PERSPECTIVE 1

Fintech Start-ups: Making the Elephants Dance

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What is Fintech?

Financial services providers, with huge demands for computation and record keeping, have always embraced technology. IBM 650, the first mass produced computer in the 1950s, which was marketed at the scientific and engineering firms, also found interests from financial companies such as the Mellon National Bank. For most parts, however, technology has been used by financial institutions to facilitate their internal operations, and in enabling some customer interactions. The institutions themselves retained their central role.

Over the past few years, startups have started turning this relationship on its head. The rise of the connected world, with the smartphone at its center, is enabling new linkages across and between customers and service providers. This is increasing accessibility and inclusion, and putting the customer in the driver's seat.

This has been referred as the Fintech revolution, where technology has allowed startups to upend traditional business models with 24x7 customer connections, unbundled services, big data, artificial intelligence and a dramatic simplification of the banking experience. Innovators have been able to take the technology and data first approach and are leveraging them far beyond the traditional players. This has allowed for innovation in risk assessment, reduction in costs, and deeper penetration of financial services (Exhibit P1.1).

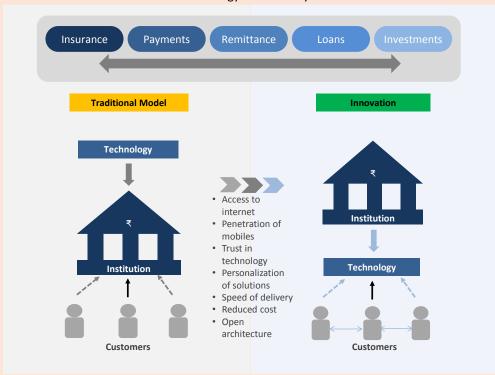


Exhibit P1.1: Technology and delivery of financial services

However, the definition of Fintech does not include the traditional technology solutions used by financial institutions: core banking solutions for banks, internet banking solutions for customers, digital money transfer that requires knowledge of payee's bank account, card based POS solutions, vanilla share trading services, and so on.¹

The differentiated approach of Fintech startups has allowed them to grow rapidly in segments such as payment solutions (peer-to-peer payments, wallets, and mobile payments), remittances, and consumer and small business loans. This has led to increased investor interest - \$22 billion² of investment went into the Fintech sector in 2015, of which India received \$1.65 billion, the second largest after China in APAC.

Upsetting the cart: reimagining financial service delivery

Traditional financial service providers tend to provide a broad range of services across multiple business lines. They carry legacy infrastructure, a historical burden of loans already made, and processes that were optimized for a different era. On the other hand, startups, not similarly burdened, are free to explore new ways to serve segments that are uneconomical for incumbents, explore new processes of evaluating risk or closing a transaction, and to rethink how a service can be provided profitably. These startups have changed the landscape in three key ways:

- With advantages such as a lower cost of servicing a client (because of greater use of technology), better assessment of risk (because of use of alternate data in data sparse situations), they have often been able to reach customers that are not profitable for incumbents, thus expanding the market. Even incumbents like Bank of Baroda are tying up with alternate lenders like CreditMantri to service first time borrowers.³
- Advanced technology enables more efficient processes (for example, by matching people who are looking to deposit money to those looking for a loan), leading to disintermediation in the multi-step processes. This and other such simplification leads to reduced service times and costs. Capital Float, for example, believes that one of their differentiators is speed in loan disbursement, which is possible within a day.⁴
- By packaging multiple solutions (for example, a number of different credit cards into a single wallet), startups have given users the convenience of a single simpler interface while inserting themselves as an additional intermediary in the traditional service delivery process. Paytm started out with a focus on prepaid recharge solutions, expanding their portfolio to payment gateway, mobile wallet, online marketplace, and payment bank.

JAM: the sauce for Fintech growth in India

The growth opportunity for Fintech in India can be traced down to two factors: the low penetration of formal financial services in the country, and the JAM (Jan Dhan, Aadhaar and Mobile) strategy pushed by the Government of India for financial inclusion.

Sixty percent of Indians have traditionally had no access to any banking solution.⁵ Ninety percent of SMEs have no access to formal credit.⁶ Thus, a significant pool of business and individuals only had access to informal channels - a large pool that can now be addressed by Fintech solution providers because of the three-pronged JAM initiative.

The Pradhan Mantri Jan Dhan Yojana was launched in August 2014. In two years, it had led to the opening of 236 million bank accounts, and the issuance of 188 million debit cards.⁷ When the program started, about 45 percent of the accounts opened under the scheme had zero balance, which has since the reduced to 24 percent. This pool of people with functioning bank accounts provides a large target market for Fintech companies.

Aadhaar, the national identification number of the Indian government, also provides for biometric identification and online verification - both of which will facilitate digital transactions. At 1.04 billion registrations, it currently covers 85 percent of the population of the country.⁸

While banking penetration has been low, 75 percent of the Indians own mobile phones and over 25 percent are expected to have a smart phone by 2017. About a third of Indians were expected to be online by 2016, most of them through mobile phones. Mobile banking has been growing faster than web banking. Albeit on a low base, the value of mobile transactions in Dec 2015 was more than four times the amount it was a year ago.⁹ Digital transactions are expected to account for a quarter of all banking transactions by 2020, with close to 50 percent of the people accessing digital banking by 2022.¹⁰ The year 2016 also saw the announcement of the Unified Payment Interface (UPI), a set of standards that will help integrate different payment systems in India. This will further enable the adoption of mobile and digital transactions in India, opening new use cases for Fintech startups.^{11, 12}

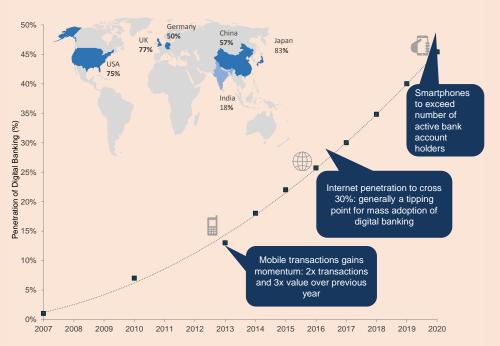


Exhibit P1.2: Penetration of digital banking in India

The way India leapfrogged the fixed line telephone phase and moved to mobile telephony, a similar model may be imminent in the Indian financial sector. It is possible that a large part of the population may never open a conventional bank account and straight away use mobile phones to do financial transactions¹³ – whether for payments, lending,¹⁴ borrowing or investing. Nandan Nilekani, the former Chairman of UIDAI that implemented the Aadhaar programme has said that the mobile phone will be the bank account for many Indians and it could be a "WhatsApp moment in Indian financial services."

The emerging landscape

In India, over 70 percent of the total Fintech investment in 2015 was received by companies in the Payments sector – led by Paytm which received over \$500 million from ANT Financial, followed by BillDesk who got \$150 million from General Atlantic. MobiKwik received \$75 million led by TreeLine Asia and Citrus received \$25 million from Ascent and Sequoia Capital to boost investments in the Wallets sector. BankBazaar received \$60 million from Amazon India, Fidelity Growth and Mousse Partners to top investments in the Credit Cards & Loans, a

category that received the third highest investment. Exhibit P1.3 gives the start-up investment activity in Fintech companies during 2015.

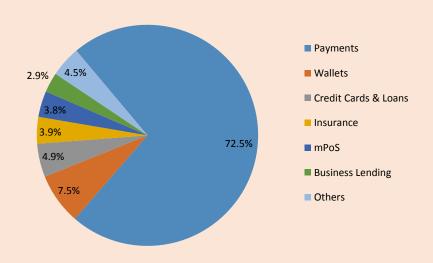


Exhibit P1.3: Investment activity in Fintech, 2015

While some sectors are still in early stages of adoption, others have gained wide acceptance. Payments, remittances and wallets are growing rapidly with cashless payments projected to account for over 50 percent of transactions in India by 2020. ^{15,16} Tech-enabled asset management firms also known as robo-advisory firms, such as ArthaYantra, have now opened up the market to millennials and low-value investors by using algorithms to reduce the cost of investing¹⁷. Fintech lenders like Capital Float in India, are able to cater to SME's rapidly and more effectively. In India, lenders like KredX add value by assisting SME's to become creditworthy, and are building a data repository to better their credit assessment algorithms. Incumbents are seeing this effect and are developing this technology or collaborating with Fintech champions to cut the cost of lending to SME's. With new companies launched every day, the market is seeing solutions emerge across each sector. For example:

- mSwipe is an mPoS solution that uses a card reader connected to a mobile device to allow small business
 merchants to accept card payments. mSwipe sends the user's payment to an escrow account, from where
 it gets connected to the payment gateways. Thus, it does not require a bank to complete the transaction.
 As of July 2016, they claimed to have 85,000 merchants onboard and were on track to increase this to
 200,000 by December 2016.¹⁸
- Faircent is a Peer-To-Peer lending marketplace where borrowers and lenders can connect. Borrowers are assigned a loan based on Faircent's underwriting algorithm. Lenders can then make offers at interest rates that are similar or lower than specified by Faircent for a borrower. Faircent charges an upfront fee and an administrative fee on finalized deals.
- Neogrowth is an NBFC that provides loans to small businesses off its own book that has brought in an innovation in collections. Neogrowth provides loans to retailers who have EDC/POS machines or online sellers, where instead of a fixed monthly payment the repayment is a fixed percentage of each day's sale through the EDC/POS machine or e-commerce platform. Since launched in 2013, they have disbursed over ₹6000 million in loans. In 2016, they received a funding of ₹1080 million from IIFL.¹⁹

- Scripbox has tried to make investment easy, by automating and simplifying the process of selecting mutual funds for investment. The platform provides three streams of investment (tax saving, equity and debt) and provides the user with 2-4 funds in each category. The shortlisted funds are automatically reviewed, and single click options are provided to switch from an old fund to a new one. Seventy percent of their customers are first time investors with investment ranging from ₹500 to ₹400,000 p.m.
- ArthaYantra uses a simple questionnaire to capture the investor's financial goals and risk appetite. The algorithm then runs this information and funds are recommended for investment. Artha Yantra's mixed model allows the investor to pay for investment advice alone and buy the funds separately or buy the funds through the platform and receive free advice as the funds pay a commission to the platform.

Exhibit P1.4 below provides a quick segmentation of the Indian Fintech ecosystem.²⁰

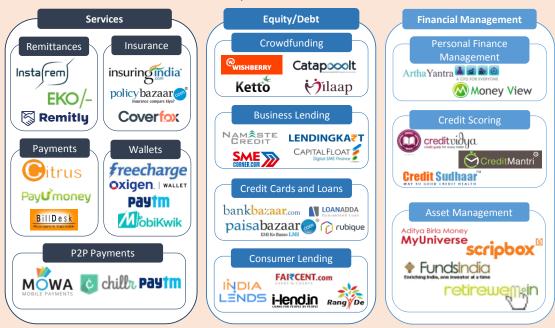


Exhibit P1.4: Ecosystem of Fintech Firms in India

The technology revolution i.e. penetration of internet and mobile devices will only further the cause of Fintech in the years to come. For example, the Unified Payments Interface (UPI) infrastructure facilitates a less-cash society. Government is also taking initiatives like the MUDRA Yojana that will provide small businesses loans of up to one million rupees at low interest rates. We have projected that online financial services (not including payments, share trading and remittances) will be a ₹150 billion market by 2020. The market size calculations in Exhibit P1.5 are represented by net revenue accrued to service providers and not the gross value of transactions.²¹

Exhibit P1.5: Sector-wise 2014 vs 2020 Market Opportunity



Opportunity Size of Online Financial Services (₹ million)

The challenges ahead

- 1. Fintech regulations are still evolving in India. The principal regulator, Reserve Bank of India, has commissioned studies on certain aspects of the emerging Fintech landscape, with a 13-member panel in July 2016 to "look into and report on the granular aspects of Fin Tech and its implications". In general, the RBI has advocated a wait and watch strategy. An April 2016 consultation paper on P2P lending expressed the opinion that "Regulating an exempt or nascent sector" could create the perception of legitimacy, which, in the context of P2P lending, could attract vulnerable lenders who do not understand the risks involved. While the focus of the regulator is usually on borrower protection, in these segments, assuming that "the lenders may include uninformed individuals", the regulator has also emphasized the need to protect the individual lenders.
- 2. While there are many Fintech companies that have been operating in India for three or more years, most of them are still sub-scale. Wallets are an exception, where Paytm has driven dramatic growth of the segment. In others, such as lending, there are multiple players of similar (and relatively small) size. The value of transactions is still small compared to the potential, or even compared to the incumbents. With companies being at such an early stage of development, it is hard to identify one as a leader there are many rounds of competitive churn ahead of us. Even companies like PolicyBazaar, who have built a reasonable position, continue to face new competitors.²²
- 3. Fintech startups generally have a technology first mandate, but many Indian operations can best be described as technology-enabled. Some companies, specifically those in P2P payments, are restricted due to regulations. In other segments such as SME lending, customers require significant amounts of handholding, and the delivery of the services depends on having feet on the ground. The challenge is exacerbated for Indian startups because key elements of the ecosystem are not yet available. For example, SMERA, the largest credit-scoring bureau for small business, covers less than 1 in 10,000 businesses.²³ In other cases, data is not available, or is of poor quality. For example, credit card history, a key source of data for personal credit scores in the West, is not very useful in India because less than 2 percent of the population have a credit card. Of course, this is also an opportunity area for entrepreneurs. Finomena, for

example, is trying to use alternate data and algorithms to evaluate the credit worthiness of college students and working professionals.²⁴

4. Incumbents in India have been forewarned by the explosive growth of Fintech in other countries. They are aggressively trying to learn from startups and from the response of their peers in other markets. The banks have either tried to adopt the techniques from the startups, or tried to collaborate with them. The first approach has been demonstrated by Citibank, which started 'Citi Fintech'²⁵, a small team with a mix of former technology and banking employees, to drive innovation and counter challenges from Fintech startups. The goal is to mirror the speed and agility of the startups by replicating their processes, such as by having shorter release cycles for new versions of the mobile app. On the other hand, JP Morgan Chase has partnered with the lending startup, OnDeck Capital, where JP Morgan will use the platform from OnDeck to provide loans to their small business customers, with OnDeck providing processing support and faster turnaround time²⁶. In India, SBI has started experimenting with several initiatives that replicate the game plan of startups – such as B2C lending partnerships with ecommerce platforms.²⁷ HDFC bank has established a 'Digital Innovation Summit' to "reach out and source ideas from Fintech companies". Tata Capital is partnering with Fintech companies like Biz2Credit, an SME lending startup with an international presence.²⁸

The overall impact of Fintech start-ups

Startups in the Fintech space have helped redefine the financial services landscape – both directly and indirectly. Although, many of the current firms are still relatively small, we can see several ways in which they are helping to reshape financial services in India.

The most obvious impact is in the area of payments – where millions of Indians are now using digital wallets as a matter of course. This has eased transactions immeasurably, especially in the mobile commerce space and has enabled the dramatic growth of taxi-hailing services like Uber and Ola. Importantly, it is leading to a reduction of the cash economy, evidenced already in the slow-down of ATM growth. In June 2016, Paytm also announced a soon-to-be-launched feature of making offline payments using an app, bringing digital payments to low connectivity users.

The second area of impact is in terms of inclusion. Digital models can scale rapidly and at low cost – removing the limitation that traditional brick-and-mortar institutions have had. Once the models are developed, we will see rapid improvements in the penetration of financial services – reducing the role of the informal economy.

Further, Fintech models are improving the efficiency of the financial services space. With improved data and analytics engines, it is now possible to do segment-of-one pricing. Averages will no longer be relevant and firms will be able to distinguish between good and bad customers in a much better way. This will result in better pricing and efficiencies. We expect that this will reduce the overall cost of credit in the system, which has a major GDP multiplier.

Finally, the threat of Fintech startups has galvanized the incumbents into action, bringing in more efficiencies in the system. Many of the incumbebt institutions are developing their own digital plays and are collaborating with Fintech companies. In June 2016, Axis Bank set up an innovation lab in Bangalore to develop startups with the intention of absorbing their technology. SBI, in the same month, launched a ₹2 billion startup fund and earlier in the year, launched a specialized branch catering to startups, realizing the value of collaborating with Fintech companies to cross-sell their products. All-in-all, the startups are shaking up the establishment, and are leading to a new order.

Notes

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- ³ "Bank of Baroda ties up with CreditMantri to first-time borrowers, SMEs", The Economic Times, July 25, 2016
- ⁴ "Hold on, my wallet's in my phone: Fintech firms are a blessing for small entrepreneurs", Forbes India, July 15, 2016

⁵ "Jan Dhan Yojana: Government loads up RuPay with Rs 30K LIC cover plus Rs 1 lakh accident insurance," The Economic Times, August 28, 2014

⁶ "Fourth All India Census of Micro, Small and Medium Enterprises", Ministry of Micro, Small and Medium Enterprise, September, 2009

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- ⁸ "Aadhaar Voluntarily Mandatory?", The Times of India, August 4, 2016
- ⁹ "Mobile banking sees dramatic surge in India", Mint, March 28, 2016
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- ¹⁸ "Mswipe eyes 2 lakh merchants by Dec 2016", Deccan Herald, July 14,2016
- ¹⁹ "NeoGrowth gets Rs 108 crore funding from IIFL Wealth Management's Seed Venture Fund", The Economic Times, July 4,2016
- ²⁰ "Fintech India", MXV Consulting and MAPE Advisory, June 2016
- ²¹ "Fintech India", MXV Consulting and MAPE Advisory, June 2016
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- ²³ SMERA has assigned 40,451 ratings, against an estimated 510 Mn MSME enterprises (2014-15, Ministry of MSME estimate)
- ²⁴ "Matrix Partners, others back fin-tech startup Finomena", The Economic Times, March 8, 2016
- ²⁵ "Citi Does Fintech", Fortune, July 1, 2016
- ²⁶ "Inside J.P. Morgan's Deal with On Deck Capital", WSJ, December 30, 2015
- ²⁷ "Launch of SBI (e-Smart SME) e-commerce loans", Press release, SBI, January 15, 2016
- ²⁸ "Tata Capital partners with SME lending platform Biz2Credit", Yourstory, April 11, 2016