

# India Digital Payments Annual Report 2022





## **Ramesh Narasimhan**

CEO – India, Worldline

Dear Readers,

I am amazed every day to see the incredible progress we have made in the digital payments ecosystem over the past few years. The mass adoption of multiple payment solutions is a boon in our journey to realize the dream of a cashless India.

2022 witnessed an ever increasing adoption of digital payments with UPI leading the way. You will be happy to note that by December 2022, the total number of cards in circulation was 1.02 billion, POS terminals deployed by merchant acquiring banks were 7.55 million, number of prepaid payment instruments were 16.23 billion, and UPI and BQR QRs were 242.89 million.

As we look to the future, we are excited about the opportunities that lie ahead. Worldline, a global leader in payment services, will continue to focus on developing solutions that provide a seamless and secure experience for consumers, merchants, and financial institutions. We recognize that the financial services industry is undergoing significant transformation and we are committed to being at the forefront of this change to address key aspects like rapidly changing consumer behavior, constantly evolving regulations, continuous technological advances among others.

In 2023 and beyond, we will continue to collaborate with our merchants, partner banks, fintechs, ecommerce players and invest in the technology and infrastructure needed to build a more inclusive and open financial ecosystem. With these thoughts, I am glad to present to you Worldline India's Digital Payments Report covering key highlights insights from the previous year. i.e. Jan till Dec 2022. Along with this, we also share our perspective on the Metaverse and where it is likely headed to.

Happy Reading!

**Ramesh Narasimhan**

CEO – India, Worldline

# Where is the Metaverse headed to?



The runner-up for Oxford English Dictionary's 2022 Word of the Year was 'Metaverse'. That said, it was probably one of the top words that was thrown about without really understanding what the term meant. Also, the Metaverse was pronounced as the future and in the same breath, the future of the metaverse was also being questioned as being nothing more than air.

In very simple terms, the metaverse is the intersection of 3 large areas; immersive experiences (VR, AR, gaming, social, avatar), blockchain (CBDCs, crypto-currencies, NFT, smart-contracts). Web3 (decentralized, trust).

So before getting back to where the metaverse is headed to, it is necessary to understand the controversy surrounding the metaverse and more specifically on whether it is the future or whether it is snake-oil aka reality vs. hype. The fact is that companies are investing billions of real dollars in the metaverse and these companies are in various sectors such as gaming, social media, finance and retail. These investments are for both a mix of use cases today and potential use cases later down the pipe. Some of the current use cases for the Metaverse are:

- 1. Immersive entertainment** – this is probably the current largest use case and examples are gaming through the use of headsets, concerts performed by singers (several famous singers have done concerts on the Metaverse).

2. **Branding** – many companies are buying plots on Decentraland, a platform on the metaverse with the objective of announcing their presence.
3. **Customer experience** – It can be used in instances where customers can experience something without leaving their home – potentially a new house, a hotel etc.

Now the challenges or at least the current challenges and the main one is a lack of people. This is problematic for a platform where the USP is social interaction. A recent article on the Metaverse Fashion Week mentions “...featured virtual clothes and exhibits from some major names in fashion, but it was lonely, difficult to navigate, and pretty boring. The metaverse can be eerily quiet....For an event with some of the biggest names in fashion on board, I was hopeful it would have some of the energy and life that is actually possible in virtual worlds. But for a show that is based so much on what you can see, I was most struck what I couldn't hear.”<sup>2</sup> This pretty much encapsulates the main criticism of the metaverse – they aren't enough people and one of the main reasons is the cost; a fully immersive experience is only possible through a VR headset and this can get very expensive.

That said, this is still early days for the Metaverse. For a wider acceptance, many things, among others, need to fall into place; cost of entrance, wider payment choices, better graphics and most importantly, something that simulate the real world to a reasonable extent and not feel like one is in a cartoon world.

## **Sunil Rongala**

Senior Vice President – Strategy, Innovation and Analytics

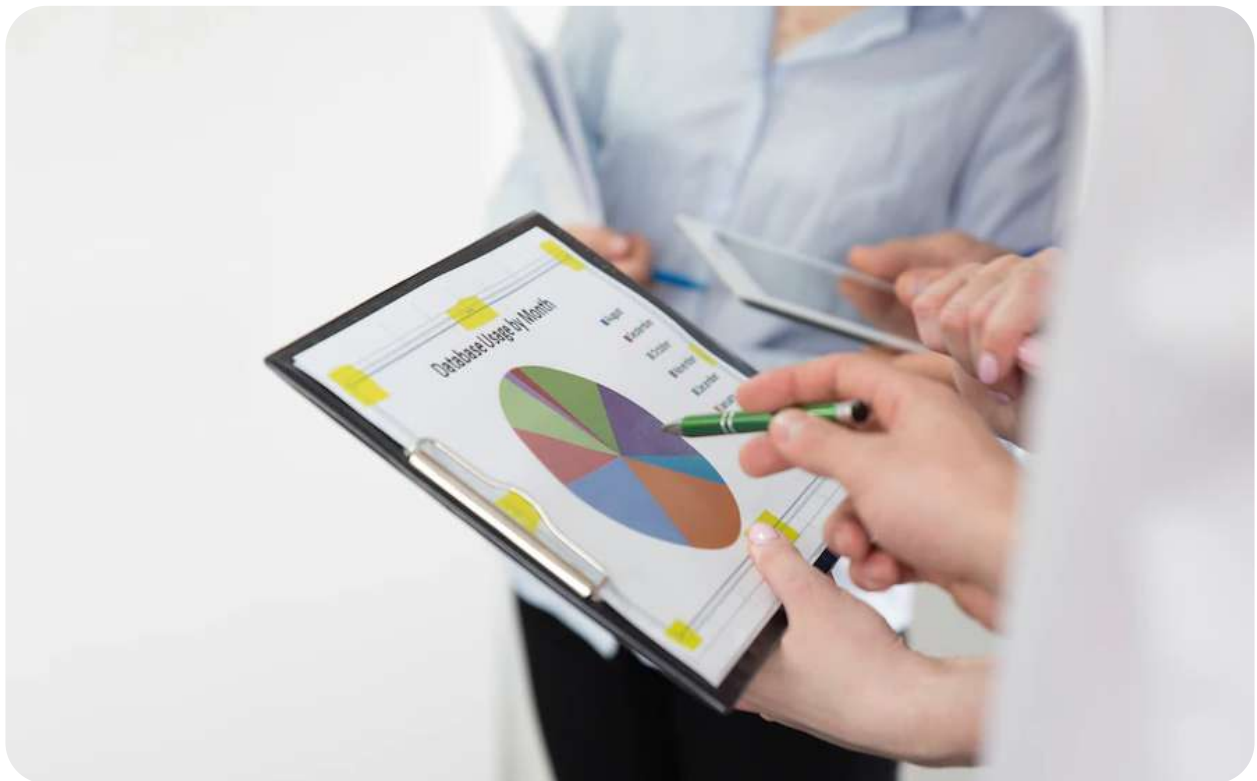
### Reference:

<sup>1</sup> The 2022 Word of the Year was 'Goblin Mode'.

<sup>2</sup> <https://www.theverge.com/23668846/decentraland-metaverse-fashion-week-2023>

## 2022 in review

We have analyzed transactions available in public databases as well as transactions processed by us in 2022 (Jan – Dec) and derived some unique insights.



## Key Takeaways

1. UPI continues to be the dominant channels for digital payments. The number of transactions in 2022 touched 74 billion transactions, a 70% increase in the year. The value of transactions was INR 126 trillion, a 54% increase.
2. At the end of 2022, 54% of UPI transactions volume were P2M (merchant transactions) whereas in terms of value it was 23%.
  - a. The average ticket size for P2M transactions in December 2022 was INR 687 while P2P transactions was 2753.
  - b. This signals the deep entrenchments of UPI P2M transactions; it is being used for large as well as very small transactions, the latter being the most difficult to move away from cash.
3. UPI transactions are being driven by the proliferations of QRs – it was 237 million in December 22 compared to 152 million in January 22.
4. The number of POS terminals at the end of 2022 was 7.55 million, a growth of 37% YoY.
5. Banks have increased the number of credit cards by 18% indicating an increased appetite for higher ticket transactions.
  - a. The volume and value of transactions done on credit cards has seen a steady uptick through the year.
  - b. Credit card transactions in 2023 could benefit majorly as credit cards are now eligible for doing UPI transactions.
6. Debit card transactions have seen a steady decline through the year – this is very likely an outcome of the increase in UPI transactions.
7. Fastag has seen a massive uptick in 2022 with a growth of 31% in terms of volume; this is expected with the number of vehicles sold also seeing an uptick.

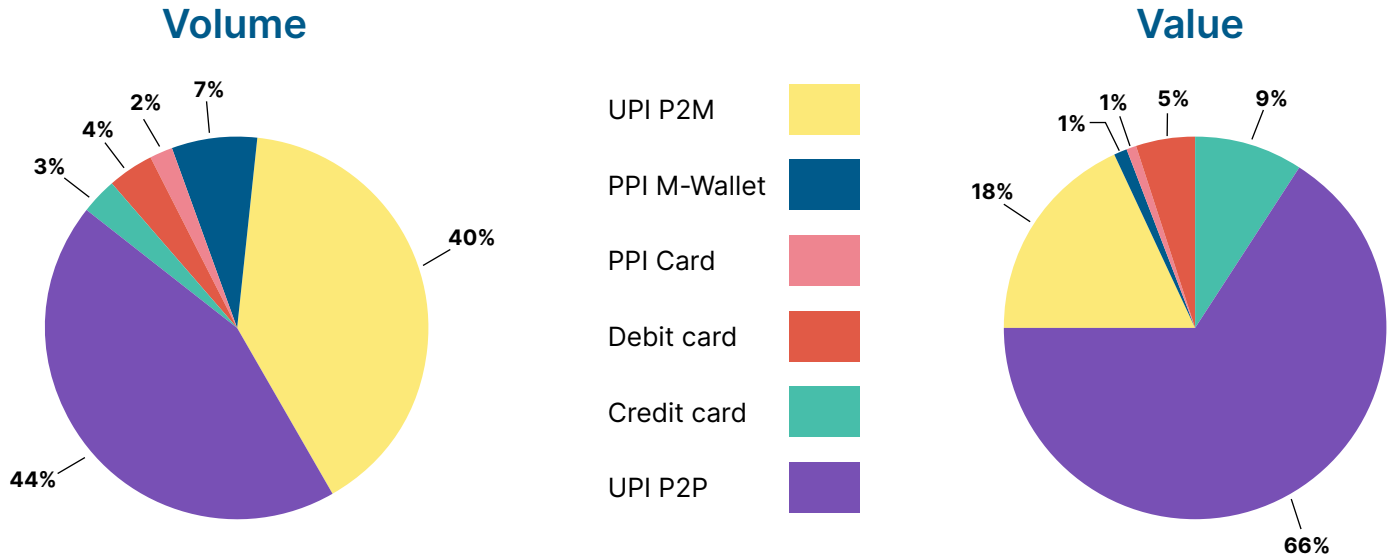
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# Payments Landscape

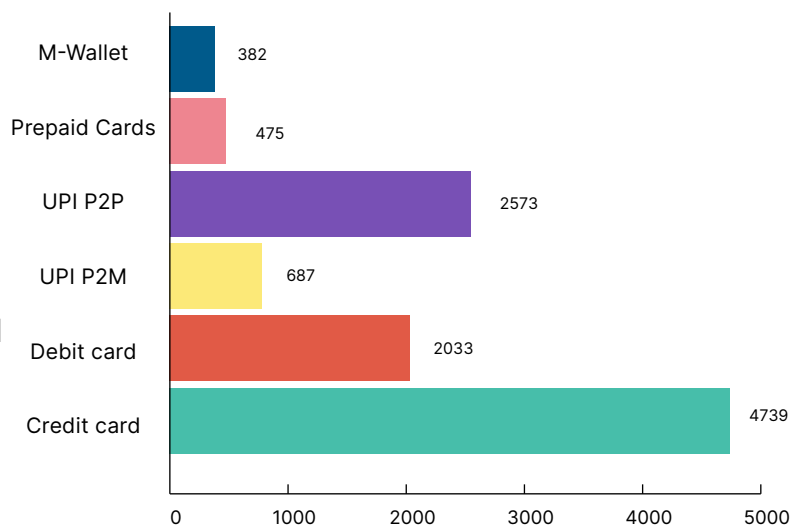
In 2022, payment modes like UPI, Debit and Credit cards, Prepaid Payment Instruments – Mobile and Prepaid cards processed 87.92 billion transactions worth ₹ 149.5 trillion.



It is evident that UPI Person-to-Merchant (P2M) and Person-to-Person (P2P) are the most preferred payment modes among consumers with a market share of 40% and 44% in terms of transactions volume (UPI was 84% in total). However, in terms of value, UPI P2M accounted for 18% share whereas UPI P2P accounted for 66% of digital transactions by value (UPI was 84% in total). **It should be noted that P2P transactions are not necessarily payments and can also be potentially money transfers among people.**

This is followed by payment through credit and debit cards which accounted for 7% in volume and 14% in value. The adoption of credit cards is growing at a healthy pace as it has long been a preference of customers when it comes to high ticket size transactions and is evident in the chart that highlights the Average Ticket Size of all payment modes:

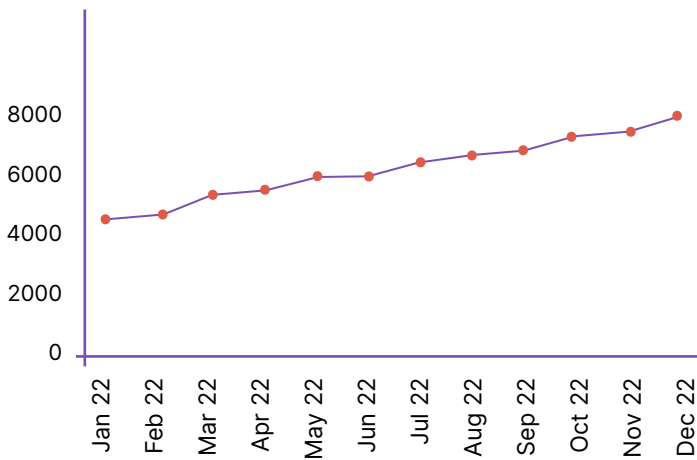
## Average Ticket Size ( INR )



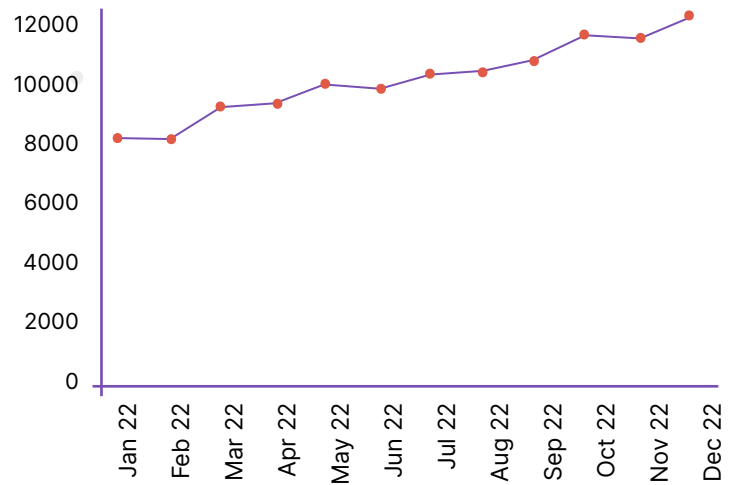
# Unified Payments Interface

In Year 2022, UPI clocked over 74.05 billion transactions in volume and ₹ 126 trillion in terms of value. Its transactions volume and value almost doubled since last year as it recorded 91% increase in volume and over 76% increase in value in Year 2022 as compared to Year 2021.

**UPI Volume (Million)**



**UPI Value (₹ billion)**



As of Year 2022, the top 5 UPI Apps in terms of volume and value were PhonePe, Google Pay, and Paytm Payments Bank App, Amazon Pay and Axis Bank while top Remitter and Beneficiary Banks are highlighted below:

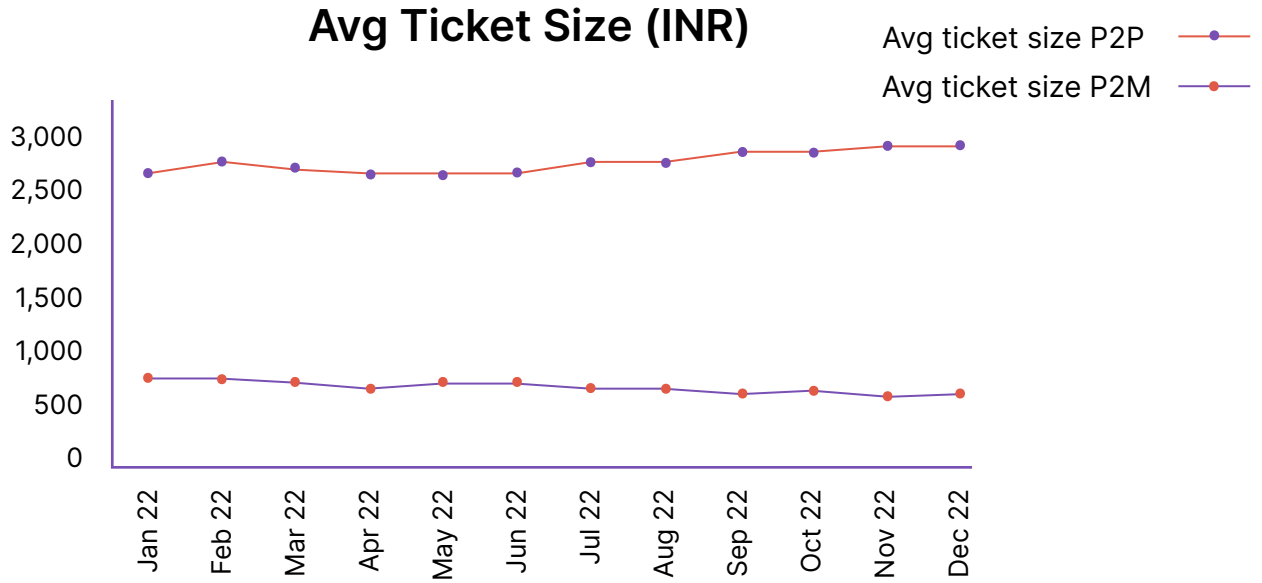
**Top 5 UPI Remitter Banks**

- State Bank of India
- HDFC Bank
- Bank of Baroda
- Union Bank of India
- ICICI Bank

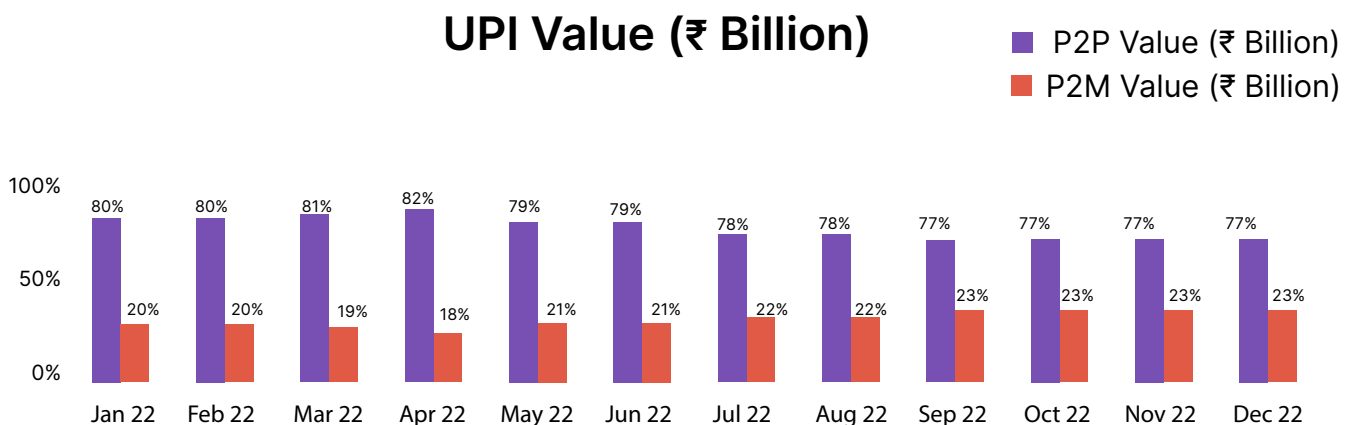
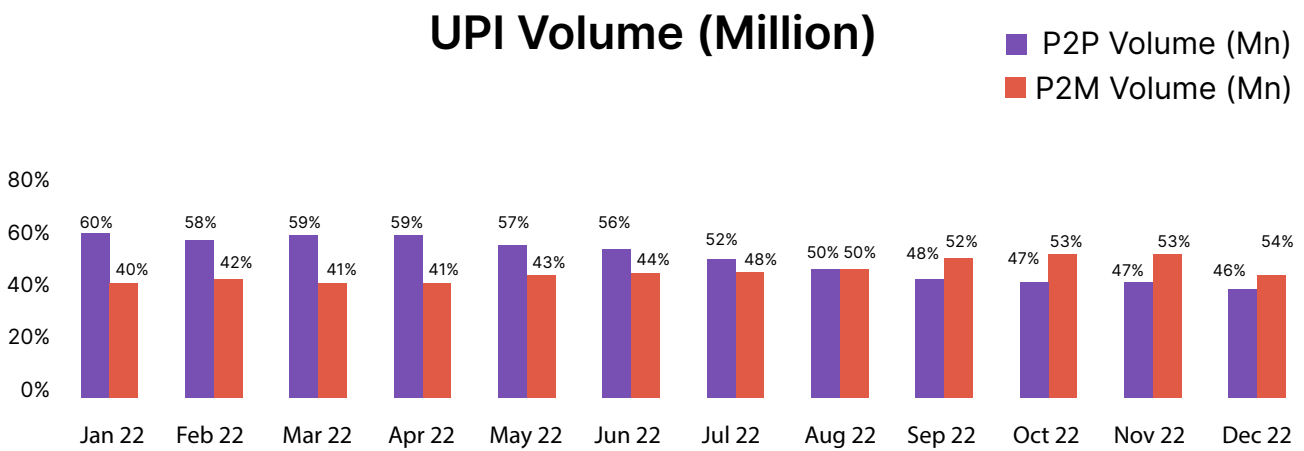
**Top 5 UPI Beneficiary Banks**

- Paytm Payments Bank
- YES Bank
- State Bank of India
- Axis Bank
- ICICI Bank

The Average Ticket Size (ATS) for UPI P2P transactions was INR 2753 and ATS for UPI P2M transactions was INR 687 by December 2022.

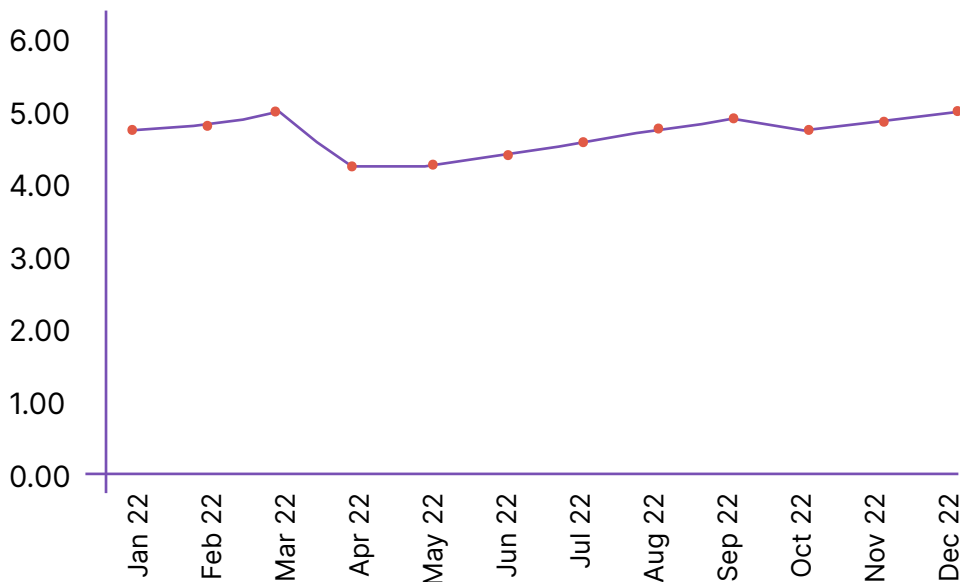


By December 2022, 54% of UPI transactions volume were P2M while 46% of transactions volume were P2P whereas in terms of value, 23% of transactions were P2M while 77% of transactions were P2P.

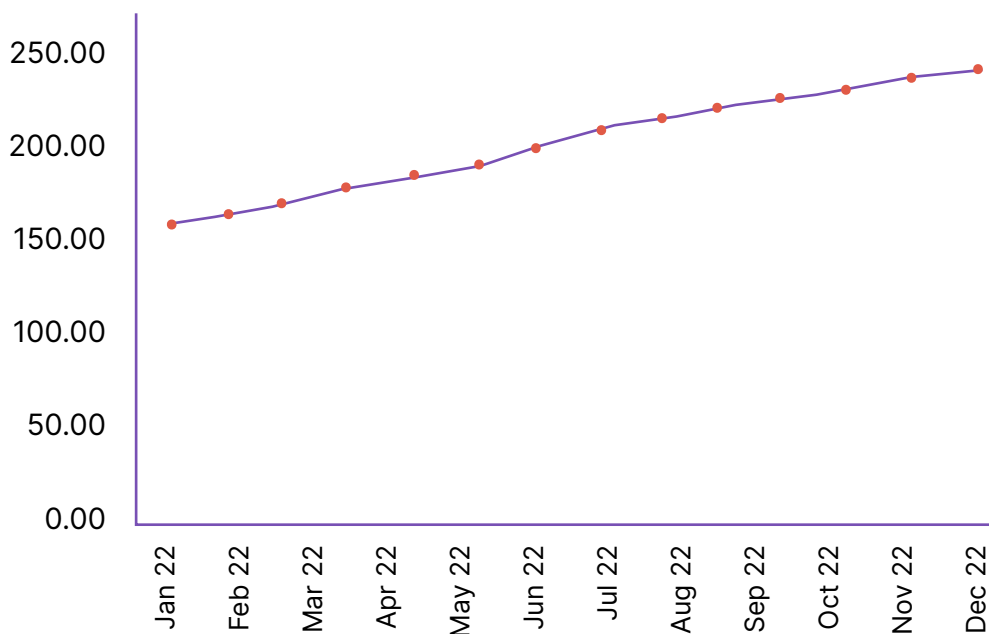


As of December 2022, total number of Bharat QRs were 4.96 million, while UPI QR stood at 237.94 million, registering an increase of 65% as compared to December 2021.

## Bharat QR (Million)



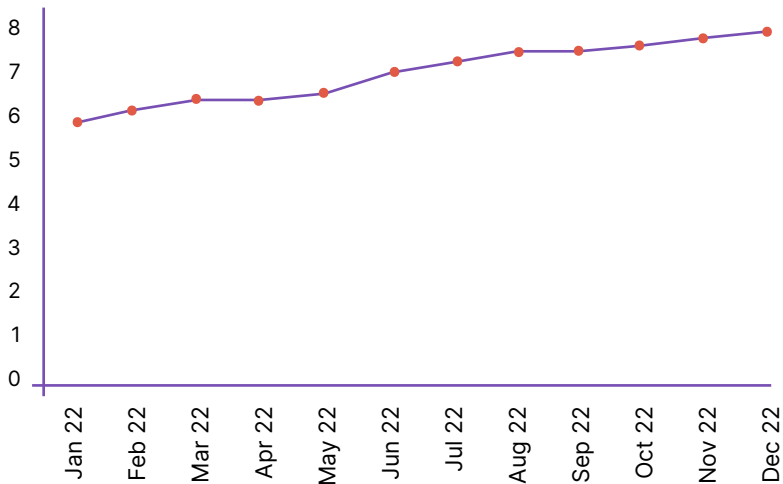
## UPI QR (Million)



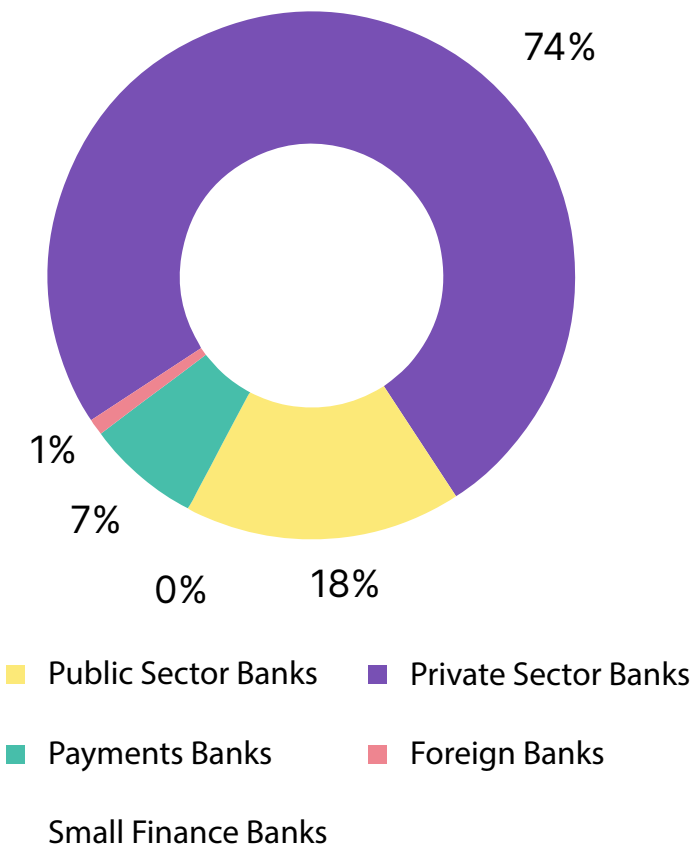
# Merchant Acquiring

As of December 2022, the total number of POS terminals deployed by merchant acquiring banks breached the 7.55 million mark; a 37% YoY growth.

### POS Terminals (Million)



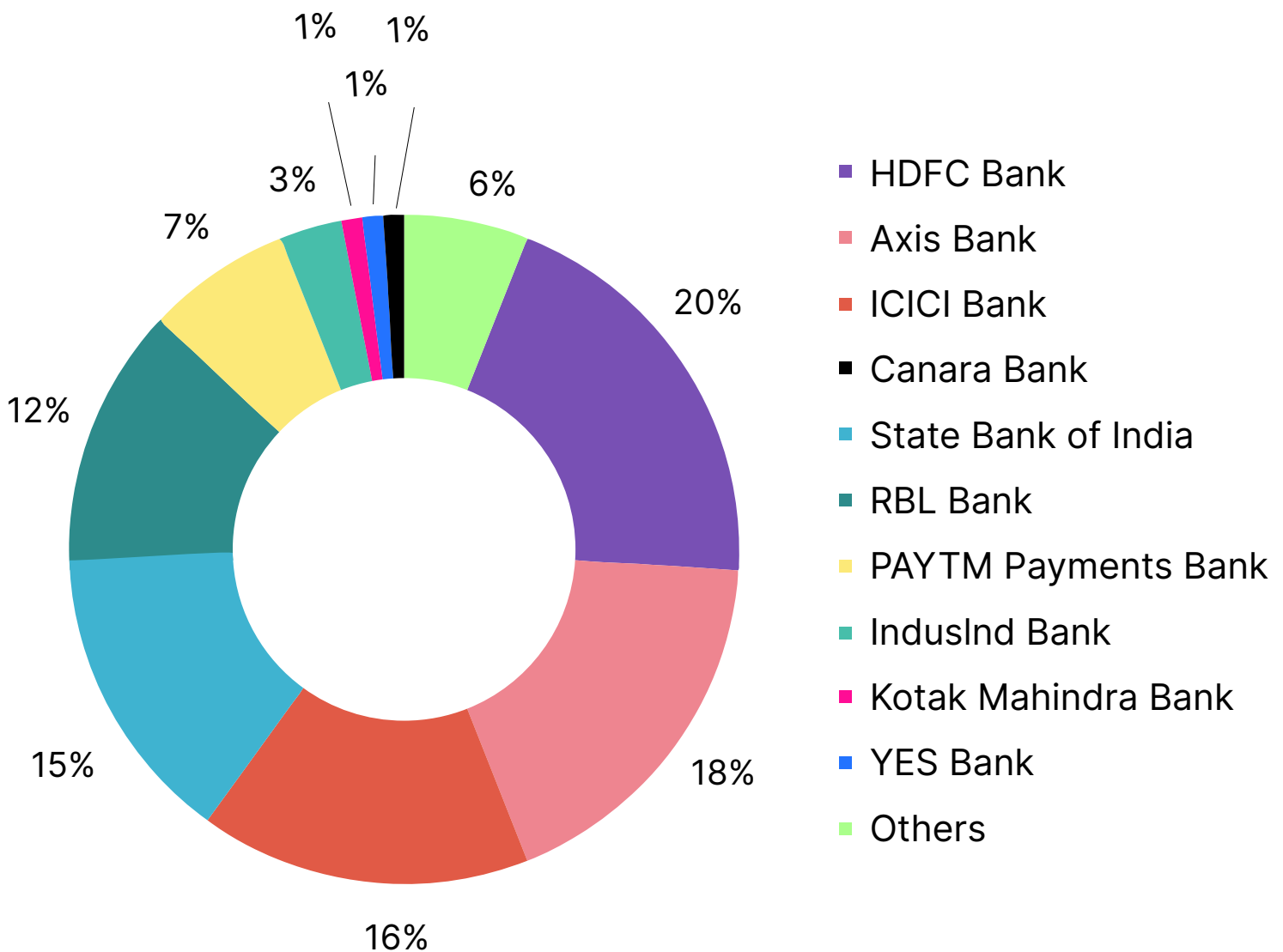
### POS Deployers



Private Sector Banks are dominating the space with 74% market share while Public Sector Banks account for 18%. Payments Banks and Foreign Banks continue to have a 7% and 1% market share respectively.

# POS Market share:

HDFC Bank, Axis Bank, ICICI Bank, State Bank of India, RBL Bank, Paytm Payments Bank, IndusInd Bank covers 92% market share as of December 2022.



# Worldline Insights

## Top 10 states & UT with the highest number of transactions at physical touch points in 2022 for Worldline India:

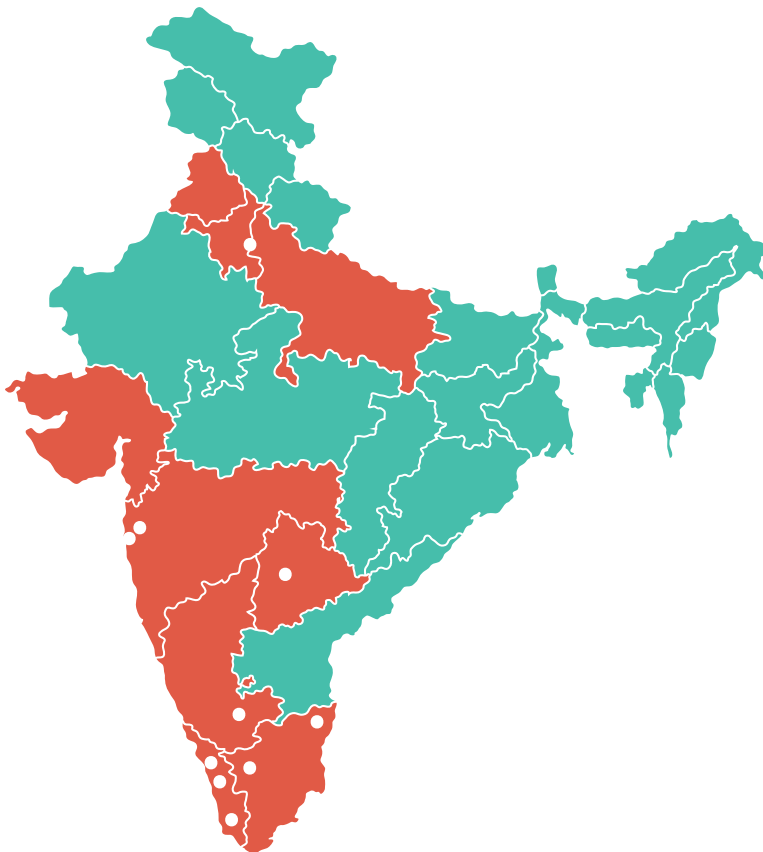
Kerala, Maharashtra, Tamil Nadu, Karnataka, Uttar Pradesh, Delhi, Telangana, Gujarat, West Bengal and Punjab.

## Top 10 cities with the highest number of transactions at physical touch points in 2022 for Worldline India:

Bengaluru, New Delhi, Mumbai, Pune, Chennai, Hyderabad, Ernakulam, Thiruvananthapuram, Thrissur and Coimbatore.

In 2022, frequently visited physical merchant categories like grocery stores, restaurants, clothing and apparel, pharmacy and medical, hotels, jewelry retail, specialty retail, household appliances and departmental stores together accounted for over 43% in terms of volume and about 40% in terms value.

In the online space, e-commerce (shopping for goods and services), gaming, utility & financial services contributed to over 85% transaction in terms of volume and 25% in terms of value. Education, Travel & Hospitality sector contributes to the remaining 15% & 75% in terms of volume and value respectively.



### Top 10 States

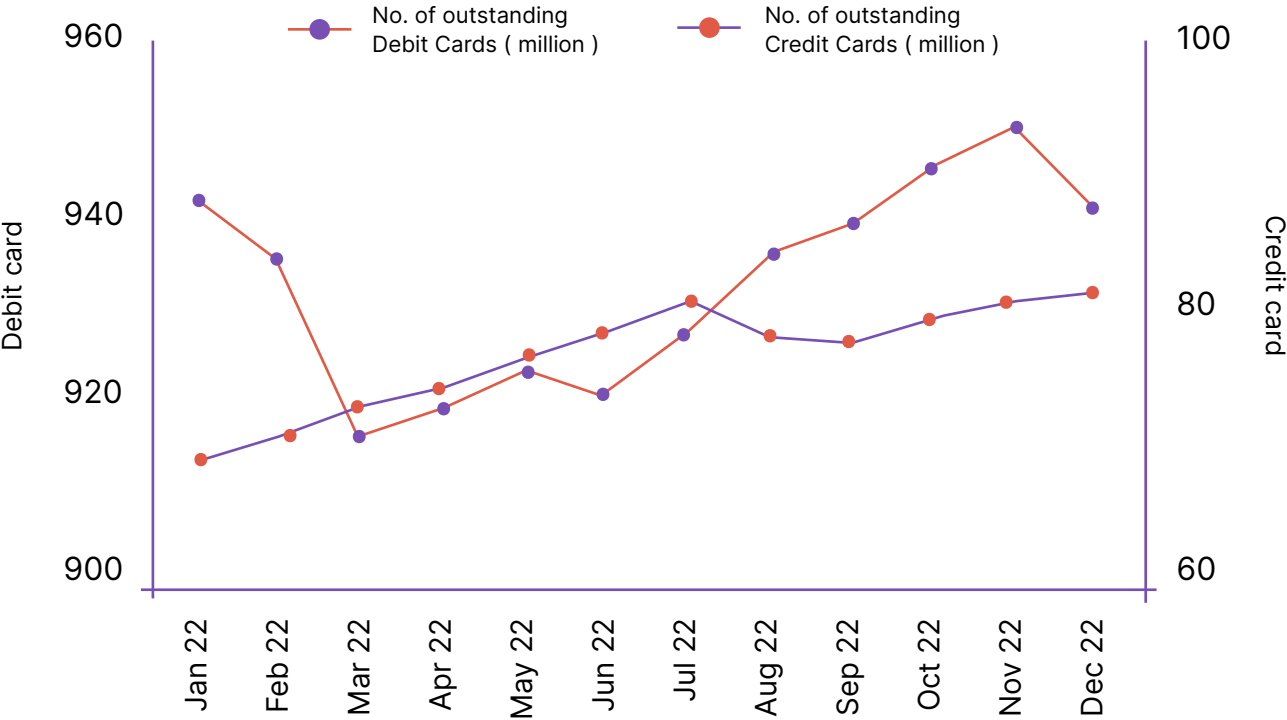
1. Kerala
2. Maharashtra
3. Tamil Nadu
4. Karnataka
5. Uttar Pradesh
6. Delhi
7. Telangana
8. Gujarat
9. West Bengal
10. Punjab.

### Top 10 Cities

1. Bengaluru
2. New Delhi
3. Mumbai
4. Pune
5. Chennai
6. Hyderabad
7. Ernakulam
8. Thiruvananthapuram
9. Thrissur
10. Coimbatore

# Card Issuance

The total number of credit and debit cards in circulation by end of Year 2022 was **1.02 billion**. The number of outstanding credit cards increased by 18% from 69 million in December 2021 to 81.1 million in December 2022 while outstanding debit cards increased by 0.2% from 938 million to 939.4 million during the same period.



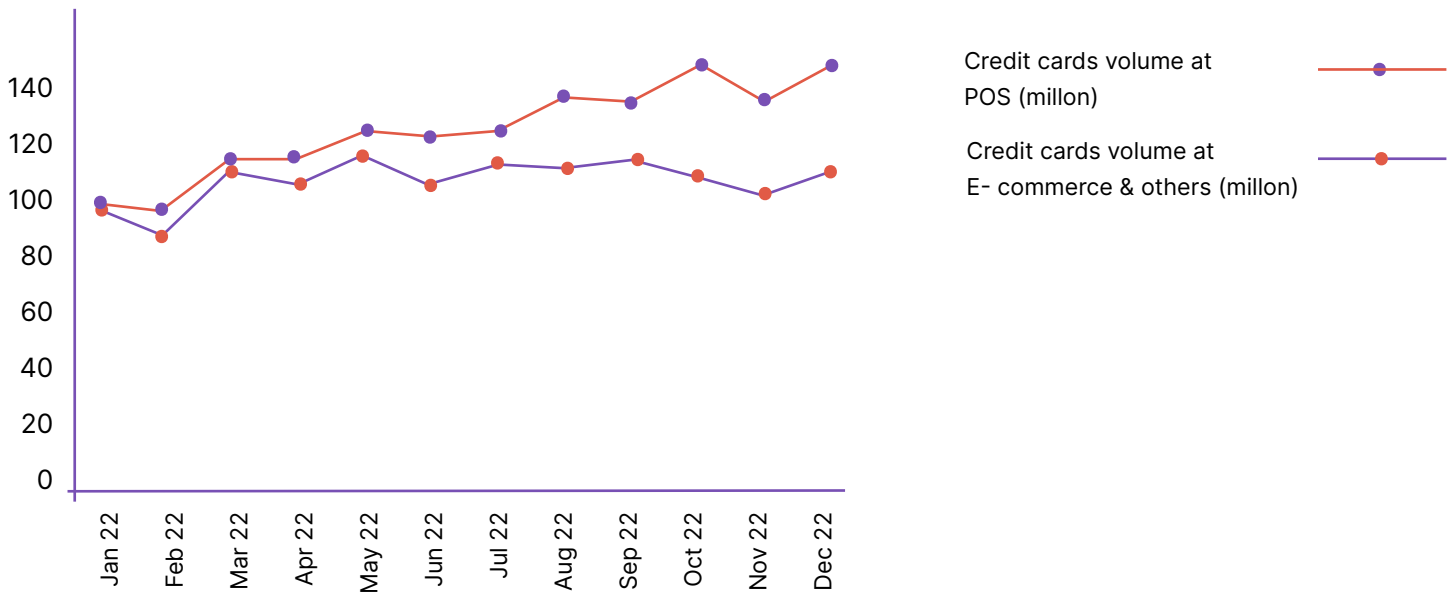


# Transaction Analysis of Credit Cards

In Year 2022, Credit cards volume and value stood at 2.76 billion and ₹ 13.12 trillion respectively.

The number of credit card transactions at POS accounted for 1.47 billion while e-commerce was 1.29 billion. In terms of value, consumers transacted ₹ 5.1 trillion at POS and ₹ 8.1 trillion on e-commerce transactions via credit cards in Year 2022.

## Credit Card- Volume (Million)



## Credit Card- Value (₹ billion)

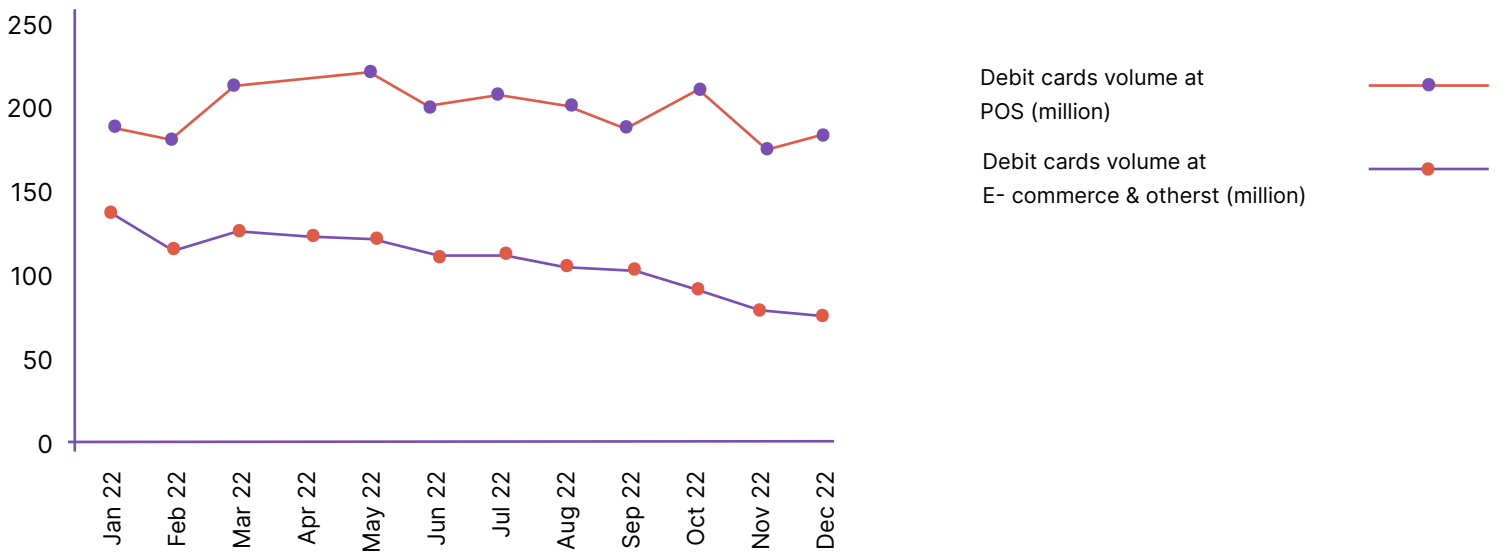


# Transaction Analysis of Debit Cards

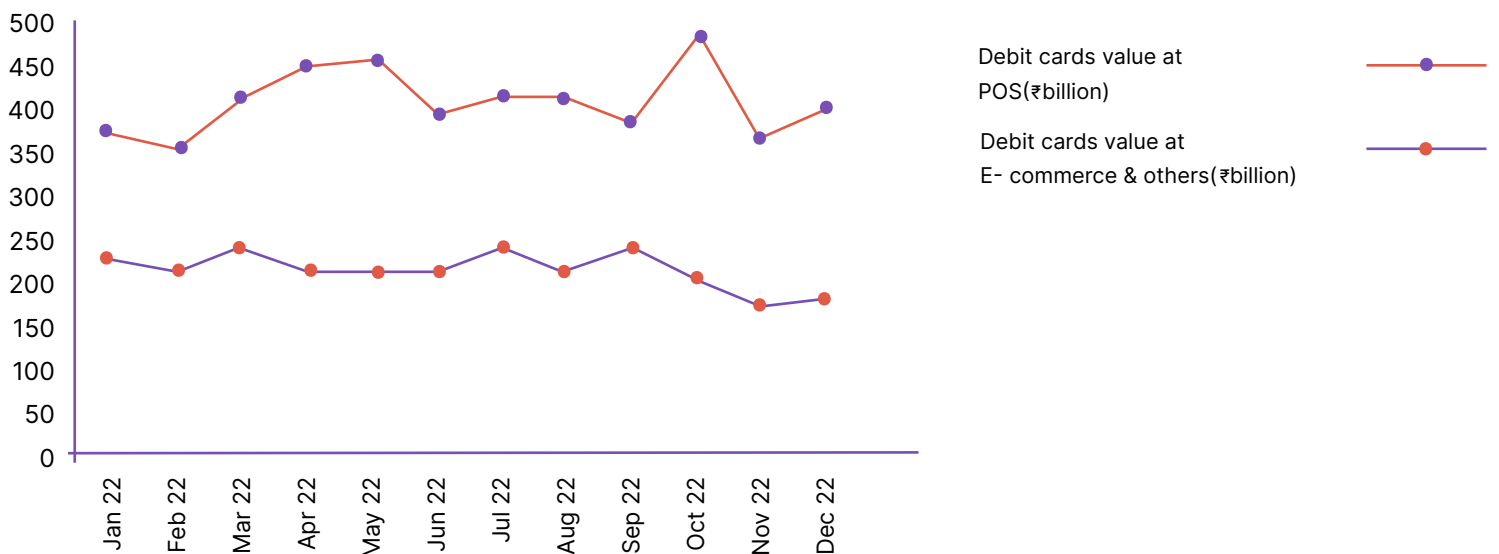
In Year 2022, debit card transactions volume and value stood at 3.64 billion and ₹ 7.4 trillion respectively.

Out of the total debit card volume, transactions at POS accounted for 2.38 billion while transactions at ecommerce was 1.26 billion. In terms of value, ₹ 4.85 trillion was processed at POS terminals while ₹ 2.56 trillion was processed at e-commerce via debit cards.

## Debit Card- Volume (Million)



## Debit Card- Value (₹ Billion)

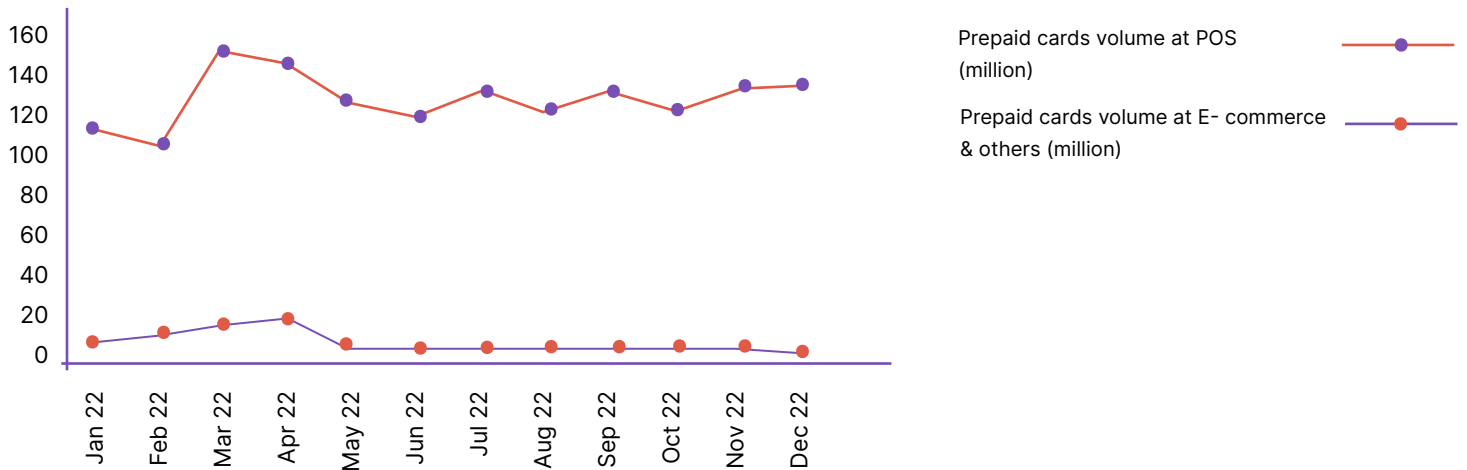


# Prepaid Payment Instruments

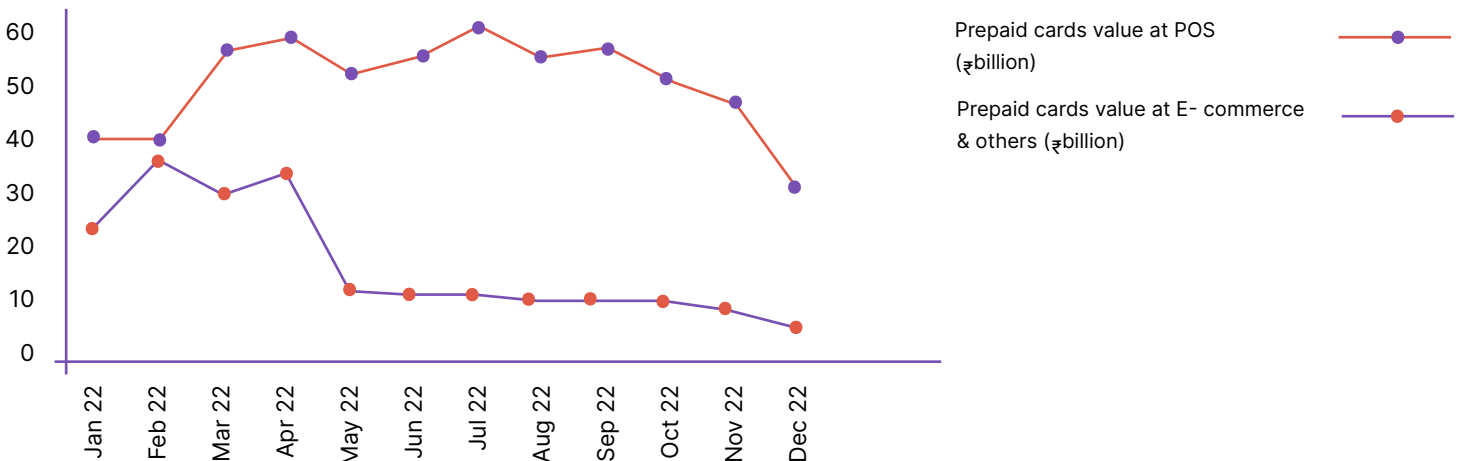
By December 2022, number of prepaid payment instruments were 16.23 billion. Out of which, 13.34 billion were wallets and 288.8 million were cards.

Total prepaid cards transactions volume and value was 1.61 billion and ₹ 765.5 billion respectively. Its transactions at POS accounted for 122.6 million while transactions through ecommerce were 1.49 billion. In terms of value, prepaid cards at POS processed transactions were worth ₹ 209.1 billion while ₹ 556.5 billion was processed through ecommerce.

## Pre Paid Card- Volume (Million)



## Pre Paid Card- Value (₹ Billion)

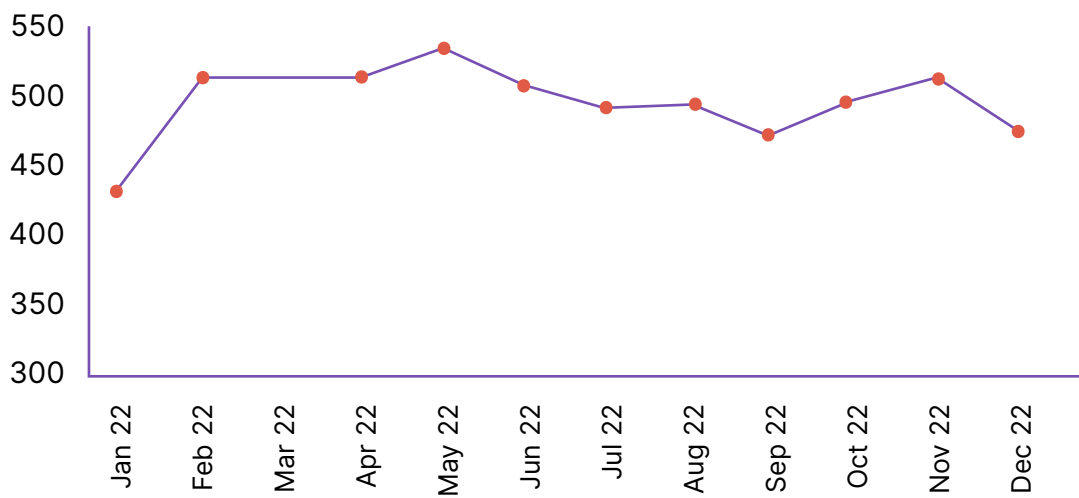


# Transaction analysis of Mobile Wallets

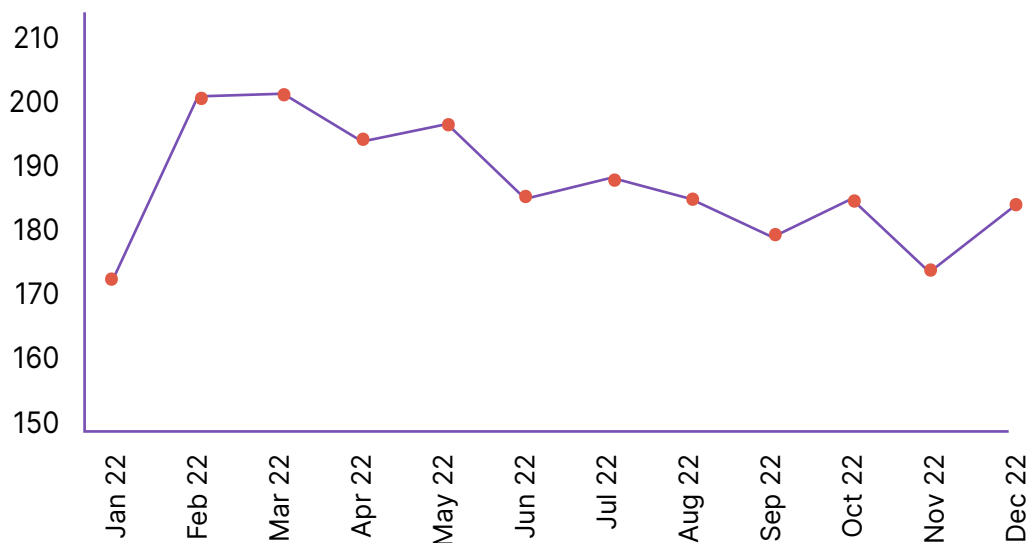
In Year 2022, the number of transactions through mobile wallets was 5.87 billion and its value was ₹ 2.25 trillion.

This includes purchase of goods and services and fund transfer through wallets. Transactions through wallets are growing steadily. It recorded a 17% increase in volume while its value of transactions decreased by 6% as compared with Year 2021.

## m-Wallet Volume (Million)



## m-Wallet Value (₹ Billion)



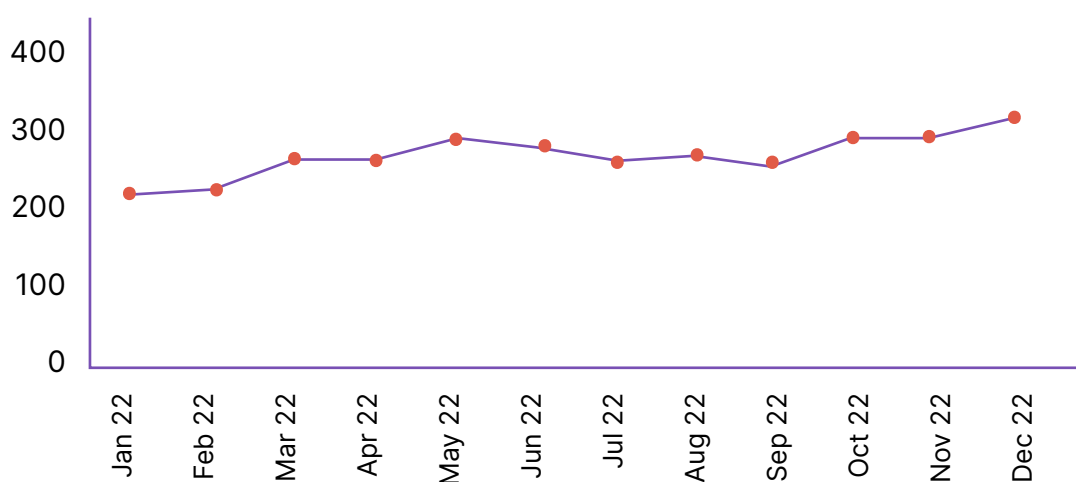
# National Electronic Toll Collection

In Year 2022, NETC processed about 3.25 billion transactions worth ₹ 509.11 billion.

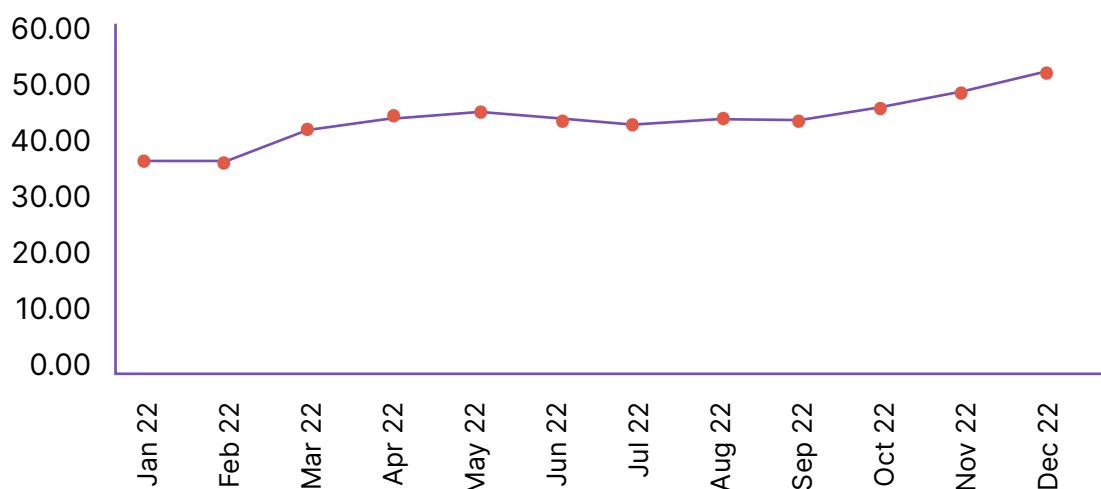
The transactions volume increased by 31% while value increased by 37% as compared to the Year 2021.

As of December 2022, total number of banks live with NETC FASTag were 36.

## NETC Volume (Million)



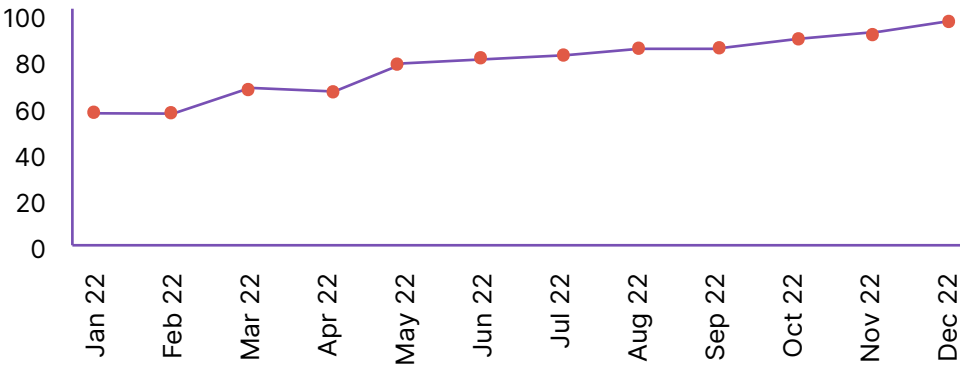
## NETC Value (₹ Billion)



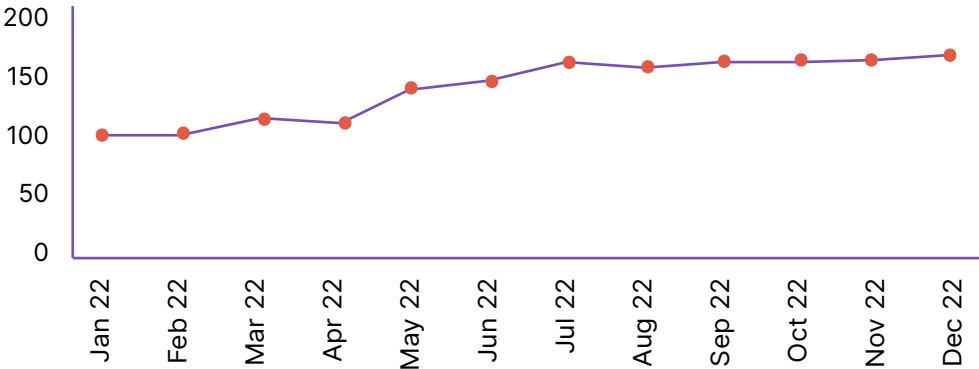
# Bharat BillPay

The transactions volume passing through Bharat Bill Payment Central Unit (BBPCU) in Year 2022 stood at 985.7 million while the transactions value was ₹ 1.70 trillion. It registered a growth rate of 75% and 83% in volume and value respectively as compared with Year 2021.

## Bharat BillPay Volume (Million)



## Bharat BillPay Value (₹ Billion)

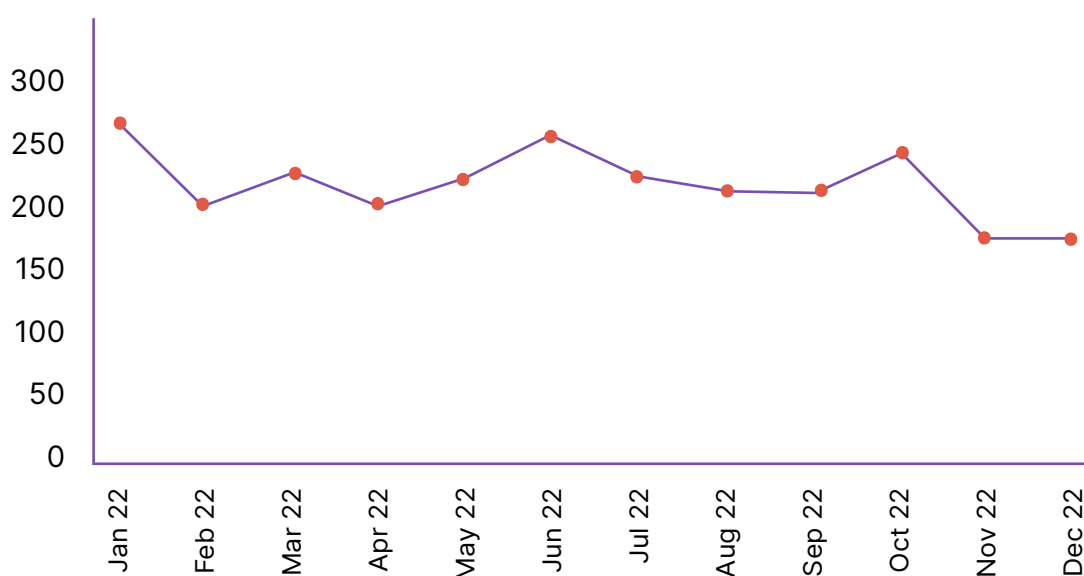


# Aadhar enabled Payment Service

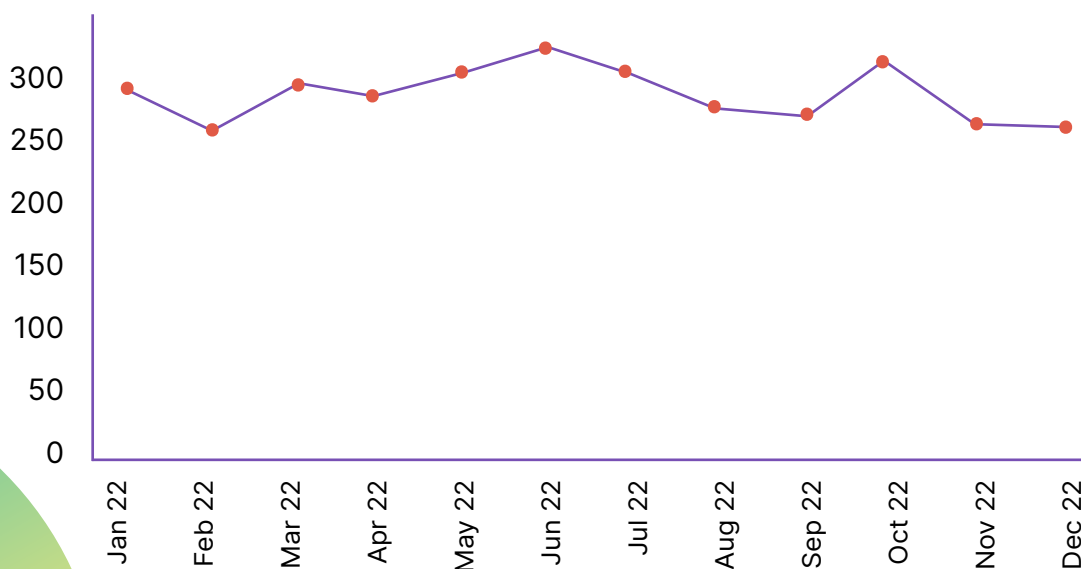
In Year 2022, AePS transactions recorded a substantial volume of over 2.63 billion transactions in volume and ₹ 3.42 trillion in value.

It registered about 24% growth in volume and 20% in value over Year 2021. AePS is a bank led model which allows online inter operable financial inclusion transaction at PoS (MicroATM) through the Business correspondent of any bank using the Aadhaar authentication.

## AePS Volume (Million)



## AePS Value (₹ Billion)



Never miss payment alerts with

## VABOX

Voice Alert Box  
MDP810

Simple to set up  
Sleek, Compact & Robust



### Crisp and clear alerts

Ensures wider hearing range by covering the entire store

### Multilingual

Enables adoption among larger merchant and customer base. It also overcomes challenges of visual impairment and encourages inclusivity

### Powerful battery

Long-lasting powerful battery ensures longer usage and makes the device portable for optimum use

### Digital display

Provides clear visibility towards transaction amounts when processed

### Sophisticated processor

Gives instant alerts and seamlessly perform multiple applications

### Essential communication

Offers uninterrupted superior connectivity



4G



Speaker



Wifi



Battery



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