CONVERGENCE OF PAYMENT AND LENDING

"Progress is impossible without change"

- **George Bernard Shaw**

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Contents

1. Overview of India's Digital Payment Landscape

The Indian economy has traditionally been dominated by cash. The recent Government efforts in pushing a cashless economy have resulted in an environment suitable for rapid growth of the digital payment industry

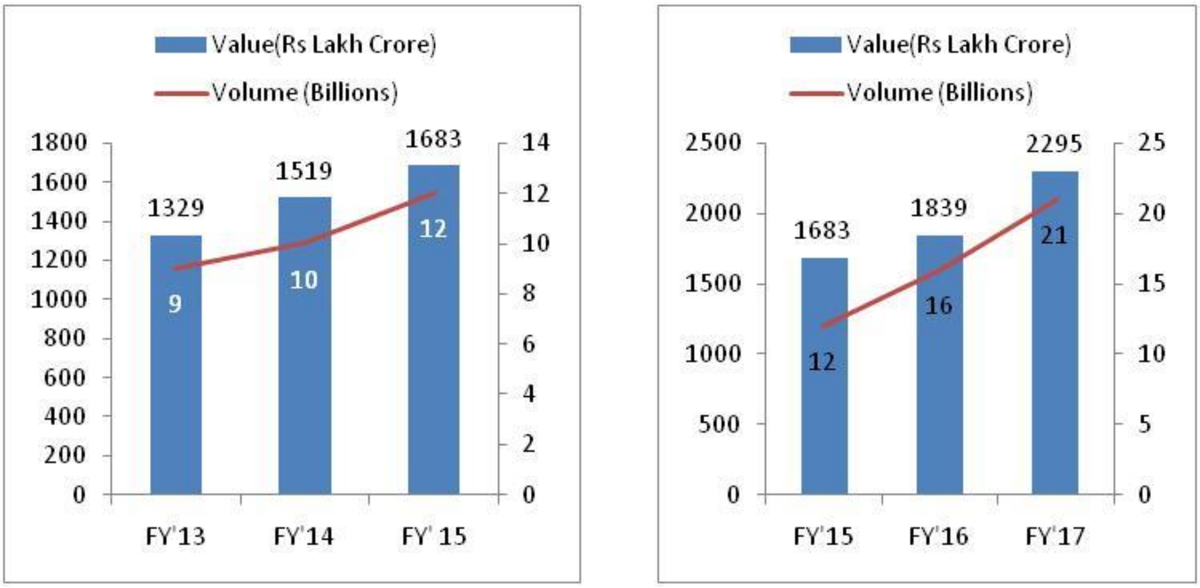


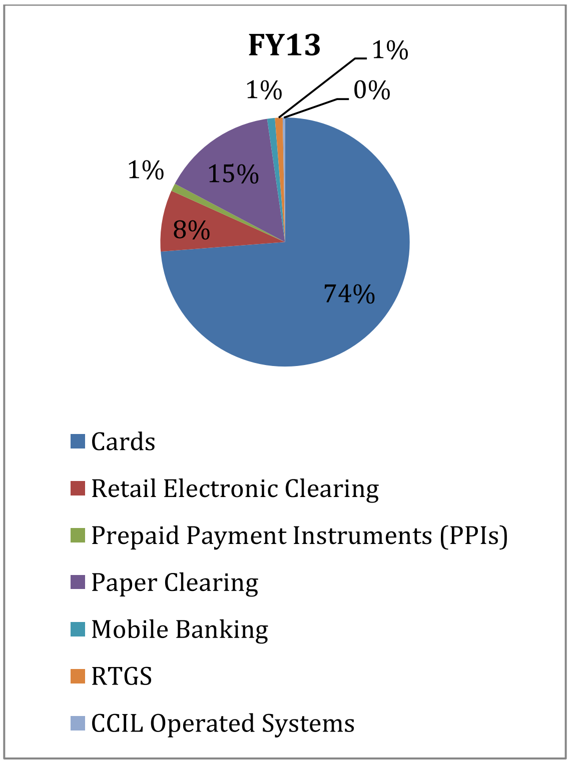
Figure 1: Digital Payment Transactions FY 13-17 in India

Digital payment transactions have grown steadily in volume by 24% & by value 15% CAGR over the last four years. However in the last 2 years it has grown by over 32% in volume and 17% in value. This can be attributed to Digital India initiative and other factors as indicated below in this paper.

> "The number of debit cards in circulation has increased from 553 million in FY15 to 867 million in April 2017. The number of credit cards also increased from 21 to 31 million in that same time period.

The digital payments market continues to be dominated by card transactions (debit and credit) both in terms of value and volume. As seen in the chart below, in FY17, card transactions accounted for c. 60% of the total digital transactions volume. While this proportion has declined since FY13, due to the increase in share of other payment modes - the overall number of cards (debit and credit) in circulation has actually increased. The number of debit cards in circulation has increased from 553 million in FY15 to 867 million in April 2017. The number of credit cards also increased from 21 to 31 million in that same time period.

The fastest growing segment of digital payments however, is Prepaid Payment Instruments (PPIs), which has grown at a CAGR of 97% in the same time period to now account for 10% of the total digital payments volume. Mobile-wallet is the largest category within PPIs. The segment also includes prepaid cards (including gift cards) as well as other paper vouchers.



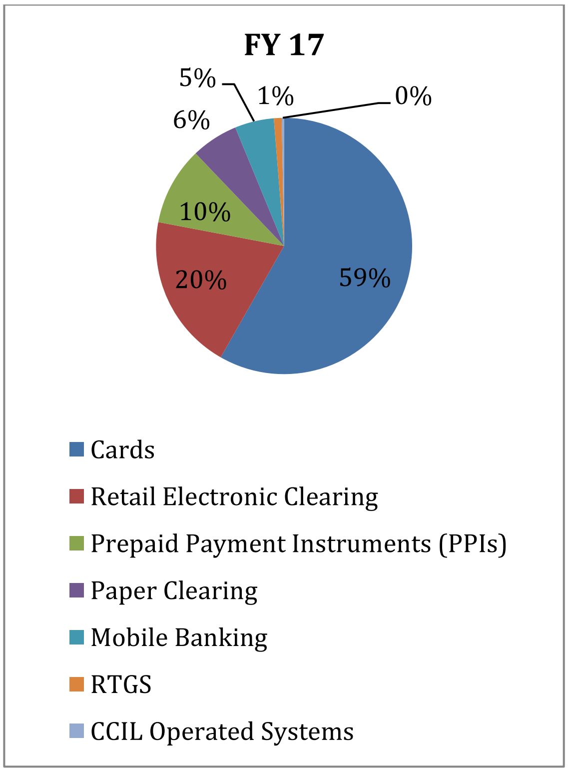
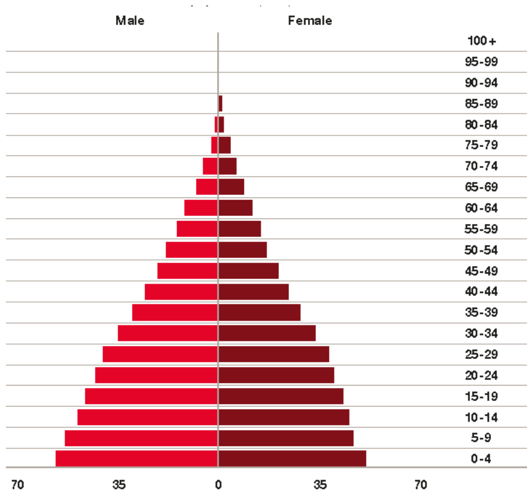


Figure 2: Volume share of various digital payment modes

2. Drivers for Digital Payments Adoption

A number of factors have come together in this case – each having its individual influence:

- Enabling Regulations – USSD (Unstructured Supplementary Service Data) was an innovative payment service launched by NPCI for feature phones. Recent initiatives like UPI, AEPS, and Micro ATMs (being used by million BCs to deliver basic payment services) etc. are part of Digital India Program (Faceless, Paperless, Cashless) and have given a significant push for Digital Payments. Of course, demonetization was another influencer.
- Digital methods to accelerate customer acquisition – Using Aadhar for online authentication and confirmation of KYC data
- Telecom Providers – We have 1 billion mobile phone subscriptions with 380 million internet activated mobile phones. This telecom infrastructure has brought commerce, payments closer to the Consumer & Provider.
- Host industry (eCommerce) – This is a booming industry utilizing the digital infrastructure. This market was Rs 247 thousand Cr in 2017 and is expected to grow to Rs 1301 thousand Cr by 2026. eCommerce is increasingly attracting customers from Tier 2 and 3 cities, where people have limited access to brands but have high aspirations.
- Population dynamics – 50% of India's population is under 25. Many of them are ready to join the work force not only equipped with knowledge of digital commerce, but finding it more convenient than traditional methods. India is poised to reap benefits from this demographic dividend with appropriate investments in initiatives such as "Skill India"



Source: CLSA/Hokenson and Co.

Figure 3: India' Population dynamics

This would be a pull based change where the target group wants a more convenient way (to which they are already more accustomed to around the world) of payment.

- Non – traditional Players – The advent of non- bank tech and retail players in the payments arena has exposed customer to a superior end- to –end customer experience

3. Case Studies

a. PAYTM

Paytm in 2010 had a very interesting start to a journey with a mobile recharge app. The idea of bridging an experience gap in recharge has now translated to Rs 650 Cr+ business for it. And it revolves primarily around digital payments!

- Mobile only marketplace – With over 120 million buyers, 2 million daily transactions and 90% prepaid offers, PayTM is one of the most beneficial marketplace for sellers. The revenue from this subcategory is generated as fees and commissions from the sellers, which differ for different category of products.
- Recharge services continue to be provided – but have now expanded from mobile to TV channels, metro card, data card etc.
- PayTM is has now expanded to bill payments (including for education), smart payment solutions for online businesses, wallet, digital gold …

b. GeM

Government e Marketplace (GeM) is transforming the Public Procurement place completely. GeM is driving real time price discovery, demand aggregation while maximizing ease, efficiency and transparency.

- It paves the opportunity for entrepreneurs to start doing business with Government through a completely online and faceless system.
- Currently there are 16,000 buyers, 45,000 sellers, 450,000 products/services. It is estimated that the number of sellers will cross 3 Lakhs in next 12 months.
- In Jan 2018, GeM did 1000 Cr worth of transactions. Government is projecting this value to be annually around 5 Lakh Cr in 5 years.
- End – to – End Digital Seller Onboarding (Real time NCA, PAN, Tax filing, Aadhar validations)
- Imagine the commerce, quality of service, financial knowledge and other such information base that is being created here.

4. Digital Payments – Future?

PayTM and GeM, both, have capitalized on digital payments and the associated Digital Government infrastructure around Aadhar, MCA 21, GST etc. The kind of data and information that is being now managed within these platforms is enormous. The wisdom that can be gained from it, the ability to influence Indian economy making it better for all parties in this ecosystem. This is paving the way for "Experience Economy".

Yet, we need to note that there is enough headroom for Digital Payments to grow in India as its contribution in personal consumption expenditure continues to be low compared to other economies.

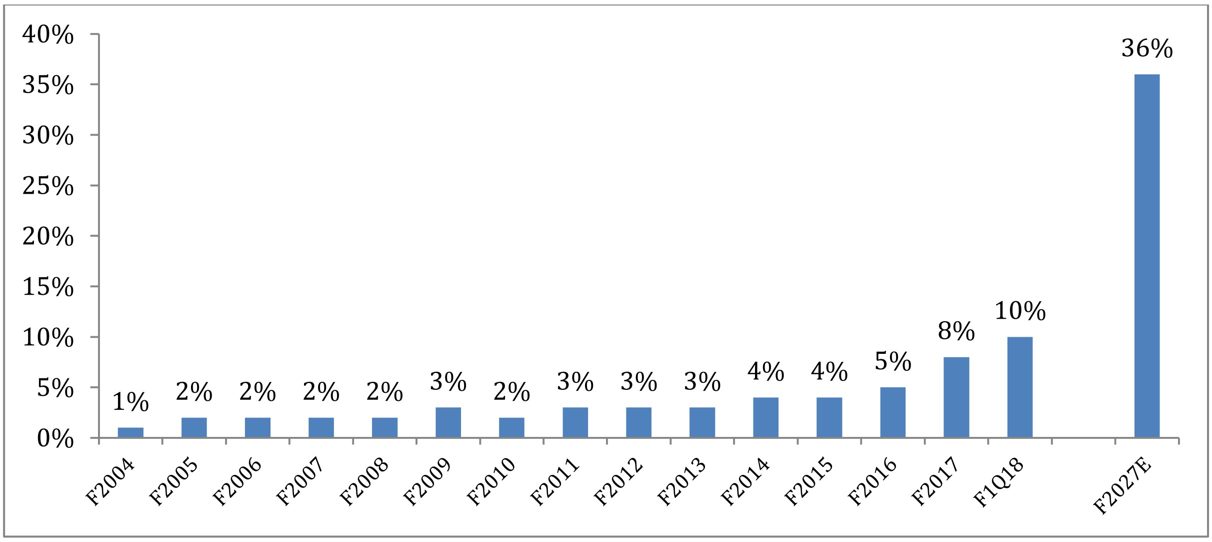


Figure 4: Digital Payments (Percentage of Personal Consumption Expenditure)

> “The wisdom that can be gained from the enormous amount of data, is making it better for all parties in this ecosystem. This is paving the way for “Experience Economy”.

The Digital Payments has a definite future, given:

a. Push from Government
b. Active participation from Industries at large, and
c. Increasing adoption.

A shift is possible as bulk payers (employers, Government, etc.) + cash-out usage + small / micro payers (SMEs, MSMEs) make a move towards digital payments. For this, electronic payments have to become more affordable, reliable and pervasive.

As Digital Payments penetration increases, a number of future scenarios become possible. Some of them being:

- M2M Commerce
- Seamless checkouts at Physical Stores – Tap and go, Intelligent Carts.
- Payments enabled by Smart Contracts – The contract conditions between Buyer & Seller are digitized. Each event in the contract can potentially trigger a payment digitally. No need for invoice!

5. Current State of Lending in India:

The formal Credit industry (Scheduled Banks) has grown by 10% in the last one year and stands at 71. 5 Lakh Cr (end of Nov 2017). The mounting NPA system, the asset quality review and state of economy had an impact on Loan growth by Public Sector Banks. This gap is being rapidly filled by Private Sector and a rapidly emerging NBFI market.

a. Following the AQR, the banking system largely stayed away from lending to large value corporate accounts and begun focusing on growing the retail book. Apart from housing and retail auto loans, unsecured credit has also been witnessing a considerable increase in growth.

b. An official recognition of the online P2P lending model and a clear set of guidelines defined by the RBI is expected to give impetus to the sector, attracting lenders and investors to these platforms. This space is expected to grow to Rs 26000 - 32500 Cr in next 5 years and is home to more than 30 players. (Faircent, Lendbox etc.). This model has the potential to carve out 15-20% of investment portfolio of different entities in next few years.

c. It is estimated that there are more than 60 million micro SMEs which support over 100 million people for their jobs and livelihood. The sector (90% of total enterprises) continues to grow despite issues like non-availability of credit, limited market linkages, technology obsolescence, etc. A majority of them, still, are unable to act towards their aspirations primarily due to lack of wise Credit access.

The main challenge remains the difficulty for Formal Financial Institutions to assess the risk of granting Credit. CIBIL had been a significant move to build financial profile for Borrowers. Credit reports work on the premise that customers have access to formal lenders and have availed loans or applied for credit cards at some point in time. In a country where relatively few individuals obtain loans through formal channels and even fewer have credit cards - the method would not be able to accurately score a significant proportion of the population with thin credit files.

There is huge head room for providing access to Credit, and an according Grey market that is now being capitalized by mushrooming NBFIs & many MFIs.

“ The main challenge remains the difficulty for Formal Financial Institutions to assess the risk of granting Credit

6. Convergence of Digital Payment & Digital Lending

There are three distinct areas of convergence between these two critical Financial Services:

a. Risk Assessment: Formal credit assessment methods have been in vogue for a number of years with different Financial Institutions.

   - The Digital Payment Infrastructure coupled with other initiatives such as eKYC, CKYC, UIDAI, GST, MCA21, TIN provide a vast cache of transactional information. An individual's spending behavior from ecommerce sites, communication pattern from mobile phones, data from banking applications, and even vacation destinations from social media sites like Facebook – can help to create a lifestyle assessment matrix – which provides a significantly more holistic data set for lenders than the information from a credit score.

   - ATM withdrawals give an indication on cash utilization. Mobile & Other utility payment data provide a view on repayment behavior. E-Commerce data provides a view on ability & desire to spend – within income?

   - Appropriate credit scoring methods can significantly reduce the cost of assessment, enhance the quality of asset, and assure speedy access to credit.

   - Intellect Risk Analyst (part of Intellect Digital Lending Suite) is one such solution that can effectively utilize AI to scan through troves of unstructured information (SEBI filings, Legal data, Director information, Social data etc.) combined with structured information from Digital Payment sources, Telecom, eCommerce, Bank etc. The solution, then, triangulates it for a specified borrower, segregates by various topics, assigns a risk score based on data & learned weights. This aggregated Credit Score can be effectively utilized to price the Risk.

b. Transaction: Each credit contract consists of series of payment transactions – disbursements, repayments, fees, charges, insurance, subvention etc. Utilization of the Digital Payment Infrastructure will bring down the operational costs for these transactions, as well as utilize the security, resilience, non-repudiation of the same.

c. Need Analysis: Deep Learning as a discipline is fast emerging with a potential to bring Artificial General Intelligence within our reach. This has come into the foray due to three factors – (i) Exponential increase in information available in electronic form (ii) Ever efficient compute power (iii) Advancements in statistical modeling.

   - Behaviour-based signals can indicate a need (e.g. House, Education, Health intervention, Machinery, Regional expansion). A child heading off to college, birth of a baby, mortgage rate reset, partnership between firms, new contract to supply Airbus, are event based signals that the customer is about to experience a financial shift.

   - The key here is relevancy. It all boils down to personalization. Personalized products can be offered just when your consumers need them. By offering ways to meet their needs before they've even voiced those needs, you're creating a powerful relationship with your customer, who feels understood.

7. Case in Point – Amazon USA

In a rather shrewd move, Amazon started offering Credit – by invitation – to merchants on its site. It surpassed $3 Bn in small business loans within a few years. Further, more than 50% of small businesses take a second loan from Amazon!

- If a merchant is eligible for Amazon Lending, he can borrow loans ranging from $1,000 to $750,000. The maximum borrowing amount is based on your past sales performance on Amazon, better the sales higher is your eligibility and chance to get a loan
- The application and financing process is fast and straightforward, since Amazon already has your sales history and personal information on file.
- If approved for financing, funds are sent to the borrower within one day through the bank account the borrower has linked to Amazon.

8. Digital Lending – Future?

Amazon, Baidu, Tencent, Alibaba – are examples of Digital Enterprises that have successfully exploited its network, information-base and technology-prowess to create & distribute financial products (specifically Payments & Lending).

a. A Platform like GeM has a similar potential:

   - Receivable finance: There is a clear knowledge of the various events that will trigger AP/AR. The merchants usually suffer from the massive DSOs on their book. By bringing in Financial Institutions into the fray, or linking with TREDS (Trade Receivables Discounting System), the entire financing and settlement process can be STP'ed.
   - Working Capital finance: This can be provided based on signed contracts and quality of past deliveries.

b. As Digital India initiative becomes more pervasive, it will become that much more efficient to service different segments. The underserved and unserved individuals / entities will embrace digital payments thereby creating a new source for assessing Credit Risk. The same infrastructure will make credit accessible as well as usable on the tap!

9. Caution!

While this paper describes the possibilities, there are a significant number of areas that need attention. To name a few:

- Fraud prevention, Dispute management – How do we identify the buyer, seller, intermediary uniquely without any doubt? Zelle in US is facing issues as it is not taking any liability for delivery of goods/service. It is only responsible for payment!
- Open Banking & PSD2 have paved the way in UK & Continental Europe respectively for new Financial Service players to emerge. Banks that traditionally carry enormous information base (though not utilized to its potential) will have to open it up through APIs. This is creating a level playing field (or perhaps tilted towards Technology savvy organizations) for Financial Services. India needs to plan for this inevitability.
- Privacy protection – Cash is anonymous! GDPR in Europe is in the direction of protecting Data-Owner's rights.

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Prior to joining Intellect, Rajesh, was Chief Executive Officer, American Express, India and in this role was responsible for International Consumer & Small Business Services in India as well as for providing leadership to the AEBC Country Executive Team. He is credited for turning around the cards business and setting the business for growth in India.

Prior to AMEX, he worked with Citibank for 19 years across five different geographies in various consumer banking roles with the last 10 years spent in managing large teams and product and country P&L's.

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