



# The Impact Of Unified Payments Interface (UPI) On The Banking Sector: A Comprehensive Analysis

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## **ABSTRACT:**

The Unified Payments Interface (UPI) has emerged as a transformative force within the Indian banking sector, transforming the way financial transactions are conducted. This study dives into the multifaceted effects of UPI on banks, analysing its implications on various aspects including customer behaviour, operational efficiency, competition, and regulatory framework.

With its seamless and user-friendly interface, UPI has facilitated a sudden increase in adoption rates among consumers across diverse demographic segments. Banks have leveraged UPI to modernize their backend systems, automate routine tasks, and optimize resource allocation, leading to tangible improvements in service delivery and cost management. The transition towards digital payments is expected to fuel an increase in impulsive buying behaviour among individuals, further impacting the banking sector and consumer spending patterns. Traditional banks are facing increased pressure from non-banking entities such as fintech startups and digital wallets, which leverage UPI as a platform to offer innovative payment solutions.

To analyse the impact of UPI on banking sector applications, how it influences the behaviour of normal people in impulsive buying and convenience of digitalisation. To analyse the use of UPI apps like Gpay, Phonepe etc.

In conclusion, the advent of the Unified Payments Interface (UPI) in India has transformed the landscape of digital payments, offering unparalleled convenience and accessibility. However, its rapid adoption has brought forth challenges in the banking sector. While UPI transactions reduce fee-based income for banks and intensify competition from fintech players, they also necessitate substantial investments in cybersecurity and infrastructure. Moreover, the

shift towards digital payments may strain banks' margins and interest income. In the foreseeable future, as digital payments become increasingly prevalent, the role of hard currency is likely to diminish, further reshaping the banking landscape.

Keywords: UPI, Fintech, Banking, Digital Payments

## **I. INTRODUCTION:**

India is understood for large population and it stands ordinal within the world once China. Since the technology has upgraded apace all the 3 generations began to use technology in their lifestyle significantly once the ending there's growth in digital payments in India. The Republic of India had initiative known as Digital India for the transparency and fast services for the individuals in India and because of Digital India initiative there's tremendous growth in use of mobile phones and web that directly facilitate growth in digital payments, the utilization of digital payments offers a lot of transparency in cash transactions this improves the economy of India. In previous couple of years because of the digital payment platform by NPCI several payment platforms like UPI, BHIM, USSD & AEPS there's positive changes in digital payments. The target of this analysis paper is to review the comparison of UPI and alternative payment platforms on digital payment system. This analysis paper focuses on the utilization of UPI or alternative means that of transactions by users. This paper is solely abstract in nature, data is collected through varied secondary sources.

### **Unified Payments Interface (UPI)**

Unified Payments Interface (UPI) may be a system that powers multiple bank accounts into one mobile application (of any collaborating bank), merging many banking options, seamless fund routing & bourgeois payments into one hood. It additionally caters to the "Peer to Peer" collect request which may be scheduled and paid as per demand and convenience.

With the on top of context in mind, NPCI conducted a pilot launch with twenty one member banks. The pilot launch was on eleventh April 2016 by Dr. Raghuram G Rajan, Governor, tally at urban center. Banks have begun to transfer their UPI enabled Apps on Google Play store from twenty fifth August, 2016 onwards. (UPI, India) How is it unique?

Immediate cash transfer through mobile device around the clock 24\*7 and twelve months.

Single mobile application for accessing totally different bank accounts.

Single Click a pair of issue Authentication – Aligned with the regulative tips, nonetheless provides for a awfully sturdy feature of seamless single click payments.

Virtual address of the client for Pull & Push provides for progressive security with the client not needed to enter the small print like Card no, Account number; IFSC etc.

Merchant Payment with Single Application or In-App Payments.

Utility Bill Payments, Over the Counter Payments, QR Code (Scan and Pay) primarily based payments.

Donations, Collections, Disbursements ascendible.

Raising criticism from Mobile App directly.

Participants in UPI

- Payer PSP
- Payee PSP
- Remitter Bank
- Beneficiary Bank
- NPCI
- Bank Account holders
- Merchants

Objective: This analysis aims to give a complete picture of how UPI has changed banking. We want to go beyond just guessing or sharing stories and instead provide useful advice and ideas for people in the banking world who are dealing with big changes because of digital technology.

## II. **LITERATURE REVIEW:**

Nandan Nilekani (2016) in his article he wrote about Unified Payments Interface, popularly known as UPI revolutionized the way we make digital payments in India. It has made it easier for people to transfer funds from one bank account to another without the requirement of any bank account details, IFSC codes, or even a mobile wallet. Raghuram Rajan (2017), as a former RBI Governor, has written extensively on banking and finance, likely exploring the implications of UPI apps in his research, payments process which was launched by himself on April 11 in Mumbai was in the final stages of integration and testing with the banks and the National Payments Corporation of India (NPCI), to an ET report. Amartya Sen's (2021) research framework to UPI apps, one can analyse how these digital payment platforms contribute to economic empowerment and financial inclusion. UPI has the potential to enhance people's capabilities by providing them with convenient access

Anirban Chakraborty's (2017-18) analysis outlines the great journey of UPI and its

## III. **NEED FOR THE STUDY**

Unified Payments Interface (UPI), developed by the National Payments Corporation of India (NPCI) in 2016, has seen immense growth in its popularity over the years. Since its inception in 2016 by the National Payments Corporation of India (NPCI), Unified Payments Interface (UPI) has witnessed an exponential growth in usage over the following years. Adoption of UPI has been credited with facilitating the financial transactions of rural populations, as highlighted by a study from the Internet and Mobile Association of India (IMAI). The study reveals that a substantial number of active internet users, particularly from rural areas, have embraced UPI, with projections indicating an escalation among in rural internet users by 2025. This study delves into the factors driving the success

transformative effects on the Indian banking industry. By examining the previous data available and technology development UPI has revolutionized traditional banking practices and infrastructure.

Sumit Das (2019) explained the implications of UPI adoption on traditional banking services, highlighting both the benefits and challenges faced by financial institutions. His study explores and tells about operational changes required to fit in with UPI transactions and how its impact on customer satisfaction.

Alok Gupta's (2019) study focuses on the digital revolution triggered by UPI, analysing its effect on Indian banking sector. By examining the strategic responses of banks to UPI adoption, the research throws light onto the evolving competitive dynamics and market opportunities. Mohammed Ehsanul Haque's (2019-20) research study dives into the rise of UPI and its implications for the banking sector in India, he also explained their major role for financial inclusion and digital empowerment. The study examines the socio-economic changes and impacts that UPI brought in the society. Nandini Iyer's (2018-19) study tells us about the ill effects caused by UPI on traditional banking channels, banks went through lot of difficulty to get adopted to the digitalised ecosystem. The research explores strategies for banks to leverage UPI technology to enhance customer engagement and operational efficiency.

Rishabh Jain's (2020) research investigates the adoption of UPI and its impact on the Indian banking infrastructure, he majorly noticed that increase in transaction volumes, processing times, and cost structures. These brought major changes in positioning of banks and the strategies implemented by banking sector.

Anuj Kumar's (2019) study explores the transformative impact of UPI apps on banking operations and revenue streams, examining changes in transaction volumes, fee structures, and customer preferences. The research highlights the challenges and opportunities for banks in adapting to the digital payments landscape.

of UPI in digital payments, as well as the challenges it has successfully navigated. Various economic indicators such as per capita private final consumption expenditure (PFCE), currency circulation, narrow money, and per capita GDP were assessed to measure their impact on UPI transactions through regression analysis. Additionally, the study also analysed the effects of business decline (BD) and technical decline (TD) on bank performance using Anova and T tests. The continuous growth of UPI payments reflects its vital role in facilitating convenient and secure transactions. Its trajectory of success and the ever-evolving landscape of digital payments indicate that UPI will continue to be a cornerstone of India's financial sector in the years ahead.

IV. DATA COLLECTION AND ANALYSIS :

UPI Apps (Apr'24)

UPI Apps (Apr'24)											
Sr.No.	Application Name	Customer Initiated Transactions		B2C Transactions		B2B Transactions		On-us Transactions		Total	
		Volume (Mn)	Value (Cr)	Volume (Mn)	Value (Cr)	Volume (Mn)	Value (Cr)	Volume (Mn)	Value (Cr)	Volume (Mn)	Value (Cr)
1	PhonePe	6,500.14	10,01,679.63	0.00	0.00	0.00	0.00	0.00	0.00	6,500.14	10,01,679.63
2	Coogee Pay	5,027.32	6,94,389.68	0.00	0.00	0.00	0.00	0.00	0.00	5,027.32	6,94,389.68
3	Paytm	1,117.13	1,22,554.24	0.00	0.01	0.00	0.00	0.00	0.00	1,117.13	1,22,554.25
4	Cred	138.46	43,233.21	0.00	0.00	0.00	0.00	0.00	0.00	138.46	43,233.21
5	Axis Bank Apps	13.53	3,313.28	56.27	1,168.22	0.01	1.74	0.00	0.00	69.80	6,483.24
6	Amazon Pay	64.33	6,784.82	0.00	0.00	0.00	0.00	0.00	0.00	64.33	6,784.82
7	ICICI Bank Apps	35.39	14,357.18	3.57	336.49	8.45	11,945.21	0.00	0.00	47.41	26,638.88
8	Fampay	46.64	588.00	0.00	0.00	0.00	0.00	0.00	0.00	46.64	588.00



9	Kocak Mahindra Bank Apps	41.54	6101.88	0.00	0.00	0.00	0.00	0.00	0.00	41.54	6101.88
10	HDFC Bank Apps	35.99	7589.44	0.00	0.00	0.01	0.32	0.00	0.00	35.99	7589.76
11	WhatsApp	34.12	2,815.68	0.00	0.00	0.00	0.00	0.00	0.00	34.12	2,815.68
12	BHIM	25.48	8,670.52	0.00	0.00	0.00	0.00	0.00	0.00	25.48	8,670.52
13	Yes Bank Apps	21.99	11,978.16	0.00	0.00	0.27	31.04	0.00	0.00	22.26	12,009.40
14	Airtel Payments Bank Apps	16.19	1,243.55	0.00	0.00	0.00	0.40	0.00	0.09	16.19	1,244.14
15	Navi	15.10	402.92	0.00	0.00	0.00	0.00	0.00	0.00	15.10	402.92
16	Bajaj Finserv	10.29	1,819.55	0.00	0.00	0.00	0.00	0.00	0.00	10.29	1,819.55
17	Mobikwik	9.76	2,348.19	0.00	0.00	0.00	0.00	0.00	0.00	9.76	2,348.19
18	Croww	8.02	5,452.72	0.00	0.00	0.00	0.00	0.00	0.00	8.02	5,452.72
19	Slide	7.51	608.62	0.00	0.00	0.00	0.00	0.00	0.00	7.51	608.62
20	State Bank of India Apps	6.49	2,385.64	0.00	0.00	0.04	114	0.00	0.00	6.53	2,386.79
21	IDFC Bank Apps	6.45	1,581.78	0.00	0.00	0.00	0.00	0.00	0.00	6.45	1,581.78
22	Samsung Pay	6.30	527.40	0.00	0.00	0.00	0.00	0.00	0.00	6.30	527.40
23	Federal Bank Apps	6.14	821.80	0.00	0.00	0.00	0.00	0.00	0.00	6.14	821.80
24	Jupiter	5.92	710.69	0.00	0.00	0.00	0.00	0.00	0.00	5.92	710.69
25	India Post Payments Bank Apps	5.08	687.52	0.00	0.00	0.00	0.00	0.00	0.00	5.08	687.52
26	Flipkart UPI	3.46	174.73	0.00	0.00	0.00	0.00	0.00	0.00	3.46	174.73
27	Deutsche Bank Apps	3.28	441.58	0.00	0.00	0.00	0.02	0.00	0.00	3.28	441.58
28	Canara Bank Apps	3.03	812.15	0.00	0.00	0.00	0.00	0.00	0.00	3.03	812.15
29	Timepay	2.15	24.14	0.00	0.00	0.00	0.10	0.00	0.00	2.16	24.25
30	5o Payments Bank Apps	1.87	164.17	0.00	0.00	0.00	0.00	0.00	0.00	1.87	164.17
31	Punjab National Bank Apps	1.66	419.99	0.00	0.00	0.00	0.00	0.00	0.00	1.66	419.99
32	RBL Bank Apps	1.46	529.18	0.00	0.01	0.11	11710	0.00	0.00	1.57	546.29
33	Indian Bank Apps	1.50	310.69	0.00	0.00	0.00	6.71	0.00	0.00	1.50	317.40
34	Union Bank Apps	1.25	525.02	0.00	0.00	0.00	0.00	0.00	0.00	1.25	525.02
35	Omniscard	1.06	37.27	0.00	0.00	0.00	0.00	0.50	0.00	1.06	37.27
36	Bank of Baroda Apps	0.99	469.50	0.00	0.00	0.00	8.27	0.00	0.00	0.99	467.77
37	Central Bank of India Apps	0.89	204.45	0.00	0.00	0.00	0.00	0.00	0.00	0.89	204.45
38	AU Small Finance Bank Apps	0.80	257.99	0.00	0.00	0.00	0.00	0.00	0.00	0.80	257.99
39	Go Kivi	0.58	92.87	0.00	0.00	0.00	0.00	0.00	0.00	0.58	92.87
40	DBS Digibank Apps	0.46	182.52	0.00	0.00	0.00	0.38	0.00	0.00	0.47	182.89
41	South Indian Bank Apps	0.43	129.71	0.00	0.00	0.00	0.00	0.00	0.00	0.43	129.71
42	Shriram One	0.40	37.49	0.00	0.00	0.00	0.00	0.00	0.00	0.40	37.49
43	Fino Payments bank Apps	0.35	49.47	0.00	0.00	0.00	0.00	0.00	0.00	0.35	49.47
44	Indus Ind Bank Apps	0.32	58.71	0.00	0.00	0.00	0.26	0.00	0.00	0.32	58.97
45	HSBC Bank Apps	0.32	126.55	0.00	0.05	0.00	0.00	0.00	0.00	0.32	126.59

46	TataNeu	0.32	34.06	0.00	0.00	0.00	0.00	0.00	0.00	0.32	34.06
47	Bank of India Apps	0.21	87.25	0.00	0.00	0.00	0.00	0.00	0.00	0.21	87.25
48	Standard Chartered Bank Apps	0.16	105.48	0.00	0.00	0.00	0.03	0.00	0.00	0.16	105.51
49	UCO Bank Apps	0.16	54.30	0.00	0.00	0.00	0.00	0.00	0.00	0.16	54.30
50	Digikhata	0.15	51.08	0.00	0.00	0.00	0.00	0.00	0.00	0.15	51.08
51	Karnataka Bank Apps	0.15	27.18	0.00	0.00	0.00	0.00	0.00	0.00	0.15	27.18
52	Jupiter Edge	0.14	22.88	0.00	0.00	0.00	0.00	0.00	0.00	0.14	22.88
53	Dhoni	0.13	7.44	0.00	0.00	0.00	0.00	0.00	0.00	0.13	7.44
54	Indian Overseas Bank Apps	0.11	30.10	0.00	0.00	0.00	0.00	0.00	0.00	0.11	30.10
55	Ultracash	0.09	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.09	6.16
56	Tamilnad Mercantile Bank Apps	0.09	24.69	0.00	0.00	0.00	0.00	0.00	0.00	0.09	24.69
57	City Union Bank Apps	0.08	26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.08	26.60
58	NSDL Payments Bank Apps	0.08	11.88	0.00	0.00	0.00	0.00	0.00	0.00	0.08	11.88
59	Citi Bank Apps	0.06	69.18	0.00	0.00	0.00	0.01	0.00	0.00	0.06	69.19
60	IDBI Bank Apps	0.06	20.15	0.00	0.00	0.00	0.00	0.00	0.00	0.06	20.15
61	Bank of Maharashtra Apps	0.06	13.96	0.00	0.00	0.00	0.00	0.00	0.00	0.06	14.06
62	Karur Vysya Bank Apps	0.05	18.94	0.00	0.00	0.00	0.00	0.00	0.00	0.05	18.94
63	MakeMyTrip	0.04	19.32	0.00	0.00	0.00	0.00	0.00	0.00	0.04	19.32
64	Go Nijo	0.04	16.77	0.00	0.00	0.00	0.00	0.00	0.00	0.04	16.77
65	Equitas Small Finance Bank Apps	0.03	25.52	0.00	0.00	0.00	0.00	0.00	0.00	0.03	25.52
66	Punjab Sind Bank Apps	0.03	12.15	0.00	0.00	0.00	0.00	0.00	0.00	0.03	12.15
67	Allahabad Bank Apps	0.02	6.18	0.00	0.00	0.00	0.00	0.00	0.00	0.02	6.18
68	Fave	0.02	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.02	1.16
69	Cheq	0.01	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.13
70	Other Apps	1.03	108.38	0.00	0.00	0.15	4.42	0.00	0.00	1.18	112.60

Note: - (Source: NPCI Data for April 2024)

- App volume in table is basis the Payer App logic, i.e the financial transaction is attributed to the PSP in UPI on the Payer’s side.
- All B2C (Business to Customer) & B2B (Business to Business) transactions is attributed to respective PSP.
- From January 2021 onwards, ‘On-us Transactions’ in UPI that are not processed and settled through the UPI Central System is shown under ‘On-us Transactions’ column.
- Apps which have volume less than 10,000 is included under ‘Other Apps’.
- BHIM Volume is inclusive of \*99# volume.

- WhatsApp\*: Maximum registered user base of hundred (100) million in UPI □ App volume in the table is

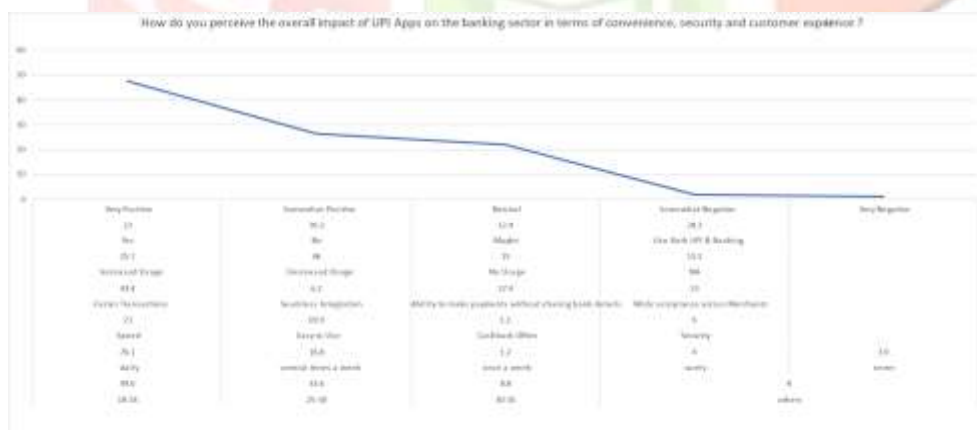
exclusive of cross-border payments.

## V. RESEARCH METHODOLOGY

The study conducted is descriptive research and the primary objectives is to find out the usage of UPI Apps in relation to banking apps. A survey was conducted related “Impact of UPI Apps over Banking Sector” and in which we have received more than 100 responses. The survey found that more than 80% of the people use UPI App in their day-to-day life and has find it easy to use. whereas there are some people who prefer using banking apps for their day-to-day transactions and found some people who prefer using both UPI and Banking Apps. From the Survey, we conclude that most of the people find UPI Apps are more convenient and easier to use, and have a positive impact on their satisfaction.

Questionnaires in the Survey Include :

1. Age?
2. How frequently do you UPI apps for your banking transactions ?
3. What factors influence your decision to use UPI Apps over banking apps for making or transfers ?
4. In your opinion, what are the primary advantages of using UPI apps compared to banking apps ?
5. Have you noticed any changes in your usage of banking apps since you started using UPI Apps ?
6. Do you Still Use Banking Apps ?
7. How do you perceive the overall impact of UPI Apps on the banking sector in terms of convenience, security and customer experience ?





**VI. FINDINGS:**

1. E Payment system have been possible when all the stakeholders like Reserve bank of India, Government of India, National Clearing Cell, Customers, IDRBT and NPCI have together taken various initiatives to make Indian banking robust technology and risk management. (JP Shah, 2015)
2. All electronic payment choices in India are square measure growing there is sensible support from all the participants.
3. Adoption of electronic payments brings regarding all around benefit to all or any participants and also the economy itself. It brings cash into the industry.
4. Innovation, convenience, cost, awareness, legal supports are the factors that may accelerate the improved usage of electronic payments especially in UPI Payments systems.
5. Anticipating client wants and be prepared a lot of important these days instead of simply understanding the needs Our payment system vision ought to be where ever a Physical Cheque will get processed.
6. Electronic funds transfer ought to additionally reach we've got the chance to supply the Best within the nation.
7. UPI are treated as best means of transactions compared to any other means like AEPS, USSD or Online Banking.
8. UPI is Network based where AEPS and USSD won't require any means of Internet Connectivity.
9. UPI usage is easy way of Financial Transactions as per Users (NPCI Report -2024)

**VII. CONCLUSION**

In Conclusion, the research highlights the significant impact of UPI Apps over Banking Apps, where we can see that people are more relied on using UPI Apps because of digitalization across the nation and it is both Cost and Time Saver. This Study also highlights how UPI Apps has revolutionized the whole payment systems in India, offering Users a seamless and easiest way to do transaction. However, Its also raise some concerns about the challenges it creates for banking apps and banking system. Overall, the finding shows that the UPI apps are the future of the Nation and they are demanding the banking industry to adapt and innovate to remain competitive in the digital era. Banking Apps can come with some extra initiatives or some attractive offers or cashback for customers to gain more interest towards using their Apps.

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