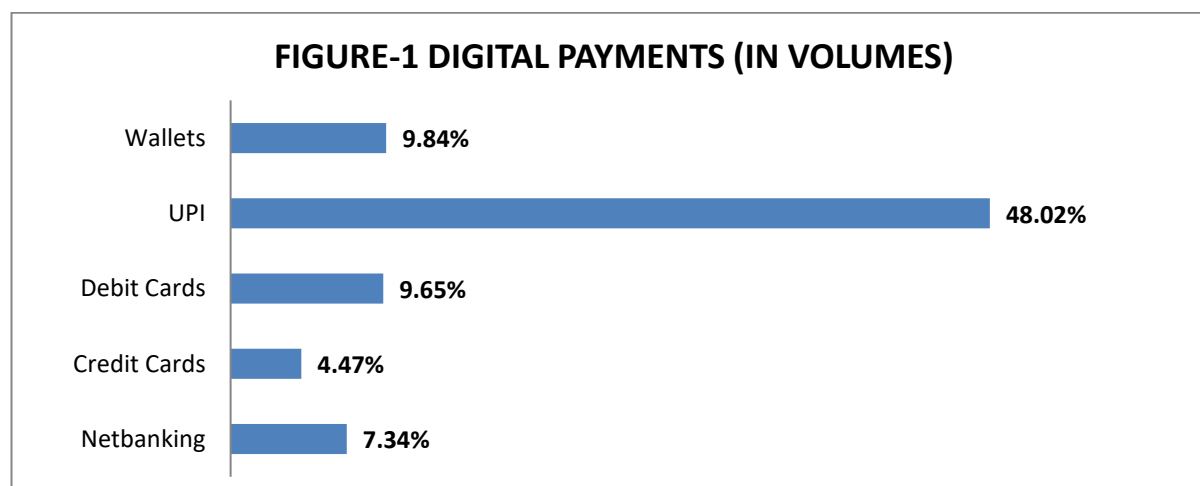


Figure -1 shows that among the various digital payment tools, UPI has been the most popular with 48 percent, followed by debit cards with 9.65 percent of the total volume of digital payments in 2020–21. During the years 2021–2022, credit cards made up 4.47 percent of the total amount of digital payments.

Table 1: Demographic Profile of the Respondents

Variables	Options	Percentage of the Frequency
Gender of the Respondents	1.Male	74
	2. Female	26
Age of the Respondents	1.Less than 20 years	7.6
	2.21-30	32.9
	3.31-40	16.6
	4.41-50	36.1
	5.Above 50 Years	6.7
Education of the Respondents	1.School Education	1.7
	2.UG	18.3
	3.PG	62.3
	4.Professional Education	15.1
	5.Others	2.5
Annual income of the respondents	1.Below 1 Lac	16.8
	2.1 lac – 3 lac	23.7
	3.3 lac – 5 lac	23.5
	4.5 lac – 10 lacs	25.1
	5.Above 10 lacs	10.9

Source: Data collected through questionnaire

Table 1 shows that out of 119 respondents, men made up the majority (74%) of the group. The age group of users between the ages of 41 and 50 made up 36%. Further observation revealed that the majority of respondents' (62.3%) educational background was PG. Between Rs. 5 lac and Rs. 10 lac was the annual income range for more than 25% of the respondents.

Table 2: Ranking of Different Digital Payment Mode

Digital Payment Mode	Order of Choices(in%)				
	First Choice	Second Choice	Third Choice	Fourth Choice	Fifth Choice
Debit Card	29.09	35.96	35.00	17.11	14.29
Net Banking	27.43	29.82	23.00	26.32	22.86
UPI	31.97	21.93	14.00	6.58	11.43
Wallets	1.77	4.39	6.00	18.74	29.57
Credit Card	9.73	7.89	22.00	31.26	21.86
Total	100	100	100	100	100

Source: Data Collected from questionnaire

Table 2 shows that among the various digital payment methods, the UPI was selected as the top option by 32% of respondents. It was also discovered that among the various digital payment methods, debit cards were chosen by more than 35% of respondents as their second and third preferences. Credit cards are the fourth digital payment method that 31% of respondents prefer to use. Additionally, among the various digital payment methods, 29 percent of respondents chose wallets as their fifth preference.

Table3:Test of Association between variables

Sl No	Variables	Chi-square p value	Level of association
1	Frequency of usage Vs Level of Satisfaction	0.465	No Significant association
2	Frequency of usage Vs Safety Level	0.378	No Significant association
3	Age of the respondents Vs Level of Awareness towards UPI	0.08	No Significant Association
4	Age of the respondents Vs Level of satisfaction towards UPI	0.01**	Significant Association
5	Education of the respondents Vs Frequency of Usage	0.631	No Significant Association

Source : Data collected from structure questionnaire Note : ** @5% level of significance

At the 5% level of significance, the null hypothesis was accepted for most relationships. No significant association was found between the frequency of digital payment usage and UPI satisfaction, UPI usage frequency and perceived safety, respondents' age and UPI awareness, or educational background and frequency of UPI usage. However, the null hypothesis was rejected for the relationship between respondents' age and their satisfaction with UPI, indicating a significant association between age and UPI satisfaction.

Table4: Test of Relationship between variables

Sl No	Variables	Pearson Correlation Value	P Value	Level of Relationship
1	Annual Income Vs Duration of Usage of UPI	0.278	.002**	Significant Relationship
2	Annual Income Vs Maximum Amount of transaction done in UPI	0.191	.039*	Significant Relationship
3	Education level of Respondents Vs Safety level of UPI	.039	.672	No Significant Relationship

Source : Data collected from structure questionnaire Note : * denotes @5% level of significance & ** denotes @ 1% level of Significance

The null hypothesis was rejected at the 5% level of significance because Table 4 shows a significant relationship between annual income and UPI usage duration ($r = 0.278$, $p = 0.002$). The null hypothesis was rejected at the 5% level of significance due to the significant relationship between annual income and the maximum number of UPI transactions (r

= 0.191, $p = 0.039$). The correlation analysis showed that there was no correlation between respondents' education levels and the safety level of UPI ($r = 0.039$, $p = 0.672$), so the null hypothesis was accepted at the 5% level of significance.

Findings and Suggestions

The study found that 87% of respondents were aware of UPI, indicating a high level of awareness among users. Google Pay was the preferred UPI application for 76% of respondents, while 20% used UPI daily and 50% weekly. About 56% of respondents used UPI for transactions ranging from ₹5,000 to ₹10,000. While 67% considered UPI to have strong safety features, connectivity and payment failures were the major problems faced. About 45% reported that UPI-related issues were resolved within a day, and 72% rated its overall performance positively. The study recommends strengthening cybersecurity and regulatory measures to encourage wider adoption of UPI.

Conclusion

Indian banks have increasingly adopted electronic banking services such as mobile banking, ATMs, and digital payments. UPI, introduced in 2016, has emerged as a major instant real-time payment system in India. The study examines UPI awareness, user satisfaction, problems faced, and issue-resolution time. A descriptive research design was adopted, with 119 respondents selected through convenience sampling. The findings show that 86% were aware of UPI, while 31% preferred it as their top digital payment method. The study concludes that stronger cybersecurity and regulatory measures are essential to increase UPI adoption.

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