

India Digital Payments Report

Q2 2019



On the occasion of India's 73rd Independence Day, the Prime Minister re-emphasized the importance of digital payments and encouraged everyone to embrace it with a new motto "Digital Payment ko Haan, Nakad ko Na" - Yes to digital payments, No to cash. Clearly, our country is steadily moving towards this goal.



With a number of digital payment options available with consumers to make purchases, the acceptance infrastructure now needs to grow to meet the demand from consumers and merchants alike. Obviously for this to happen, similar to how incentives are being given to merchants and consumers, incentives need to be given to merchant acquiring companies to meet this goal. The merchant acceptance ecosystem is a diverse one with multiple modes such as POS, UPI, BQR among others.

Worldline, an independent player in the electronic payments and transactions market, is dedicated to the cause of digital payments in the country with its state-of-the-art products and services.

We are pleased to know that our research reports are serving your need to interpret consumer payments trends across retail platforms and we hope that our upcoming editions will continue to benefit you. In this issue, we present an in-depth analysis of payment trends from April 2019 till June 2019 along with interesting consumer payments behaviour. In addition, we give our perspective on how we see current technologies evolving in the coming years.

Happy reading!

Deepak Chandnani
Managing Director, Worldline South Asia & Middle East

Worldline

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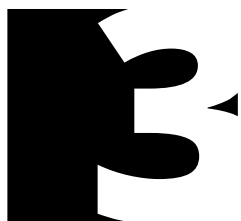
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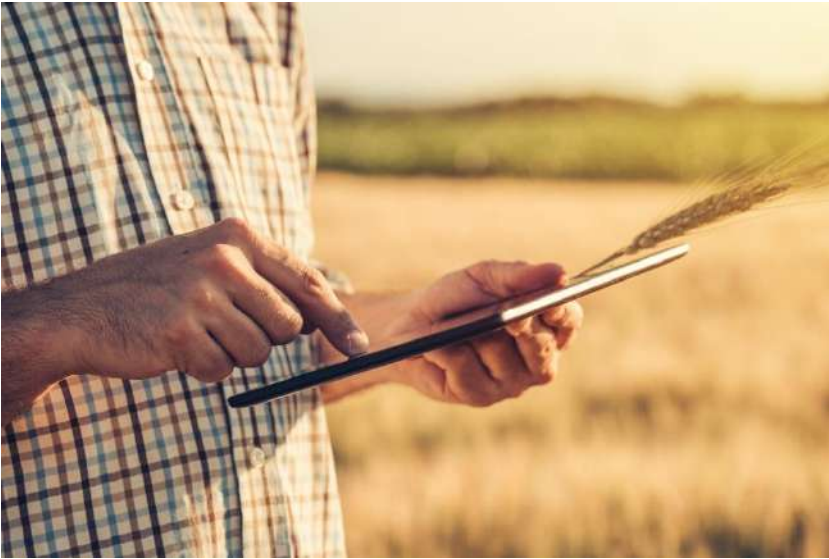


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The Future of Payments



As far as electronic payments are concerned, a favourite pastime of late has become the prognostication on how the electronic payments ecosystem is going to evolve in the coming years. Most of them revolve around how cash is going to disappear and listing some vague very high level trends. Both are inherently difficult to gauge.

Cash, in its many forms, has been in existence for over three thousand years and it is not going to disappear by any stretch of the imagination because cash has an important thing going for it; trust. It also helps that cash is more widely accepted at stores than digital payments – go to any tier-3 city and one sees that reality. This is not to dilute the many costs associated with cash both to the economy as well as merchants but the fact that it has existed for so long means that people have learnt to internalize that cost. Obviously, cash usage will go down because there are certain genuine advantages to using digital forms of payments and also because cash usage is so high, the only way for it is down as new payment channels proliferate.

As far as trends go, there is a challenge predicting how things are going to evolve in this space. To put things in perspective, how many of us made a payment on our mobile phones just 3 years ago? These days it seems unimaginable. Similar is the case of QR codes. Only a few years ago, QRs were primarily used in the logistics industry – now they driving the digital payments revolution where merchants can accept payments without an asset.

On that note, we attempt to give our perspective on how we see the digital payments ecosystem will move in the coming years not so much from the perspective of predicting future payment modes but more from the perspective of how current technologies will evolve.

1. Current dominant forms of payments are not going to disappear – a favorite prediction of ‘futurists’ is that physical cards will disappear. This is unlikely to happen. Point of sale terminals will continue to be at merchant locations and payments with cards will be done by cardholders. One need only look at advanced countries to see why this will continue to be the case.
2. Convenience – One ‘card’ – physical or otherwise – will be used for everything. The card will be capable of debit or credit payments, transit, double up as an ID, among others. The NCMC card comes close to this right now but the future will be a boosted version of the NCMC card.
3. The Internet of Things (IoT) will be a much bigger reality – see the next article on this.
4. Crypto-currencies may be relevant only on internet ecommerce and will not see much of an uptake otherwise as governments continue to regulate them heavily. Comments from governments on Facebook’s Libra currency are only an indicator of things to come.
5. Trust & Security – while the security aspect is already present to a good extent, consumers and merchants alike have a trust issue when it comes to digital payments. This is ironically what makes cash tick and the trust part will be the underpinning of all futuristic developments – the consumer and merchant will be made more aware from the debiting of money to the credit of that money accurately.

Sunil Rongala
Vice President
Strategy, Innovation & Analytics

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Internet of Things (IoT)

The Internet of Things enables M2M (Man to Machine) type of communication by integrating physical devices and objects with communication networks such as the internet, NFC or RFID. These devices are equipped with micro-processors, sensors and software that allow data collection, its processing and distribution to create a smart environment and enable quicker performance of mundane operations.

It is predicted that by 2020 more than 50 billion devices ('things') will be connected and daily use devices or objects will get smarter and connected. Integration of payments with these connected devices is revolutionizing the industry. The ways in which payments in IoT will work are:

Smart homes: IoT is set to dominate micro payments by transforming connected devices into payment channels. For example; smart refrigerators will order groceries based on how much are stocked in the fridge and will replenish its stock. Similarly, smart coffee machines can replenish its stock of coffee beans. Even electrical devices like tube lights, bulbs and switches can monitor themselves and notify the user if it needs repair or replacement.

In-store experience: Using wearables, stores can provide personalized information to consumers. When a consumer steps into the store, using past history and analytics, stores can provide information on their highest volume purchase items, offer customized deals and also inform them where it can be picked up from. Once the product is picked up from the shelves, the consumer can walk out of the store with the store having added the total and debited the consumers account.

Connected cars: Auto industry is coming up with number of advanced car models which allow the drivers to order and pay for goods and services. Fully equipped cars can update the user about the weather conditions, detect traffic and suggest alternate routes to commute; it can also locate food outlets on the way to its destination and order items for pick-ups. In addition to this, it can also facilitate voice banking, pay at fuel pumps, parking and toll plazas and enable payments on-the-go.

Fraud Risk Management: IoT helps payment companies to predict fraudulent cases in card transactions as well. Banks and card schemes can be informed immediately if the transaction appears to be fraudulent. Smart solutions can alert the systems of suspicious transaction by examining consumer's location of transaction and their mobile phone, if they are at different locations.

While there are some challenges like high prices, security and privacy concerns preventing high adoption of IOT based solutions, its implementation will enable us to enhance our products and services, and also develop new streams of revenue in coming years. With almost half of the world's population online, and technology now being a deeply integrated part of our lives, consumers are going to want more and better experiences that enrich their lives using these smart solutions.

ANTERA

Android POS

Worldline brings to you high performance, Android based smart POS terminals with stylish and elegant appearance, ergonomic design and a full touch screen

Features

- Portable, compact and stylish design
- 4G, Wi-Fi, Bluetooth supported,
- Faster operation experience
- Dual camera, more convenient
- 5200mAh capacity, more power
- Bank card, mobile payment, QR payment all in one
- PCI, UPTS 2.0 certified, exceptional security
- Enhanced operating experience with Android 5.X
- Third party app integration



SWIPE

All Scheme
Magstripe cards
accepted



CHIP

All Scheme Chip
cards accepted



NFC

- Accepts Paypass,
Paywave
- Qsparc and
Expressway on
the way



HCE

Accepts
SamsungPay



QR

- Accepts BQR
- Accepts UPI

Worldline

Review of Q2 2019

Worldline has over 1 million merchant touchpoints PAN-India accounting for 30% of the merchant acquiring touchpoints. We have analysed transactions processed by us in Q2 2019 (Apr-May-Jun) and derived some unique insights.



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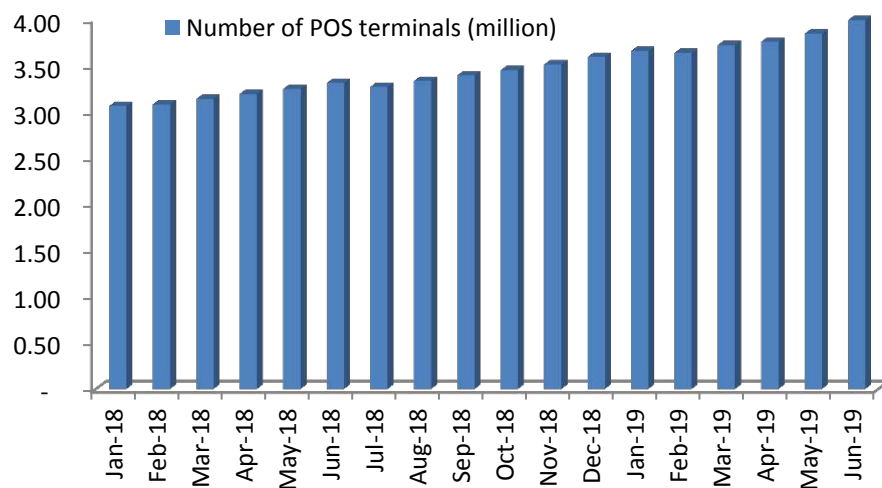
Merchant Acquiring

In order to boost digital payments, Finance Minister Ms. Nirmala Sitharaman in the Union Budget announced several measures like advising business establishments with annual turnover more than INR 50 crore to offer low cost digital modes of payment to their customers and also mentioned that no Merchant Discount Rate shall be imposed on customers as well as merchants.

For digital acceptance to be more widespread, there needs to be a mechanism to incentivize players in this space by making this a reasonably profitable endeavour. This is not unique to this industry and is a common factor across all spaces. The acquiring space is not just about banks – there are multiple non-bank fintech players who make the smooth running of digital acceptance possible. However, when revenues from accepting digital payments is impacted, this negatively impacting all ecosystem players who are central to driving much needed growth of the acceptance / acquiring eco-system.

The number of point of sale (POS) terminals increased to 3.99 million in June 2019 from 3.31 million in June 2018, an increase by a mere 20.5%. This could well be a key impediment in transformation to a cash-lite economy.

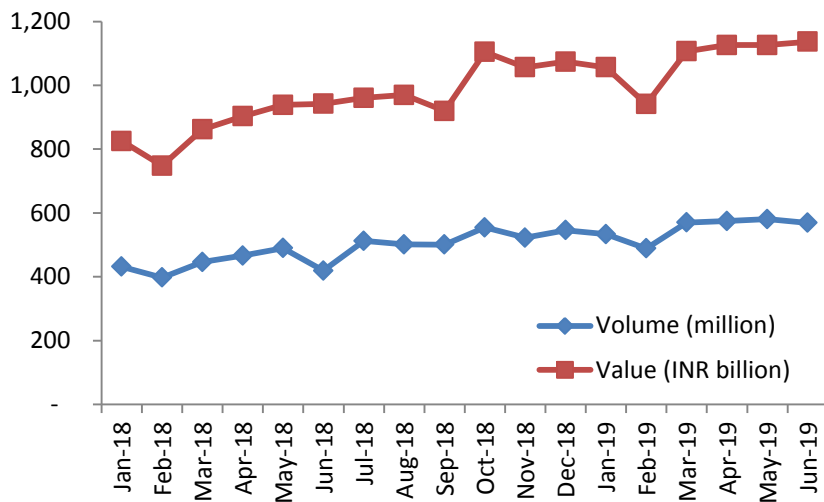
POS Terminal Deployment



Source: Reserve Bank of India

A point to note is that while 29% of transactions done on POS terminals were done using credit cards, they accounted for 51% of the total value spent on POS terminals. The reason is that consumers mostly use debit cards for their daily purchases and credit cards for purchasing high value items. **In Q2 2019, the average ticket size on POS terminals for debit card transactions was INR 1,366 and INR 3,423 for credit card transactions.**

Volume and Value Growth of transactions on POS Terminals



Source: Reserve Bank of India

In addition, while transactions at POS terminals increased from 1.4 billion transactions in Q2 2018 to 1.7 billion transactions in Q2 2019 (up by 25.4%), the share of card transactions at POS terminals to total card transactions at POS terminals and ATMs, went up from 38% to 42% only. This indicates that people still use debit cards primarily at ATMs.

Similarly, while the value of transactions at POS terminals increased from INR 2.8 trillion in Q2 2018 to INR 3.4 trillion in Q2 2019 (up by 21.8%), the share of value of money spent through cards at POS terminals to total money spent through cards at POS terminals and ATMs went up from 26% to 28% only.

The above information is of particular interest because the number of POS terminals actually increased by 20.5% while the number of ATMs remained constant at 0.2 million during the year indicating that despite the push from the government to increase awareness about digital payments along with the sustained effort by banks to enroll merchants to join the digital payments platform, cash is still king.

Some of the key hindrances to the growth of digital payments are the constant squeezing of merchant acquirers, relatively higher cost of acceptance infrastructure, lack of financial literacy amongst smaller merchants, high propensity of households to save in cash and the unorganized cash-intensive SMEs.

Having said that, it will be interesting to witness how the acceptance of contactless NCMC will change the payments landscape in near future.

Worldline Insights

May was the month with the highest number of transactions in Q2 2019. June 2 ranked as the day with the highest number of transactions but this should come as no surprise given it was the weekend and Eid-ul-Fitr was just three days away. The days with second and third highest number of transactions were June 1 and April 13 which were near Eid-ul-Fitr (June 5) and Ram Navami-Baisakhi (April 13-14) respectively. The trend of highest number of transactions recorded during festivals continued like previous quarters.

The merchant categories with the highest volume and value of transactions in Q2 2019 were Grocery, Restaurants, Petrol Stations, Apparel Stores and Speciality Retail which accounted for about 65% volume of transactions and about 40% value of transactions.

It is interesting to note that while jewelry stores accounted for only 2% of total volume of transactions, they accounted for 9% of total value of transactions.

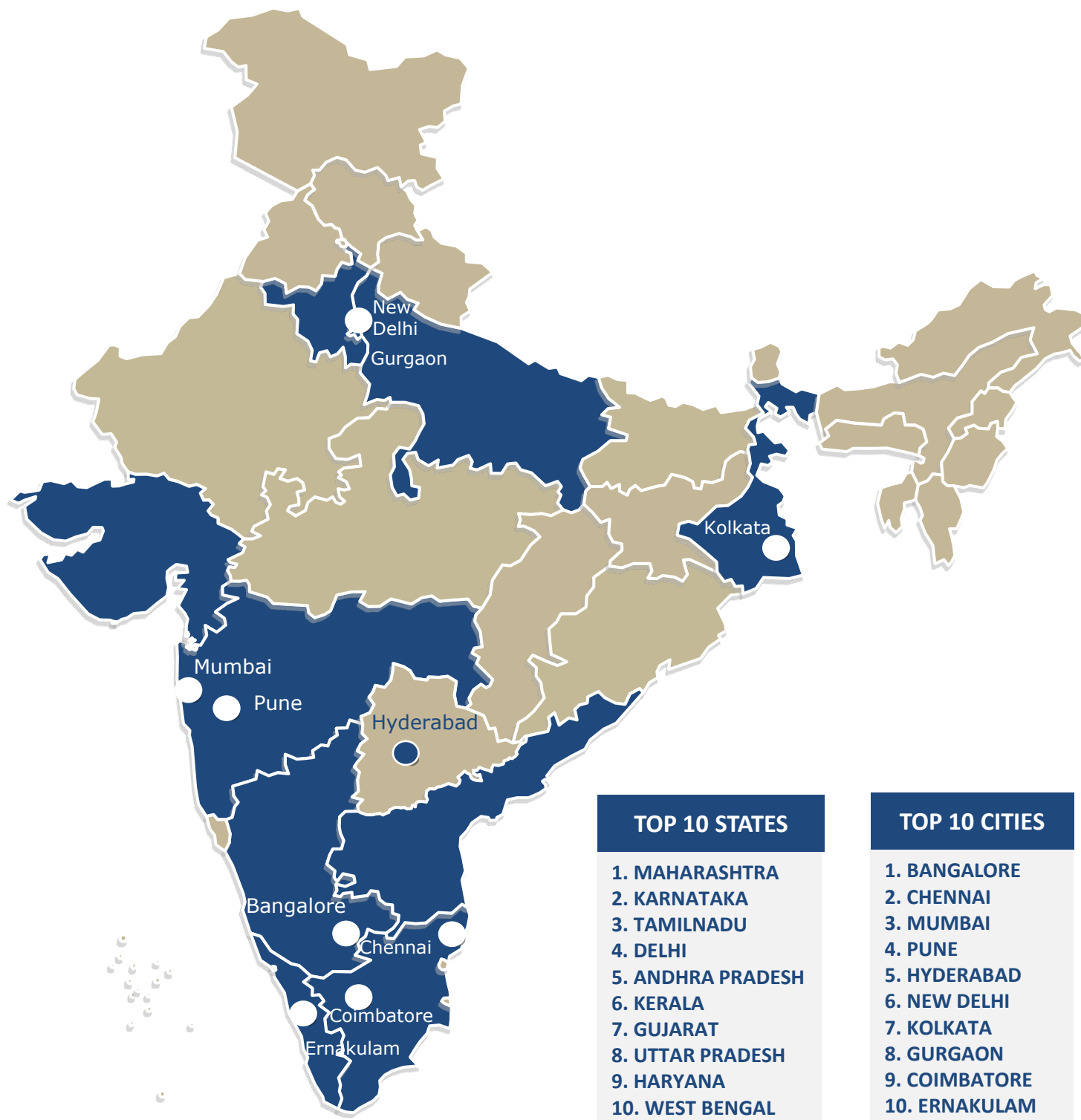
The top categories remained the same for both credit and debit card transactions.



Top Merchant Categories

Worldline Insights

States and cities with the highest number of transactions in the second quarter



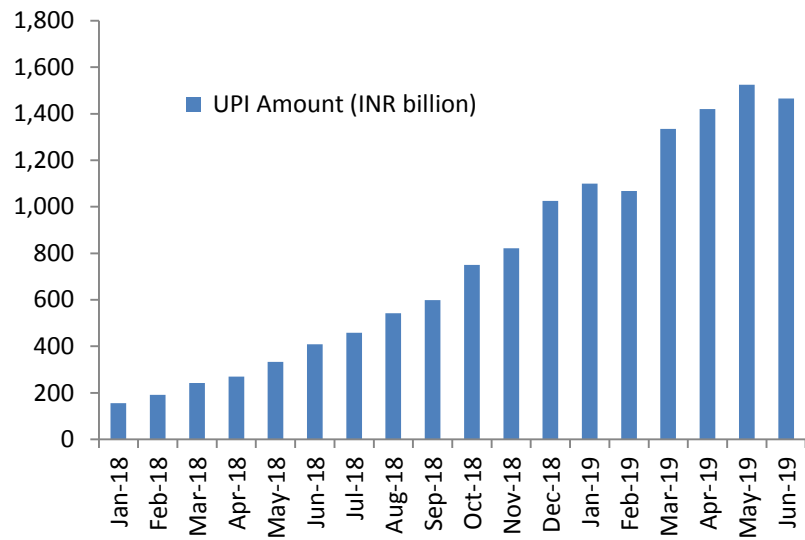
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Unified Payments Interface

After a monumental growth of UPI since 2017, we witnessed a couple of months of tepid growth in Q2 2019.

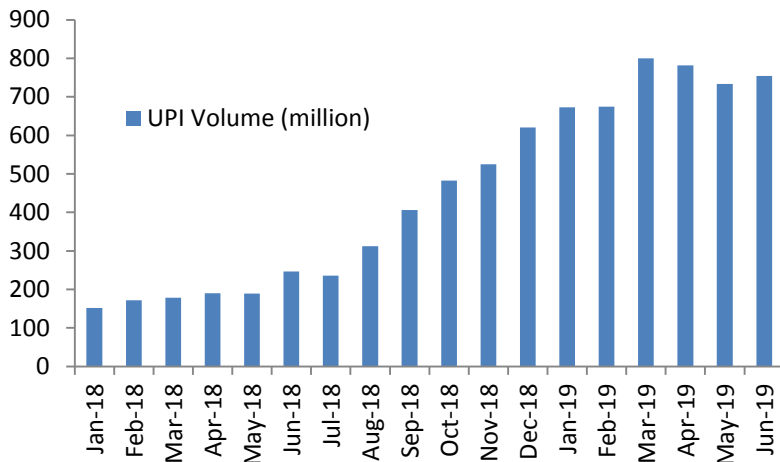
UPI has been taking some share away from more traditional modes of digital payments such as cards and net banking. The total volume of UPI transactions in Q2 2019 was 2.2 billion, a 263% increase from Q2 of the previous year. In terms of value, UPI clocked INR 4.4 trillion, up 336% from Q2 of the previous year.

UPI Transactions Value



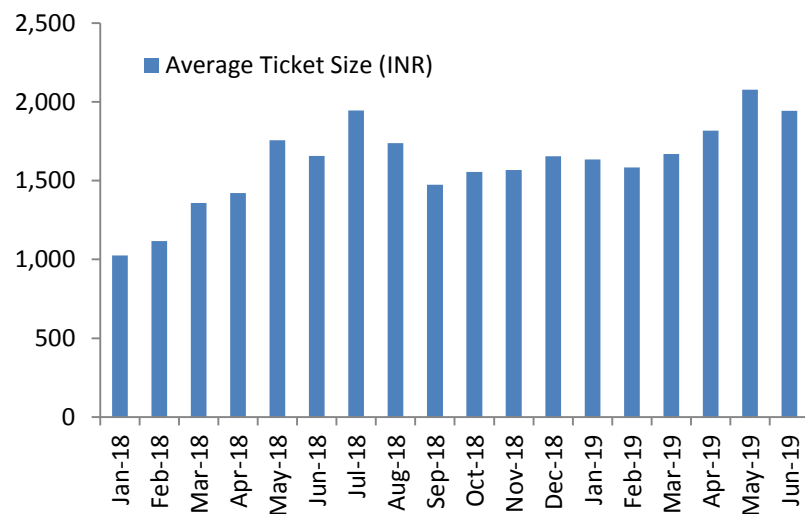
Source: NPCI

UPI Transactions Volume



Source: NPCI

UPI Average Transactions Value (INR)



Source: NPCI

It is worth noting that Paytm, PhonePe and Google Pay collectively process more than 90% of UPI transactions, of which Google Pay leads in terms of both transactions volume and transactions amount.

Paytm has shifted its focus from cashbacks-led P2P transactions and committed that money towards achieving growth in offline merchant payments. It would be interesting to know how other players will drive further growth for UPI. Also, with the debut of players such as Amazon Pay, Mi Pay, and the impending mass rollout of WhatsApp Pay, it looks like the UPI ecosystem would most likely continue its momentum.

UPI Transactions in July 2019

PSP	Transactions Volume (million)	Transactions Value (INR billion)
Google Pay	301	592
Paytm	133	205
PhonePe	296	505

Source: The Economic Times

Several aggregators are increasing UPI merchant base by pushing QR based offline acceptance platforms. It is expected to touch 1 billion transactions a month with a focus on Person-2-Merchant payments.

The roll out of UPI 2.0 features clubbed with attractive cash back offers by third party UPI players will give a further boost to UPI transactions. Also, a new UPI development is the roll-out of UPI payment solution for IPOs by SEBI and NPCI to provide convenience to consumers while reducing the time taken to process IPO application forms. SEBI has made it mandatory for retail investors who want to bid for shares in an IPO through Application Supported by Blocked Amount (ASBA) mode to apply only through the UPI route.

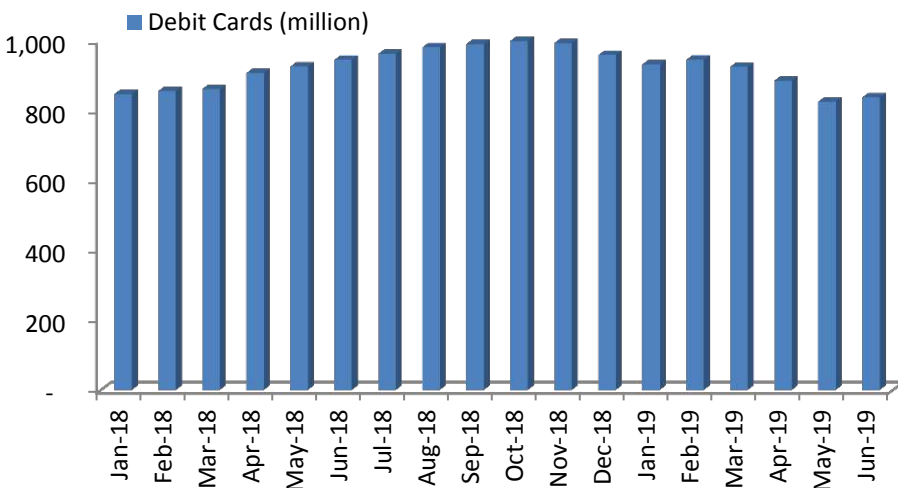
Both UPI and Immediate Payment System (IMPS) are interbank instant fund transfer mechanisms and have witnessed increased adoption with the government's push towards a cash-lite economy. IMPS continued to rise despite the growth in UPI and wallets, and continued its strong growth in Q2 2019. IMPS recorded 539 million transactions, a 56% increase from Q2 of the previous year. In terms of value, IMPS clocked INR 5.2 trillion, up 61% from Q2 of the previous year.

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Card Issuance

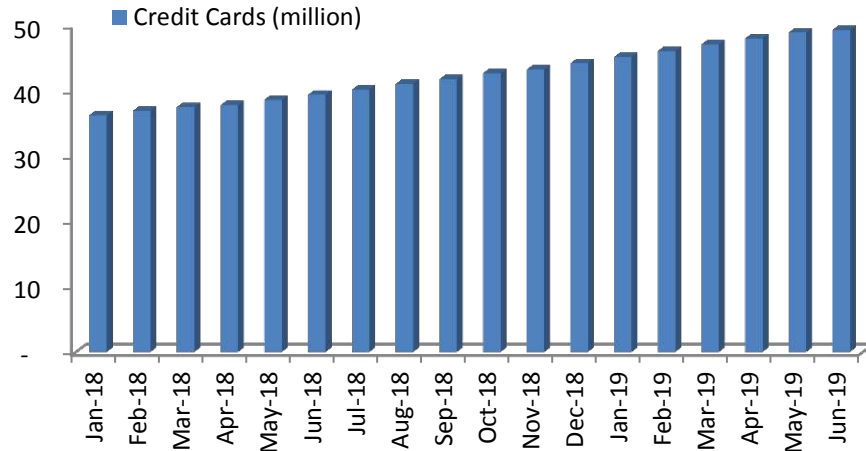
Card issuance will see an uptick with the rise of several metro and smart city projects, and with payments banks and aggregators also set to introduce credit cards to a new all-digital consumer base. Banks and Fintech companies offer attractive cash-back offers to credit card consumers. Credit card consumers can enjoy rewards from both banks and Fintech companies. National Common Mobility Card was launched for seamless use in transit payments and can also be used for toll parking, small value retail payments etc. It is an interoperable and scalable contactless card that has been adopted by all card schemes.

Debit Cards in Operation



Source: Reserve Bank of India

Credit Cards in Operation

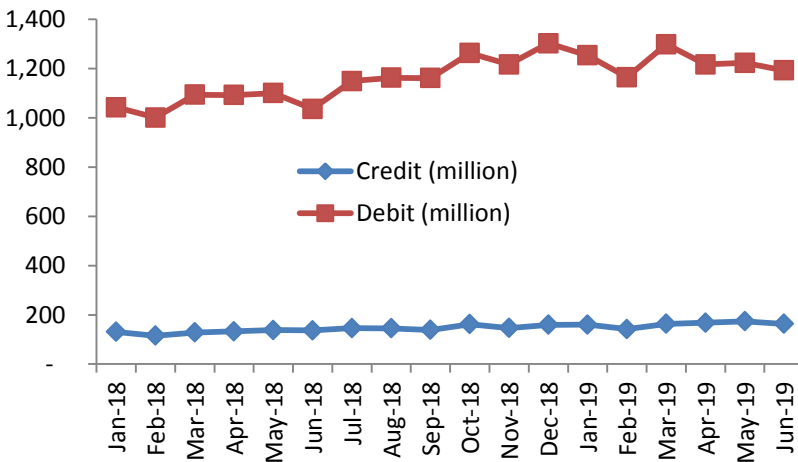


Source: Reserve Bank of India

There are about 837 million debit cards and about 49 million credit cards in circulation. It is interesting to note that between June 2018 and June 2019, there was an addition of about 10 million credit cards and reduction of about 107 million debit cards. While the rise in credit cards may be attributed to growing digital payments and the expansion of retail borrowers in the market, the fall in debit cards could be due to the mass closure of zero balance accounts.

In Q2 2019, the total number of credit card transactions was 505 million, an increase of 23.7% over the previous year and the total number of debit card transactions was 3.6 billion, an increase of 12.5% over the previous year.

Credit and Debit Card Transactions Volume



Source: Reserve Bank of India

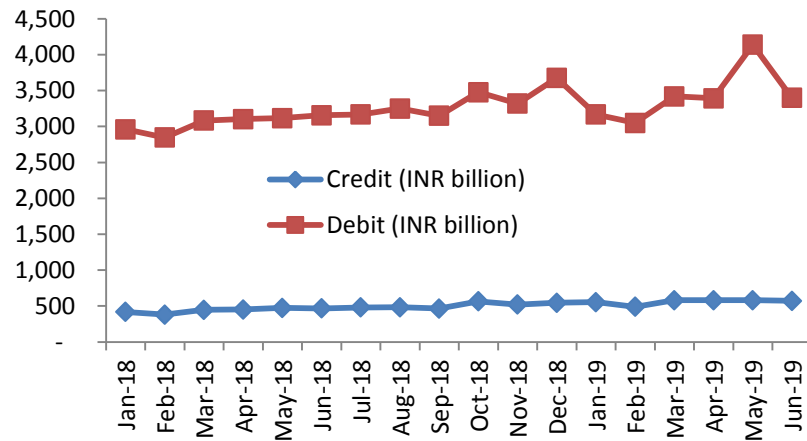
The below table illustrates how credit and debit cards are used. It is quite clear that debit cards are largely used for ATM withdrawals while credit cards for POS transactions. Also, consumers tend to make larger ticket size purchases through credit cards at POS terminals when compared to debit cards. The challenge will be how to move ATM transactions into digital payment transactions which fits into the national agenda of going digital.

	Volume (million)		Value (INR billion)		Average Ticket Size (INR)	
	POS	ATM	POS	ATM	POS	ATM
Credit cards	502	3	1,720	12	3,423	4,656
Debit cards	1,222	2,411	1,669	8,516	1,366	3,532

Source: Reserve Bank of India

In Q2 2019, total value of transactions done on credit cards was INR 1.7 trillion, an increase of 24.4% over the previous year. The total value of transactions done on debit cards was INR 10.9 trillion, an increase of 16.6% over the previous year.

Credit and Debit Card Transactions Value



Source: Reserve Bank of India

NPCI reported that over 1,100 banks issue RuPay cards. Its customer base is now over 600 million, claiming 58% market share in card issuance while the combined POS and e-commerce transactions share in volume and value is currently at 30% and 25% respectively.

RuPay Card Transactions at POS in Q2 2019

Volume (million)	Value (INR billion)
179.5	267.6

Source: NPCI



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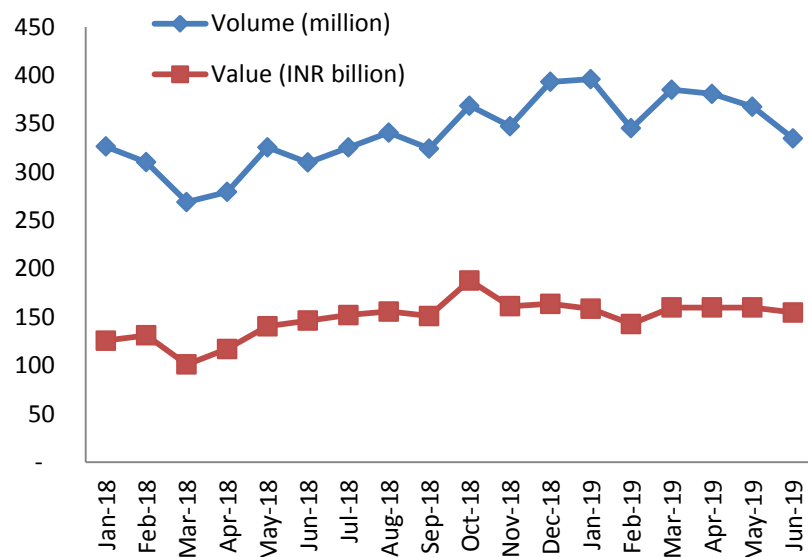
Mobile Wallets

The growth of e-commerce and an increased penetration and usage of smartphones and internet are driving the mobile wallet market in India.

The Reserve Bank of India has permitted 46 entities to launch their Prepaid Payment Instruments (PPI) for consumers and according to their latest data, **the number of transactions done on mobile wallets in Q2 2019 was 1.08 billion, an increase of 18.4% over Q2 of previous year while the value of transactions in Q2 2019 was INR 474 billion, an increase of 17.5% over Q2 of the previous year.**

NASSCOM, the industry body for technology companies, has written to the RBI, government and UIDAI for an extension for the mandatory full KYC deadline and usage of alternative digital KYC channels so that the industry has adequate time and means to abide by the regulatory mandate. As the August 31 deadline for full KYC looms, the share of full KYC wallets is barely 15%.

Volume and Value of Transactions done on Mobile Wallets

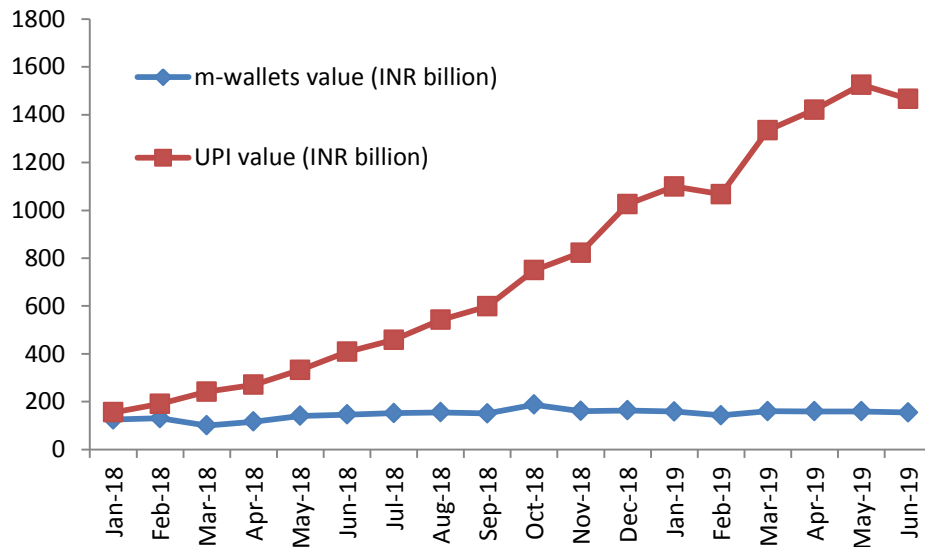
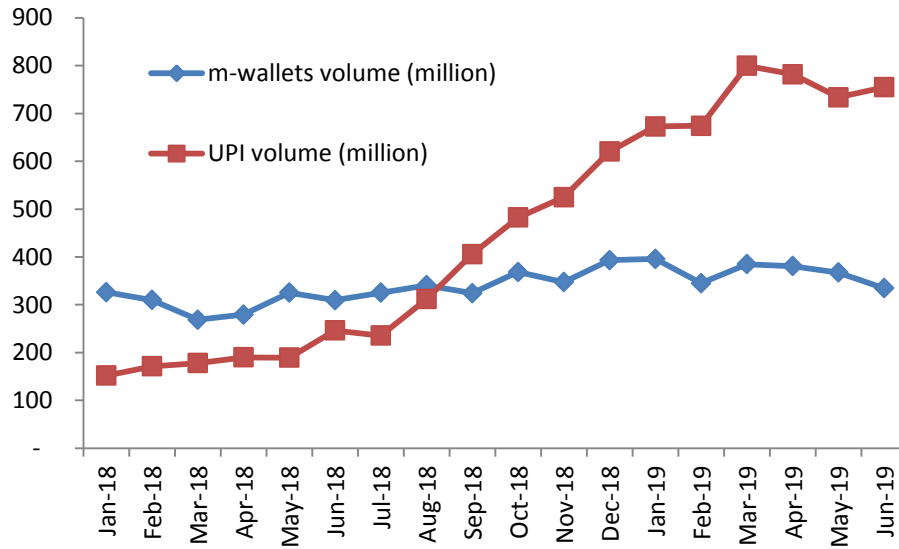


Source: Reserve Bank of India

The growth of mobile wallets has not taken off much following the emergence of UPI. Its struggles come in direct proportion to the unprecedented growth of UPI. While there was an 18.4% increase in the number of transactions done on mobile wallets (1.08 billion) in Q2 2019, the increase in the number of transactions done on UPI (2.27 billion) over the same period was a massive 263%.

In absolute terms as well, transactions done using mobile wallets in Q2 2019 (INR 474 billion) are only 10% of the size of the total transaction value on the UPI platform (INR 4.4 trillion). It is likely that the growth in UPI is coming at the expense of wallet transactions.

Mobile Wallets vs UPI



Source: Reserve Bank of India



National Electronic Toll Collection

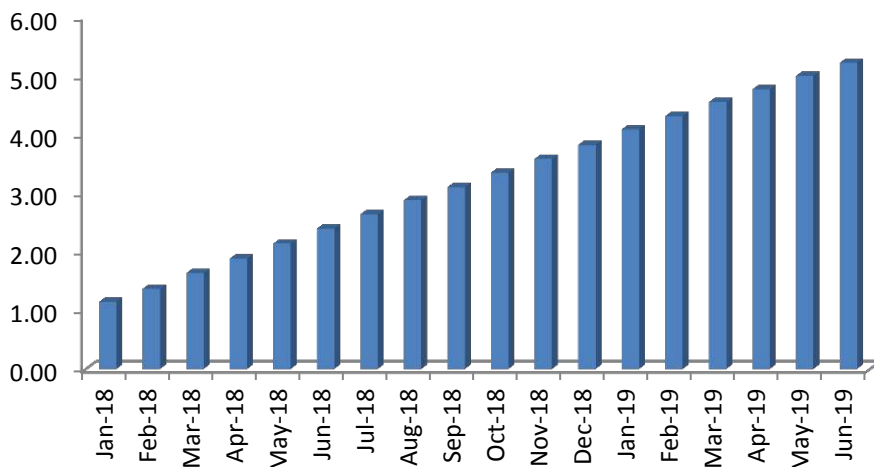
NETC has been developed to meet the electronic tolling requirements of India offering an interoperable nationwide toll payment solution.

As of now, NETC amounts for 25% of the total toll collected. It is the perfect solution as it enhances efficiency in processing transactions, tackles the menace of toll evasions done on highways and reduces congestion around toll plazas, fuel consumption and air pollution.

NETC transactions in Q2 2019 stood at 80.1 million, a jump of 53.9% over Q2 2018 and the value of transactions was INR 17.9 billion, an increase of 44.4% over Q2 2018. The tag issuance base in Q2 2018 jumped manifold, with an increase of 118%, to 5.22 million tags in Q2 2019. The increase in these numbers show sustained consumer acceptance.

Now all new cars are equipped with FASTags. Customers can purchase tags from service centres, fuel stations and e-commerce platforms, and get them activated via the banks/ dealers or the My FASTag mobile app. Also, the highways ministry has asked the NHAI to enable all toll lines across NH network to process FASTag before December as it plans to allow only tagged vehicles to use the toll lanes. Only one lane on each side will allow cash payment. In future, NETC can gain significant momentum by adding more use cases like parking, e-challan, payment for fuel charges etc. and become a single stop solution for all vehicle-related payments.

Tag Issuance (million)



Source: NPCI



Aadhaar Enabled Payment System

AePS is a bank led model which allows interoperable financial transactions at POS or MicroATM through the business correspondents of any bank by using Aadhaar authentication. AePS allows consumers to access respective Aadhaar enabled bank account and make several type of financial transactions such as cash withdrawal, cash deposits, Aadhaar to Aadhaar funds transfer and non-financial transactions such as balance enquiry, mini statement etc. The only inputs required for a customer to do an AePS transaction are the name of the customer's bank, Aadhaar number and fingerprint captured during enrolment.

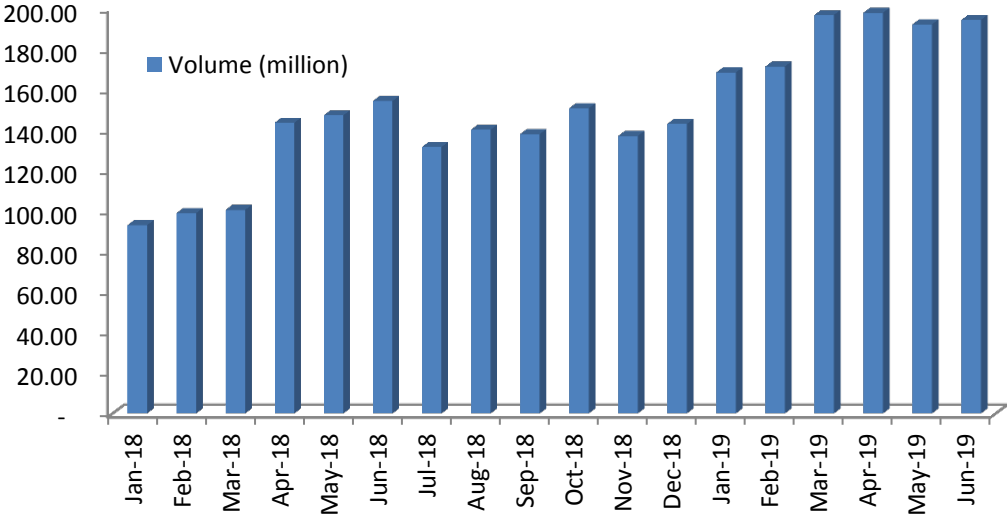
The total volume of AePS transactions (ONUS, OFFUS, DEMO AUTH & eKYC) in Q2 2019 was 584 million, a 31% increase from Q2 of the previous year, while the total value was INR 274 billion, up 107% from Q2 of the previous year.

In April 2017, Prime Minister Narendra Modi launched BHIM Aadhaar Pay that rides on AePS. It allows consumers to purchase goods and service at the merchant establishments using their Aadhaar number linked to their account. AePS was conceptualized to sub-serve the goal of Government of India and Reserve Bank of India in furthering the financial inclusion initiatives. It has the potential to help the rural population embrace digital payments. Some hurdles in its way are the high rate of transaction failures and the fact that it is mostly used by people who get DBT/ subsidies only to withdraw cash, when in fact, it can be developed further to deliver even more services to people.

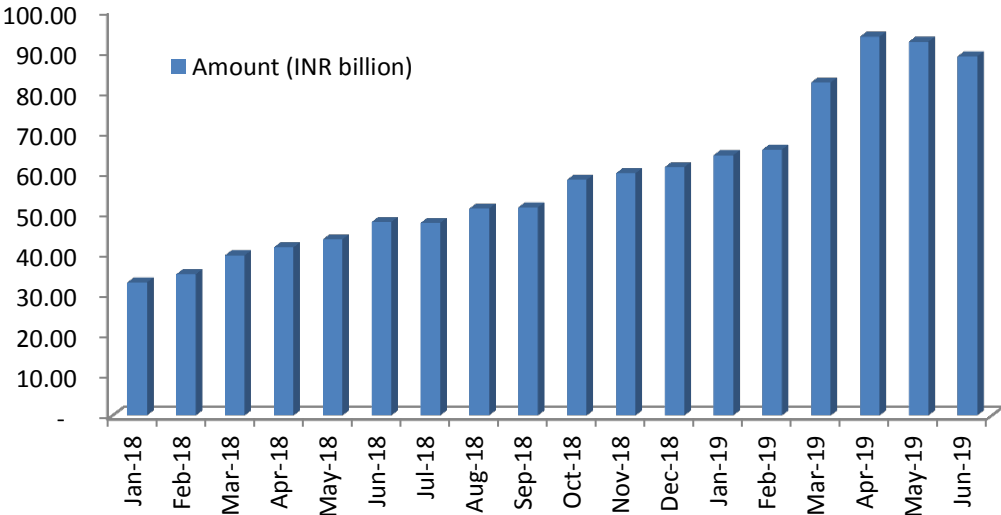
One of the public banks launched the 'Bank on Wheels' facility in few districts in South India, wherein a dedicated banking correspondent with a micro ATM will be inside a mobile van, enabling the public, especially senior citizens, to conveniently get door-step banking facility available at identified locations of the lead districts.

Also, the growth in cash withdrawal numbers could be because of paucity in ATMs. Micro ATMs helped citizens tide over the cash crunch in the aftermath of cyclone Fani and Kerala floods, as several ATMs were affected. Micro ATMs operated through banking correspondent model reduce the cost of transaction for both the bank and the customer, and also enhance the banking literacy of the customers. These instances indicate that Micro ATMs with the AePS platform, could cater to the rising demand for cash in our expanding economy, especially in rural and semi-rural areas.

AePS Transactions Volume



AePS Transactions Value



Source: NPCI

LINURA

POS

LINURA - L6210



Worldline brings to you high performance and multiple function handheld terminals. The terminals adopt a leading 32-bit CPU and a large memory that supports multiple tasks and multiple applications.

Features

- ❖ Sleek, Robust & ergonomic design
- ❖ ARM 11 Processor
- ❖ Linux Based OS
- ❖ Micro USB Port
- ❖ 32 Bit CPU
- ❖ Comes with Stylus
- ❖ PCI 5.X certified
- ❖ Multi App Loading
- ❖ Remote Download - TTMS
- ❖ Remote Diagnostic for quicker Resolution
- ❖ Large Capacity Battery for long standby time
- ❖ Impact & Scratch Resistant touchscreen display
- ❖ Supports all key VAS such as EMI, Loyalty, DCC etc.
- ❖ Supports WIFI & 3G as optional features
- ❖ e-chargeslip via SMS & Email
- ❖ Accepts all forms of Payments

LINURA - LP7210



Worldline India (WI) is wholly owned by Worldline SA, a leading payments company in Europe that is listed on Euronext Paris. Worldline entered India in 2010 with the acquisition of Venture Infotek followed by the acquisition of MRL Posnet in 2017. While WI's business is primarily in India, it is expanding its footprint in the Middle East, Sri Lanka and Bhutan. Headquartered in Mumbai, it has offices in 10 cities and a reach in over 3000 cities and towns across the geographic spread of India.

Worldline India is a transactions facilitator in all spectrums of the digital payments ecosystem and provides the highest available level of products, services and solutions that are fully compliant with PCI and Reserve Bank of India guidelines, along the full length and breadth of the payments value chain. The main areas of business in the digital payments ecosystem it is involved in are:

POS Merchant acquiring – WI works with over 30 banks and institutions and has an excess of 1 million merchant touchpoints PAN-India accounting for 30% of the merchant acquiring touchpoints – the largest in the Indian merchant acquiring industry – in the form of both POS terminals and QR code decals with the former accounting for over 85%. These terminals allow merchants to accept payments in a variety of channels; cards, QR codes and wallets. WI manages the terminal fleet, processes the payment transactions and provides an end-to-end service. In 2018, WI processed over 1 billion acquiring transactions.

Card Issuance – In this space, WI manages end-to-end solutions for credit and prepaid cards. It works with 14 banks and prepaid issuers managing over 5 million cards in India and outside.

EMI solutions for Non-Bank Finance Companies (NBFCs) – Worldline India works with 2 leading national NBFCs providing end-to-end customized EMI (Equated monthly instalments – a specific type of consumer) solutions. WI manages over 8 million customer accounts for these clients.

Loyalty solutions for petroleum companies – WI built a full-fledged loyalty solution and operates it for oil majors Bharat Petroleum, Indian Oil and Shell.

Internet payment gateway – WI has an advanced offering focussing on specific sectors providing a fast, reliable and secure payment gateway to process online transactions.

National Electronic Toll Collection– WI offers end-to-end NETC solutions from both the issuance and acquiring sides and works with many banks.

Risk Mitigation – Using a combination of a global risk engine and home-grown sophisticated risk engines that incorporate machine learning, WI provides fraud and risk mitigation services in the areas of merchant acquiring, card issuing and internet payment gateway to over 20 banks.

Value-added services – WI provides merchants value-added services on their terminals such as bank and brand EMI, dynamic currency conversion, among others.

Worldline India is constantly investing in the latest technology to increase efficiencies, drive innovation and deliver customer delight. It is the payment partner of choice for merchants, banks, government agencies and industrial companies, delivering best-in-class digital transaction services.

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