The Reserve Bank of India, in its efforts to promote digital payments recently notified that it will operationalize the Acceptance Development Fund from January 1, 2020. This will clearly expedite the task of enabling Tier III, IV markets with acceptance infrastructure. Though POS terminals are increasing at a steady pace and have reached 4.59 million till September 2019, we still have a long way to go to cater close to 900 million cards in circulation.

However, e-payment acceptance should not only be limited to deploying terminals but also facilitating transactions through multiple payment modes like QR, BQR, UPI among others. Worldline, with its visionary payments solutions is empowering merchants with state-of-the-art services and is committed to the cause of creating a cash-lite society.

The organization seamlessly covers all spectrums of the digital payments ecosystem including Merchant Acquiring, Card Issuance, EMI Solutions for Non-Bank Finance Companies (NBFCs), loyalty solutions for petroleum companies, Internet Payment Gateway (IPG), National Electronic Toll Collection (NETC), Risk Mitigation and other Value Added Services.

We have been tracking consumer payment spends across retail payment platforms and have witnessed some interesting developments in Q3 of 2019. We are pleased to present our latest report covering insights from July 2019 till September 2019 compared with same period of previous year. We also give our perspective on what needs to be done to make the physical merchant acceptance ecosystem into one that is ubiquitous and sustainable.

Happy reading!

Deepak Chandnani
Managing Director, Worldline South Asia & Middle East
It is worth noting that for the payments ecosystem to be sustainable across the length and breadth of the country, it needs to be ubiquitous. Given there are 2 players in a digital transaction, a buyer and a seller, the former is likely to only make sustained digital payments only if they have a ubiquitous acceptance ecosystem around them. Take the example of cards; there are 889 million credit and debit cards but only 4.59 million POS terminals. While the number of card transactions done at merchant locations is on the up, ATM withdrawals data suggests that cards are being used for withdrawing cash in a big way and this is likely because there are little to no avenues for them to use their cards or other digital instruments.

That forces us to ask the question: what will it take to build a merchant acquiring ecosystem that is ubiquitous and sustainable in a relatively quick manner? The solutions are not necessarily complex but would require multiple actions from the different incumbents in this system.
1. **Simplicity** – This aspect is probably the most important. Experience shows that for any solution to take-off in a widespread manner, it has to be simple to use with minimal steps. This is particularly important if it needs to trickle down to small merchants in small towns and villages. The simplicity should not just be in terms of payments acceptance but also how merchants can easily verify that they are receiving monies due to them.

2. **Trust** – For multiple reasons, there is an innate trust in cash and by extension, distrust in digital payments. The reasons can be debated forever but this is the key to convincing merchants to adopt digital payments. A simple way of inculcating trust is to ensure merchant get their payments in a frictionless and transparent manner. Also, a certain level of education needs to be imparted for increasing trust in the banking system. This education needs to also include the fact that accepting digital payments increases sales at their stores because of increased impulsive purchases.

3. **Merchant revenue opportunities** – When merchants, particularly the smaller ones, are given multiple revenue opportunities through their digital acceptance devices they are more likely to accept it. These opportunities could be in form of bill payments, ticket bookings, Micro ATM etc. These opportunities can only be given through electronic channels; the POS terminal or mobile.

4. **Incentivizing merchant acquirers** – For a ubiquitous and sustainable merchant acquiring ecosystem to take form and shape, a key requirement is to have a strong merchant acquiring industry, an industry that is profitable and stable. Since it is in the national interest to increase digital payments acceptance, the government should take an active role in incentivizing this industry through the proposed Acceptance Development Fund to grow in tier 3 cities and below. This incentivizing could be in the form of subsidizing terminal costs, earmarking MDR for acquirers, tax breaks for entering smaller markets etc. Time and time again, it has always been the case that only enterprises that have a rate of return are the only ones who can make this happen sustainably.

**Sunil Rongala**
*Vice President*
*Strategy, Innovation & Analytics*
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 Q3 2019 (Jul-Aug-Sep) and public databases to derive some unique insights.
The Reserve Bank of India has been taking several measures to boost digital payments in the country. These range from ensuring development of acceptance infrastructure by payment entities to proving last-mile connectivity for end-users. In pursuance of its vision to further promote digital payments, RBI has recently mandated all banks not to charge savings bank account customers for online transactions in the NEFT system and operationalize the Acceptance Development Fund to increase acceptance infrastructure with effect from January 1, 2020. In order to boost acceptance of traditional card payment among merchants, NPCI has rationalized MDR for its home-grown card network as well as for UPI.

**RuPay cards:** MDR has been revised to 0.60% for transaction above INR 2,000 with a maximum cap of INR 150 per transaction w.e.f October 20, 2019. It was capped at 0.90% for transaction above INR 2,000 with higher cap of INR 1,000 per transaction. Moreover, the card based QR transactions (Bharat QR) MDR also has been reduced to 0.50% with a maximum cap of INR 150 per transaction, to boost asset-lite infrastructure for digital payments.

**BHIM UPI:** MDR has been revised to 0.30% with a maximum cap of INR 100 per transaction. It was capped at 0.25% for transactions up to INR 2,000 and at 0.65% for transactions above INR 2,000. Further, MDR for offline merchant transactions done through QR Scan and Pay is now Zero for transaction up to INR 100.

**The number of point of sale (POS) terminals increased to 4.59 million in September 2019 from 3.39 million in September 2018, an increase of 35.3%.

**POS Terminal Deployment**

Source: Reserve Bank of India
A point to note is that while 30% of transactions done on POS terminals were done using credit cards, they accounted for 51% of the total value spent on POS terminals. This is likely because most Indian consumers use credit cards for purchasing high value items.

**In Q3 2019, the average ticket size on POS terminals for credit card transactions was INR 3,324 and INR 1,357 for debit card transactions.**

We have seen that despite the push from the government to increase awareness about digital payments along with the sustained effort by banks to enrol merchants to join the digital payments platform, cash is still king. Some of the key hindrances to the growth of digital payments are the higher cost of acceptance infrastructure, lack of financial literacy amongst smaller merchants, high propensity of households to save in cash and the unorganised cash-intensive SMEs. However, the future looks bright as the regulator has decided to operationalize the Acceptance Development Fund from January 1, 2020.

In addition, the transactions at POS terminals increased from 1.5 billion transactions in Q3 2018 to 1.8 billion transactions in Q3 2019 (up by 18.3%), and the value of transactions at POS terminals increased from INR 2.8 trillion in Q3 2018 to INR 3.5 trillion in Q3 2019 (up by 23.2%).
August was the month with the highest number of transactions in Q3 2019. The highest number of transactions was recorded on August 10, just two days before Eid-al-Adha (Bakri Eid). The trend of highest number of transactions recorded during festivals continued like previous quarters.

Top 10 states with the highest transactions in Q3:
Maharashtra, Karnataka, Tamil Nadu, Delhi, Andhra Pradesh, Kerala, Gujarat, Uttar Pradesh, West Bengal and Haryana

Top 10 cities with the highest number of transactions in Q3:
Bengaluru, Chennai, Mumbai, Pune, Hyderabad, Kolkata, New Delhi, Gurgaon, Coimbatore and Ernakulam

Merchant categories with the highest volume and value of transactions in Q3 2019:
Grocery, Restaurants, Petrol Stations, Apparel Stores and Speciality Retail

They accounted for about 65% volume of transactions and about 40% value of transactions. It is interesting to note that while jewellery stores accounted for only 1% of total volume of transactions, they accounted for 6% of total value of transactions. The categories remained the same for both credit and debit card transactions.
States and cities with the highest number of transactions in the third quarter

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

TOP 10 CITIES
1. BENGALURU
2. CHENNAI
3. MUMBAI
4. PUNE
5. HYDERABAD
6. KOLKATA
7. NEW DELHI
8. GURGAON
9. COIMBATORE
10. ERNAKULAM
UPI has continued its growth in Q3 2019. The total volume of UPI transactions in Q3 2019 was 2.7 billion, a 183% increase from Q3 of the previous year. In terms of value, UPI clocked INR 4.6 trillion, up 189% from Q3 2018.

UPI completed three years of its operations in August 2019. Starting with just 21 member banks and less than 1 million transactions in August 2016, it is now adopted by 141 banks and achieved a milestone transaction volume of 1 billion in October 2019. This shows that adoption of digital payments among Indian consumers is gaining momentum with each passing month.

UPI has also introduced new ‘use cases’ and enhancements such as P2PM as a new transaction type. New feature updates in BHIM App also indicate that NPCI intends to offer premium user experience at par with third-party UPI providers and bank apps.

IMPS continued its strong growth in Q3 2019. IMPS recorded 594 million transactions, a 50% increase from Q3 2018 and in terms of value, IMPS clocked INR 5.5 trillion, up 51% from Q3 2018.
There are about 836 million debit cards and about 53 million credit cards in circulation. It is interesting to note that between September 2018 and September 2019, there was an addition of about 11 million credit cards and reduction of about 154 million debit cards. While the rise in credit cards may be attributed to the growing digital payments and the expansion of retail borrowers in the market, the fall in debit cards is likely due to the discontinuation of magnetic stripe and the mass closure of accounts with zero balances.

Debit Cards in Operation

Credit Cards in Operation

Source: Reserve Bank of India

In Q3 2019, the total number of credit card transactions was 540 million, an increase of 25.6% over the previous year and the total number of debit card transactions was 3.7 billion, an increase of 6.4% over the previous year.
The below table illustrates the usage pattern of credit and debit cards. 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 is to move ATM withdrawals (especially for PMJDY account holders) into digital payment transactions which fit into the national agenda of going digital.

<table>
<thead>
<tr>
<th>Volume (million)</th>
<th>Value (INR billion)</th>
<th>Average Ticket Size (INR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS</td>
<td>ATM</td>
<td>POS</td>
</tr>
<tr>
<td>Credit cards</td>
<td>537.46</td>
<td>2.54</td>
</tr>
<tr>
<td>Debit cards</td>
<td>1269.89</td>
<td>2424.35</td>
</tr>
</tbody>
</table>

Source: Reserve Bank of India
India is the world’s 2nd largest market for mobile payments, with a mobile subscription base of over one billion. The growth of e-commerce, policy reforms to drive digitization and financial inclusion, increased penetration and usage of smartphones and internet are driving the mobile wallet market in India.

The number of transactions done on mobile wallets in Q3 2019 was 1.04 billion, an increase of just 5% over Q3 of previous year while the value of transactions in Q3 2019 was INR 466 billion, an increase of only 2% over Q3 of the previous year.

Volume and Value of Transactions done on Mobile Wallets

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. The transactions done using mobile wallets in Q3 2019 (INR 466 billion) are only 10% of the size of the total transaction value on the UPI platform (INR 4.6 trillion).

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 for faster movement of vehicles at toll plazas, lessening road congestion and integrating cashless payment.

**NETC transactions in Q3 2019 stood at 84.05 million, a jump of 41.3% over Q3 2018 and the value of transactions was INR 18.8 billion, an increase of 38.8% over Q3 2018. The overall value of transactions has been over INR 135 billion since inception (Nov 2016).**

**The tag issuance base in Q3 2018 jumped with an increase of 93%, to 5.99 million tags in Q3 2019.** This shows sustained consumer acceptance and is bound to increase even further considering the forthcoming deadline.

Paying tolls through FASTag at all national highways will become mandatory from 1st December 2019. One lane will be made available for cash payments. Non-FASTag users will be charged double the toll fee if they pass through dedicated FASTag-only lanes.

The FASTag mode of payment is also being enabled at state highways and city toll plazas. In near future, FASTags may also be enabled to pay for parking fees and to pay for fuel at fuel stations.
Aadhaar Enabled Payment System

AePS has emerged as one of the fastest growing payments systems in the country, after UPI. It has the potential to help the rural population embrace digital payments. There are over 340 million Jan Dhan accounts out of which 220 million account holders are in rural India.

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.

The total volume of AePS transactions (ONUS, OFFUS, DEMO AUTH & eKYC) in Q3 2019 was 638 million, a 56% increase from Q3 of the previous year, while the total value was INR 286 billion, up 91% from Q3 of the previous year.

Recently India Post Payments Bank announced that it has rolled out AePS services and has enhanced the last mile interoperable banking infrastructure by 2.5 times.

Few public sector lenders have limited the cash withdrawals of customers using micro ATMs of other banks to four times a month. This could result in the reduction of transactions undertaken through the AePS platform.

Source: NPCI
The Bharat Bill Payment System is an interoperable ecosystem for repetitive bill payments, currently covering five bill segments - direct-to-home (DTH), electricity, gas, telecom and water.

In order to leverage the advantages of the Bharat BillPay and harness its full potential, RBI has permitted all categories of billers (except prepaid recharges) who provide for recurring bill payments to participate in BBPS. Apart from digitisation of cash-based bill payments, these segments would also benefit from the standardised bill payment experience for customers, centralised customer grievance redressal mechanism, prescribed customer convenience fee etc.

**Bharat BillPay has also enabled bill payment of LPG gas cylinder.**

**Hindustan Petroleum Corporation Ltd. is the first biller to go-live.**

RBI has decided to offer on-tap authorisation to Bharat Bill Payment Operating Units in order to encourage innovation and competition, and also benefit from diversification of risk.

**The number of transactions done on Bharat BillPay in Q3 2019 was 31.7 million, an increase of 98% over Q3 2018 while the value of transactions in Q3 2019 was INR 54.6 billion, an increase of 157% over Q3 2018.**

**Key categories that would be included are Insurance, EMI Payments, Mutual funds, Education Fees, Fastag Recharge, Housing Society, Municipality Taxes and other recurring payments.**
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
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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