It is evident that payment systems in India have witnessed significant progress in the previous year and more importantly, the last decade. Though favourable factors like affordable mobile phones, internet packages and constant support from the regulator as well as from the government have unquestionably contributed to this growth, the real credit goes to fintechs and banks who are constantly implementing new technologies and delivering customer centric solutions to their customers.

The surge in card transactions and other products like UPI, IMPS, NETC etc. and the rise in number of POS terminals over the past few months have been encouraging. We can now anticipate that these retail payment products will collectively reduce cash dependency to a great extent provided there is an impetus to set up multiple acquiring touchpoints in the country. Worldline, being one of the largest merchant acquirers, has always been committed to the cause of creating a ‘cash-lite’ society with its visionary payment solutions and wide reach across the country.

This annual report takes a look and provides insights on Indian digital transactions in 2019 as well as insights on transactions that were processed in our network. In addition, we look at how asset-lite products will transform digital payments in 2020.

Happy reading!

Deepak Chandnani
Managing Director, Worldline South Asia & Middle East
The reality is that these predictions will happen over the next 3-5 years are all usually well off-base. As a result we will stick to soothsaying on what we think will be the game-changer in physical merchant payments space in 2020.

Currently, the primary channels to pay digitally for goods and services at physical merchant locations is through either a POS terminal or a QR (a printed one usually and in some cases a phone). There may be bells and whistles around both these form factors but there isn’t any substantive addition.

What we think will be the game changer in the coming months will be the emergence and establishment of asset-lite technologies in merchant acquiring. Asset-lite here refers to the acceptance of all forms of digital payments including cards not on the traditional POS machines but on merchants' mobile phones. On this technology platform, merchants using an app on their phone will be able to accept payments through QR and cards; the latter will happen on NFC enabled cards through tap-on-phone technologies. Granted, currently merchants can accept only up to Rs. 2000 without a PIN but rapidly developing secure technologies will lead to the ability to accept PIN on Glass allowing them to accept larger amounts too. Besides these 2 channels, merchants will also be able to send payment links to customers through SMS or WhatsApp enabling buyers to complete their transactions via an internet payment gateway.

The reason why this technology is likely to become mainstream and have a wide acceptance by merchants is because of the following reasons:

**Cost** – The transactions will be done on the merchant’s own phone eliminating the need for a POS terminal while giving them all the benefits. The only need is for an NFC phone but the cost of an NFC phone is dropping rapidly and is now being enabled on lower-cost smartphones too. This will also provide a huge fillip to spreading digital payments at merchants at the bottom of the pyramid as well as those located in small towns and villages.

**Multiple revenue opportunities** – Apart from the ability to accept payments through multiple channels, the mobile app will allow multiple revenue opportunities for the merchant by allowing them to sell value-added services such bill pay etc.

**Convenience** – The application can also allow the merchant to manage their billing as well as their khaata customers.

Sunil Rongala  
Vice President – Strategy, Innovation & Analytics
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2019: A Year in Review

Worldline has over 1.1 million merchant touchpoints PAN-India accounting for about 30% of the merchant acquiring touchpoints. We have analysed transactions available in public databases as well as transactions processed by us in 2019 (January - December) and derived some unique insights.
Indian consumers are gradually moving from paying “in-line” to paying “online” with each passing year. There has been an increase in adoption of traditional as well as new retail payment products like debit cards, credit cards, Immediate Payment Services (IMPS) and Unified Payments Interface (UPI) among others.

In 2019, these four products recorded a combined transactions volume of over 20 trillion and combined value of over INR 54 trillion.

It is worth mentioning that UPI remained the most preferred mode of payment in terms of volume followed by debit cards, IMPS and credit cards.

In terms of value, IMPS attained the ‘numero uno’ position throughout the year followed by UPI. Value of debit and credit cards remained nearly the same throughout the year.

The significant difference between IMPS and UPI volume as compared with debit and credit cards also highlight the fact that digital payment products are being primarily utilized for Person-to-Person (P2P) transactions than Person-to-Merchants (P2M) transactions.

Going forward, it would be interesting to see whether the availability of NEFT 24x7 will have an impact on the usage pattern of UPI and IMPS transactions.
The number of POS terminals deployed by merchant acquiring banks increased to 4.98 million in December 2019 from 3.59 million in December 2018, registering a YoY increase of 39%.

RBL bank, HDFC bank, State Bank of India, Axis bank and ICICI bank emerged as top 5 merchant acquiring banks to deploy POS terminals in 2019.

In a recent development, Reserve Bank of India in its sixth Bi-monthly Monetary Policy allowed Regional Rural Banks (RRBs) to act as merchant acquiring banks using Aadhaar Pay – BHIM app and POS terminals, like other commercial banks. This move may encourage RRBs to leverage their reach, especially in tier III and below to bring more merchants in digital payments arena in 2020.

Source: RBI
For Worldline India, October 2019 was the month with highest number of transactions in volume and value. Online transactions hit its peak on October 26 and 27 on the occasion of Diwali. We observed overall spike in transactions during festive seasons throughout the year.

Top 10 states with the highest transactions in 2019 for Worldline India:

Maharashtra, Karnataka, Tamil Nadu, Delhi, Andhra Pradesh, Gujarat, Kerala, Uttar Pradesh, Haryana and West Bengal

Top 10 cities with the highest number of transactions in 2019 for Worldline India:

Bengaluru, Chennai, Mumbai, Pune, Hyderabad, Delhi, Kolkata, Gurgaon, Coimbatore and Ernakulam.

Merchant categories with the highest volume and value of transactions in 2019 for Worldline India:

Grocery, Restaurants, Petrol Stations, Apparel Stores and Speciality Retail

They accounted for about 62% volume of transactions and about 39% value of transactions. It is interesting to note that while jewellery stores accounted for only 1% of total volume of transactions, they accounted for 8% of total value of transactions.
States and cities with the highest number of transactions in 2019 for Worldline India

**TOP 10 STATES**
1. MAHARASHTRA
2. KARNATAKA
3. TAMILNADU
4. DELHI
5. ANDHRA PRADESH
6. GUJARAT
7. KERALA
8. UTTAR PRADESH
9. HARYANA
10. WEST BENGAL

**TOP 10 CITIES**
1. BENGALURU
2. CHENNAI
3. MUMBAI
4. PUNE
5. HYDERABAD
6. DELHI
7. KOLKATA
8. GURGAON
9. COIMBATORE
10. ERNAKULAM
Total number of cards in circulation stood at 860.65 million as of December 2019.

While the outstanding debit cards declined from 923.39 million in January 2019 to 805.32 million in December 2019, its volume at POS terminals achieved 4.9 trillion transactions, a 16% growth as compared with previous the year. Currently, debit cards own about 94% of total cards issuance share.

Credit card issuance witnessed growth of over 10 million cards i.e. from 45.17 million to 55.33 million in 2019. Its transactions volume at POS stood at 2 trillion, achieving a 20% YoY growth.

It is interesting to note that in spite of just 6% share in total outstanding cards, credit cards accounted for 30% transactions in terms of volume and 51% in terms of value.

Transaction value of debit cards stood at INR 6.8 trillion while transaction value of credit cards stood at INR 7.1 trillion, registering YoY growth of 21% and 33% respectively.
UPI is perhaps the fastest product to hit 1 billion transactions-a-month in 2019 since its inception in August 2016.

It recorded a substantial transaction volume of 10.8 billion in 2019, a YoY increase of 188%. In terms of value, UPI facilitated transactions worth INR 18.36 trillion, up 214% from 2018. Nine banks were added in UPI ecosystem throughout the year, bringing the total number of banks providing UPI services to 143 as of December 2019.

Some of the key factors that powered UPI’s transactions growth in 2019 are adoption of UPI 2.0 features by banks, enabling payments for IPO applications, facilitating Foreign Inward Remittance service, supporting donations for several relief programs, and numerous cashbacks and discounts offered by banks and non-bank players.

UPI's Average Ticket Size (ATS) remained around INR 1600 in 2019 which indicate the rise in number of consumers preferring UPI for making small ticket size transactions. Further, in order to enhance UPI's adoption among masses, NPCI has advised that the Regional Rural Banks (RRBs) can also participate in UPI as Acquirers, subject to RRB having a mobile banking permission from Reserve Bank of India (RBI) and post fulfilling its necessary certification requirements.

On the other hand, Immediate Payment Service (IMPS) continued its strong growth in 2019. It recorded 55% YoY increase by facilitating about 2.3 billion transactions in volume. It clocked INR 21.8 trillion in terms of value, up 41% from 2018. In 2019, it on-boarded 165 banks under its ecosystem bringing the total number of banks providing IMPS services to the customers of 559 banks by end of 2019.
NTC transactions almost doubled in recent months post the rollout of government’s mandate to implement FASTag lanes across all national highways.

As of December 2019, 11.66 million FASTags have been issued since the inception of NETC program, of which, over 7 million tags were issued in 2019 alone. At present, there are around 535 toll plazas equipped with electronic toll collection infrastructure.

NETC transactions volume in 2019 stood at 370 million, documenting a jump of 162% over previous year whereas its transactions value recorded a YoY increase of 57% with INR 80.6 billion.

In order to increase adoption of electronic toll collection through FASTags, National Highways Authority of India (NHAI) has been floating several promotional campaigns. It has been waiving FASTag fee during these promotional campaigns. In addition to this, several bank and non-bank entities are contributing to the growth of NETC by offering discounts and cashbacks on FASTag issuance and recharge packages, with an aim to retain customer stickiness and also to attract new consumers.

The year 2020 may also witness adoption of FASTags across state highways and implementation of use cases like parking fee and payment at fuel stations etc.
In 2019, transactions volume passing through Bharat Bill Payment Central Unit (BBPCU) – NPCI stood at 125.5 million, a YoY increase of 133%. Its transactions value was INR 186.8 billion, an increase of 174% as compared with the previous year.

During November and December of 2019, Bharat BillPay added new categories of billers such as insurance, loan repayment and LPG gas booking in addition to the earlier five mandated categories. Currently, consumers of HDFC Life and ICICI Prudential Life Insurance can avail Bharat BillPay services under insurance category whereas consumers of Bajaj Finance and Hindustan Petroleum Corporation Ltd (HPCL) can leverage this service under loan repayment and LPG gas booking respectively.

RBI has also decided to offer on-tap authorization to BBPCUs in order to encourage innovation and competition, and also benefit from diversification of risk. The Bharat Bill Payment System is an interoperable ecosystem for repetitive bill payments, primarily covering bill segments like direct-to-home (DTH), electricity, gas, telecom and water. In 2020, Bharat BillPay is also set to onboard other categories of billers like education fees (schools, Colleges etc.), FASTag recharge, credit card, housing society, municipality taxes etc.

Source: NPCI
The country has witnessed full range of Aadhaar enabled banking services through AePS over the past few years.

**In 2019, the total volume of AePS transactions (ONUS, OFFUS, DEMO AUTH & eKYC) stood at 2.3 billion, achieving YoY growth of 12%. The value of transactions achieved a milestone of INR 1 trillion in 2019 with YoY growth of 31%.

AePS faced strong headwinds in the previous year but despite that it managed to grow at the steady rate.

In the past few months, several use cases like Loan EMI collection for Joint Liability Groups in MFI industry, premium collections, payment on delivery etc. have been developed and operationalized on AePS based - BHIM Aadhaar service with an aim to enable wider financial inclusion.

AePS is a bank led model which allows online interoperable final inclusion transaction at PoS (MicroATM) through the business correspondent of any bank using Aadhaar authentication. The four Aadhaar-enabled basic types of banking transactions are Balance Enquiry, Cash Withdrawal, Cash Deposit, Aadhaar to Aadhaar Funds Transfer.
Worldline presents high performance, full touch screen Android POS terminal

- Industry’s first single-chip, secure Android payment terminal
- Intelligent interactive experience, easy to manage payments
- Equipped with multiple tamper protection and self-destruction mechanism
- Supports 4G/3G/2G, Wi-Fi, Bluetooth
- Supports remote download via TMS
- Supports remote diagnostics for quicker resolution

AL9220

- Accepts any method of electronic payment – contactless cards and devices, chip cards and mag-stripe cards, Samsung Pay, virtual cards, Bharat QR, UPI, Aadhaar Pay etc.
- A smart OS based on Android 5.X QUAD Core CPU design with high performance 5.0/5.5 inch HD touch screen, ensuring superior user experience.
- Ergonomic design and compact appearance, consistent with the habit of operation
- All standard terminal management services are available.
- Also supports new features such as advertising.
Worldline presents high performance Linux OS POS terminals.

LINURA
LP7210 and L6210

- Highly secure device - complying with PCI 5.x standards.
- Bigger Capacitive Touch screen of 320x240 resolution with stylus
- Longer battery life with 2600 mAh capacity
- Supports 3G and WiFi connectivity as an optional connectivity mechanism
- Drop test certified
- Equipped with multiple tamper protection and self-destruction mechanism
- Mini USB port in 7210, Micro USB port in 6210 for charging and data transfer
- Supports all digital payment instruments like NFC, Chip, Swipe/ Tap, Samsung Pay, BQR, UPI, wallets and Host Card Emulation (HCE)
- Supports all card schemes like RuPay, Visa, Mastercard, Maestro, Amex, DFS, JCB, CUPI and Diners.
- Supports remote terminal management and diagnostics for quick resolution
- Value Added Services like EMI, DCC, PC POS, Loyalty Programs
- Supports e-charge slips as a part of go-green initiative
**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 5000 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 Merchant Acquiring, Card Issuance, Loyalty solutions for petroleum companies, Internet Payment Gateway, National Electronic Toll Collection, Risk Mitigation and Value-added services.

Worldline India is constantly investing in the latest technologies 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.

<table>
<thead>
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<th>1.1 million +</th>
<th>1.2 billion +</th>
<th>5000 +</th>
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<td>Annual acquiring transactions</td>
<td>Cities supported by Field Support Division</td>
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<td>50 million +</td>
<td>75 million +</td>
<td>NETC</td>
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<td>Debit, Credit &amp; Prepaid cards managed</td>
<td>Monthly transactions monitored for fraud</td>
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- Leading third-party processor with services across the payments value chain
- Partner to majority of public, private and foreign sector acquiring banks
- Issuance processor for all major banks in India including Private, Public, Co-operative and Small Finance Banks
- Issuance and loyalty management partner to 3 of 4 major fuel retailers in India
- International customers managed in UAE, Sri Lanka, Bhutan and Nepal
This report has been prepared by

Sunil Rongala
Vice President
Strategy, Innovation & Analytics

Jackulin Sheela
Manager
Strategy & Corporate Affairs

Manish Kohli
Manager
Marketing & Communications