



The Mother of All Emerging Payments Markets, India

January 26, 2018

* Views expressed are strictly the author's.



Eric Grover

988 Bella Rosa Drive

Minden, NV 89423

USA

+1 775-392-0559

+1 775-552-9802 (fax)

Eric.Grover@IntrepidVentures.com

Epic battleground between traditional and nontraditional payment systems

- Prime Minister Modi's ballyhooed 2016 demonetization campaign invalidated the 500 and 1000-rupee notes, accounting for 87% of cash in circulation, and put a spotlight on the Indian payments market
- Cash remains dominant retail payment system, but demand for cash is down. As of October, 2017 cash was only 91% of the predemonitization level
- The demonization campaign was an inflection point, after which electronic transaction growth accelerated dramatically.
- Unlike China, the Indian market is open.
- Unlike the US, state and quasi-state regulators have played and continue to play a significant role directing the market.
- Card networks, U.S. tech titans, Chinese fintech giants, MNOs, digital-wallet-anchored payment networks, e-tailers and the National Payments Corporation of India, are among the major payments players.

General-purpose card networks

- Mastercard, Visa and national champion Rupay.
- 820 million debit cards, 33 million credit cards. –a) Only ~ 40% of debit cards are active and they're used principally for cash. Withdrawals at 207 thousand ATMs. –a)
- On annual run-rate ~ 4.5 billion retail-card payments or 3.4 per capita.
- In September general-purpose credit and debit card payments increased 96% and 112% respectively yoy. –a)
- Of 35 to 40 million merchants, in September there were only 2.9 million pos terminals, but that's up 96% yoy. –a)

Rupay

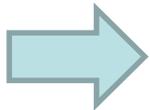
- Rupay launched in 2012 by NPCI, initially as a debit network.
- In 2017 Rupay launched credit cards. Andhra Bank, Canara Bank, Corporation Bank, Central Bank, IDB, Punjab National Bank, Union Bank, Vijaya Bank, HDFC, and Punjab & Maharashtra Cooperative Bank were first banks to commit to issue Rupay credit cards
- Reciprocal acceptance with Discover
- Co-branding with JCB
- Mastercard and Visa have complained about an “invisible” government mandate for banks to issue Rupay debit cards, contending their ATM fees were cheaper.

NPCI

- National interbank payments-processing utility set up in 2009
- Runs and processes for Rupay
- In 2016 launched the Unified Payments Interface (UPI), which is a payment scheme enabling instant mobile-phone-initiated bank-account-to-bank-account payments and requests for payments.
- NPCI is the UPI-network processor. Switching is free. Payee and Payer PSPs – in many cases banks, support participation on both sides of the network.
- Banks have their own UPI apps. NPCI supports its own UPI app Bharat Interface for Money (BHIM).
- NPCI, Mastercard and Visa introduced a QR-code standard to facilitate payment-card use with small merchants and respond to Paytm.

Aadhaar

- A national id database.
- 99% of adults registered
- 12-digit number tied to biometric data including ten fingerprints and two iris scans, photos addresses, and phone numbers.
- In theory voluntary, in practice compulsory
- Consumers must link Aadhaar ids to their bank accounts.
- Some India payments-stack architects dream of a free Aadhaar-enabled retail network using UPI.



Can help traditional networks but also enable alternative competitor networks.

Price controls and subsidies

- In 2012 government imposed price controls on debit MDRs, capping them for transactions below \$30 at .75% and those above \$30 at 1%.
- In December, 2016 the RBI instructed banks and prepaid payment instrument licensees not to charge customers for UPI and Immediate Payment Service transactions under 1000 rupees – roughly \$15, for the first 3 months of 2017.
- In 2017 debit MDR fees for transactions under \$15 were further reduced to .25% and for transactions between \$15 and \$30 to .5%, but only for three months.
- Starting in January, 2018 for small merchants for traditional pos and online debit transactions the top permissible MDR will be .4%, capped at 200 rupees. For QR-code-based card transactions the top permissible debit MDR will be .3%, also capped at 200 rupees. For large merchants the maximum MDR for traditional pos and online debit transactions will be .9%, capped at 1000 rupees. For QR-code-based debit payments, the maximum MDR will be .8%, capped at 1000 rupees.
- Starting in January, for two years, the government will cover debit (card & QR-code) and UPI payments costs for small merchants.

Paytm

- Largest nontraditional retail-payment system in India
- It's a payments bank, a branded payment network, the largest digital wallet in India with 275 million users, and has roughly 6 million merchants in its acceptance network
- Charges merchants 1.99% plus 18% general service tax
- In year ended March, 2017 Paytm had 1.5 billion transaction and \$5 billion payment volume
- Burning ~ \$200 million per year. CEO is aiming for 500 million users by 2020
- 11/2017 announced it's introducing co-branded instant digital credit.
- Introducing chat.
- Ant Financial and Softbank are primary investors

MobiKwik

- MobiKwik payment system supports mobile-phone recharge, P2P payments, bill payment, and retail payments for hotels, transport, gas stations, general stores, etc.
- Has 65 million users and 2 million merchants
- Boasted 400% increase in QR-code-based retail payments September, 2017 ytd ^{-a)}
- Backed by Sequoia, American Express and Bajaj Finance

Hike

- Hike is a chat service with 100 million registered users.
- In June, 2017 Hike launched a payment service using UPI
- In August, 2017 Tencent led a \$175 million round in which Bharti participated, valuing Hike at \$1.4 billion

(a- "MobiKwik registers 400% increase in QR transactions in 2017," Economic Times, September 29, 2017

Google

- In September the search mammoth launched Tez, a P-to-P and retail-payment system.
- Uses NPCI UPI to draw funds from consumers' bank accounts
- In Tez's first 10 weeks it did 140 million transactions, enrolled ~ 12 million consumers, signed up 525,000 businesses and 70 utilities and home services for bill payments.
- In October and November accounted for 70% of BHIM UPI transactions.
- Free for consumers and small businesses

Facebook

- Facebook has 200 million WhatsApp users in India
- It's planning to launch a payments product embedded in chat.

Apple

- Apple SVP Eddy Cue said Apple Pay wants into the Indian market
- It has only ~ 3% of the smartphone market, making Apple Pay a nonstarter.

Samsung

- Samsung Pay live in India
- Integrated UPI using Axis Bank as its PSP
- Linked to Paytm

Flipkart

- India's Amazon Flipkart has mobile-UPI app Phonepe, which enjoyed 800% transaction growth from December to August, 2017. –a) It has 25 thousand merchants.

Amazon

- Amazon is investing heavily and is India's leading e-tailer. It offers Amazon Pay to merchants off platform.

PayPal

- In November PayPal announced it was launching support for domestic payments. A bit late to a market that's red hot.

MNOs

- With 340 million smartphones, India is the world's second largest smartphone market after China.
- India's second-largest MNO Vodafone has M-Pesa which is the poster boy of successful emerging-market payment systems. It's the leading payment network in Kenya and active in 10 other emerging markets including India. Active in India since 2013, in January, 2017 M-Pesa had 8.4 million users, at which point it launched M-Pesa Pay for merchants.
- Bharti's MNO Airtel has Airtel Money, run through Airtel Payments Bank.

- Mastercard and Visa have been the primary payment networks in India for decades and should have sewn up the market.
- But, today, they face credible traditional and nontraditional challengers and the Indian payments market is very much in play.
- On its current growth trajectory within the decade India is likely to join China and the US as one of the top three electronic-payments markets