Deloitte.

IAMAI
Internet And Mobile Association Of India

FinTech in India

Ready for breakout

July 2017

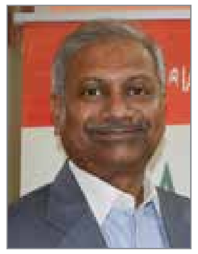
Contents

Foreword by IAMAI

Since it's formation, IAMAI has worked extensively with our industry members to foster a more inclusive and enabling digital ecosystem in India. Through the efforts of the Payments Council of India (PCI) and IAMAI's FinTech Committee, we are excited to work towards India's transition towards a less-cash, more diverse and financially inclusive economy that is geared towards introducing an ever widening population to Digital financial services.

Our belief is that this transition will be best brought about through deep partnerships between incumbent banks, new world disrupters and the government. The structure of our organization and all our efforts echoes this belief, which is why we eschew an 'us versus them' mentality in favor of a close-knit, partnership based model.

This report explores some of the most pertinent trends that are at the root of the FinTech revolution currently underway in India. We will follow it up with a series of deeper dive analyses which will get into more details about the underlying causes and regulatory / industry changes required to usher in the FinTech age in India.



Subho Ray
President, IAMAI

FinTech in India | Ready for breakout

Message from Deloitte

FinTech is one of the fastest emerging areas in banking and financial services. It is making the experience of banking and finance more intuitive, personalized and empowering. The convergence of financial services and exponential technologies will be key to build a strong digital economy, and lead India's transformation. Armed with new data and analytics capabilities, asset light platform and almost zero processing costs, FinTechs are complementing and in some cases challenging the traditional banking and financial services institutions globally.

Indian FinTech is one of top five markets by value of capital funding and investments in the sector with nearly $270 million of funding in 2016. India remains one of the largest markets where the structural enablers to setup and incubate fintech have come together strongly and at an apt time. Combination of steady economic growth with low penetration of financial services and availability of supporting infrastructure such as internet data access, smartphones along with utility infrastructure including Aadhaar based authentication and India Stack capabilities are likely to provide the required impetus to India's FinTech sector.

We have analyzed the breakout potential of India's Fintech sector across six segments - Payments, Credit, Investment Management, Personal Finance Management, BankTech and InsurTech and across twenty sub-segments. Expectedly payments and lending are the likely candidates for breakout in the short term as the new FinTechs target the quest for offering cashless digital payments services. On the lending side, low penetration of retail and MSME credit along with the promise of better experience and faster turnaround time have created strong propositions for customers. Fintechs in most of the other segments including Investment Management, Personal Finance Management, BankTech and InsurTech have initiated the market making process and currently target specific market niches. We believe that armed with right value proposition and by gaining confidence of customers, these segments are likely to witness their own break out moments and it's just a matter of time, and some entrepreneurial energy and creativity before it happens.

We hope that the industry finds this report useful in charting direction for a sustainable, and scalable FinTech sector in India.

Monish Shah
Partner – Financial Services

Introduction

Technology has been a key enabler in the growth of a digital economy. Over the years, Indian banks and financial services providers have gradually adopted technology to improve reach, customer service and operational effectiveness with evolving market and technological advances. However, the pace of technology adoption has not been commensurate with it's potential and hence there have been gaps in the penetration of financial services. For example, there is a credit demand supply gap in the Micro and Small Enterprise (MSE) segment particularly for micro enterprises. We estimate the credit gap in the MSE segment (with annual revenue upto INR 3 crore) to be INR 833,000 crores.

Exhibit 1: Credit gap in the MSE segment

Revenue Segment (INR)	No. of Units (Mn)	Credit Demand (INR 000 crore)	Bank Credit Supply (INR 000 crore)	Credit Gap (INR 000 crore)
<15 Lakh	41.4	414	92	322
15 - 30 Lakh	5.6	168	62	106
30 lakh - 1.5 Crore	4.5	477	203	274
1.5 Crore - 3 Crore	1.3	234	103	131
3 Crore - 18 Crore	1.8	720	357	363
Total	**54.6**	**2013**	**817**	**1196**

Credit gap in the target segment is INR 833k Crore or >60% of credit demand of target segment

Note: Credit Demand is calculated based on revenue using appropriate multipliers

Source: Deloitte Analysis, MSME Annual Report, RBI, Industry Reports

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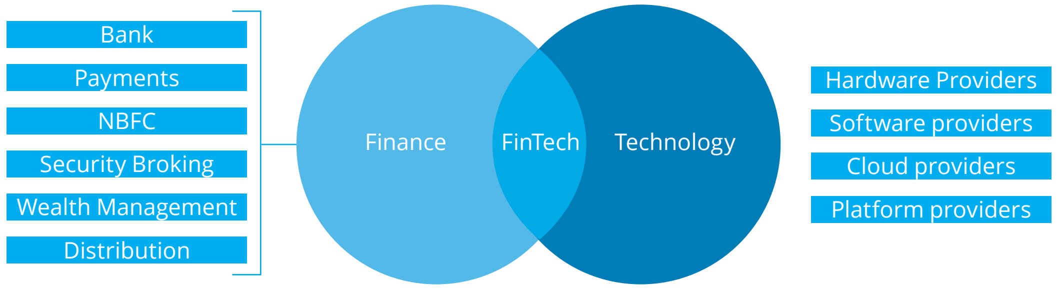
Traditional Banks and Financial Institutions have viewed technology as an enabler to business propositions, rather than creating new business propositions themselves. Financial Technology (FinTech) Companies however are changing that role by leveraging digital technologies to create new business propositions and target new market segments which hitherto were not possible.

FinTech in the truest sense is the application of technology to offer new financial products and services to new market segments in an economically viable manner. From a business model perspective, the FinTech sector is marked by technology companies that either intend to disintermediate, or partner with incumbent Banks and Financial Institutions depending on strategic narrative and market landscape. Hence, FinTech is increasingly becoming an important focus area for all the key stakeholders in India's Financial Services industry – Regulators, Traditional Banks, NBFCs, Payment Banks, Investors, Payment Service Providers, Broking and Wealth Management Companies, Insurance providers and pure-play FinTech players.

Exhibit 2 FinTech – Convergence of Financial services and Technology



Source: Deloitte Internal Analysis

Armed with advanced data and analytics capabilities, asset light platforms and almost zero processing costs, FinTech companies are complementing, and in some cases challenging the traditional banking and financial services institutions.

The immense potential of this sector is clearly apparent in the global FinTech funding scenario. With more than $17 Bn funding and over 1400 deals in 2016, Fintech is one of the most promising sectors globally. With nearly $270 Mn funding in 2016, India is ranked amongst the top ten FinTech markets globally.

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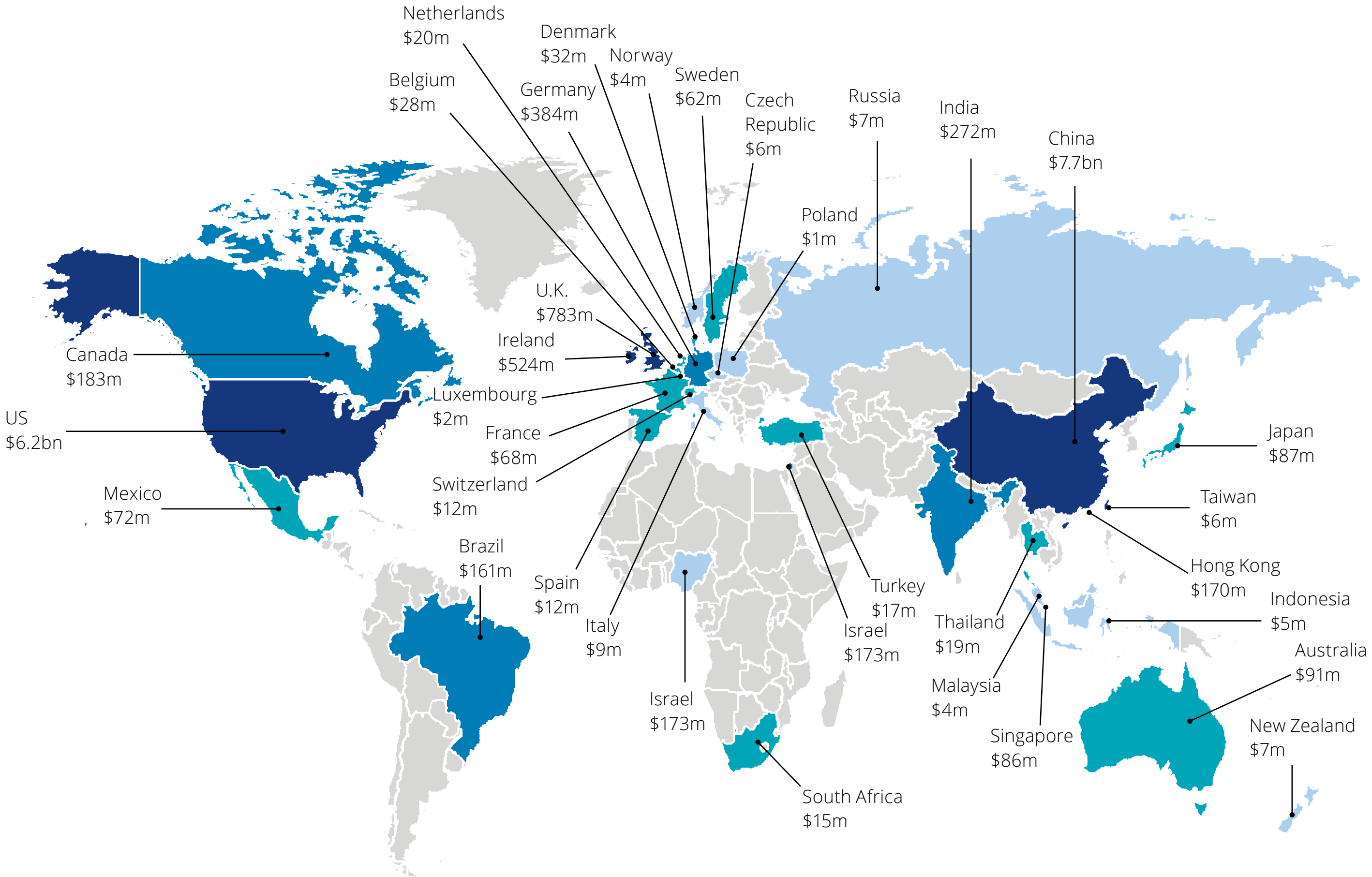
Exhibit 3 Global funding to FinTech sector in 2016



Globally, $17.4 Bn invested over 1,436 deals in 2016

■ ≥ \$500m ■ ≥ \$100m ■ ≥ \$10m ■ < \$10m

Source: PitchBook
Compiled by: Deloitte

In India, most of the FinTech companies including the exponentially growing m-wallets have been complementing existing financial services providers, rather than completely disintermediating them. Traditionally, the Indian financial services sector is characterized by brick and mortar - branch banking, labor intensive banking services, manual and paper based processes with limited straight through processing-despite continuous investments in technology and systems by Indian Banks and Financial Services Institutions. Hence, there is a very high degree of customer friction in the areas of customer on-boarding, KYC and branch banking services. This inefficiency in the system presents an inherent opportunity for data-driven analytics led FinTech business models in reducing cost of acquiring and servicing customers, eventually leading to a greater penetration of financial services and insurance products in the market.

Although Demonetization provided a boost to the payments sector in the short term, but we now expect investments in personal finance and wealth management to rise going forward.

There are a number of new business models that are being introduced in urban centers. There are a limited number of players that are focused outside urban and metro centers due to infrastructure challenges (E.g. rural India has only 17% internet penetration compared to 60% in urban India)[1]. We believe that in the medium term FinTech players will consolidate their position in urban and metro centers and will extend to rural and semi-urban areas over the next 3-5 years.

The purpose of the paper is to analyze the Indian FinTech Landscape, the likely breakout of different FinTech segments in the Indian context, their likelihood to scale, and implications on the Indian Financial Services and Insurance market.

Indian FinTech segments

In the Indian context, FinTech can be broadly aligned across the following twenty segments, across six broad financial services areas. The twenty segments are described in Exhibit 4. The contours of these segments are broadly in line with the findings of Deloitte global research on "Future of Financial Services", which was jointly conducted along with World Economic Forum and highlights the emerging areas of innovations in the financial services sector. As inferred in the study, these innovations are also clustered around specific areas with unique underlying characteristics. FinTech companies are leading the charge at pioneering these innovations and are continuously re-shaping the market landscape, even in India.

Within these segments, Digital Payments have been at the forefront of leading India's FinTech sector. Correspondingly, digital payments have also garnered the lion's share of VC funding as compared to other segments. Post the Government's demonetization initiative in November 2016, the spotlight on digital payments is unique, as payments remain an innovation cluster where penetration is extremely low and there are still areas of friction that new FinTech players can remediate to offer value.

The retail lending segment, where there is a convergence to the regulated regime as most of the FinTech players in this area, including P2P lenders, Alternative Credit Scoring platforms and Crowd Sourcing platforms, are eventually being brought into the regulatory ambit. The MSME lending area is witnessing new FinTech players addressing the structural issues of information asymmetry and reducing turnaround times for underwriting loans to small businesses.

Expectedly, the asset side of the banking business remains a white space where there have been limited innovations, with the exception of Peer-to-peer lending platforms.

[1] http://www.livemint.com/Industry/QWzIOYEsfQJknXhC3HiuVI/Number-of-Internet-users-in-India-could-cross-450-million-by.html

Exhibit 4

Areas	FinTech Segments	Brief Description
A. Credit	01. Peer-to-Peer Lending 02. Crowd Funding 03. Market Place for Loans 04. Online Lenders – on-book lending by NBFCs 05. Credit Scoring Platforms	• All forms of lending market places including Peer-to-Peer lenders and market places that connect borrowers with both, institutional and lenders; • Also includes crowd funding and equity funding platforms • NBFCs that use alternative scoring and digital channels for acquisition
B. Payments	06. M-wallets and PPIs 07. Merchant Payments and PoS Services 08. International Remittance 09. Crypto Currencies	• Services that enable transfer of funds for various use cases - P2P (Person-to-Person), P2M (Person-to-Merchant), G2P (Government-to-Person) etc. • Services targeted at both Payees and Merchants by enabling requisite payment infrastructure through mobile or other technologies
C. Investment Management	10. Robo Advisors 11. Discount Brokers 12. Online Financial Advisors	• Wealth advisory services delivered through technology governed rules and investment strategies
D. Personal Finance Management	13. Tax Filling and Processing 14. Spend Management and Financial Planning 15. Credit Scoring Services	• Tools and services for active management of individual financial profiles (e.g. spend, investments, credit profile, etc.)
E. Bank tech	16. Big Data 17. Blockchain 18. Customer Onboarding Platforms	• Services that utilize many data points such as financial transactions, spending patterns to build the risk profile of the customer. This provides an alternate to traditional underwriting methods that are unable to serve people with limited credit data. • There is significant value in unstructured data. However, it is difficult to derive value from unstructured data, owing to challenges in analyzing it. A number of new tools are being developed to derive value from large data sets.
F. InsurTech	19. Insurance Aggregator 20. IOT, Wearables and Kinematics	• Small business insurance • Usage based insurance

Source: Deloitte Analysis

Indian FinTech Scenario: To stay and to grow

India remains one of the largest markets where the structural enablers to setup and incubate FinTech companies have come together strongly. The following seven factors are likely to drive the growth of the Indian FinTech sector, in the medium to long term:

01. Combination of steady economic growth with low penetration of financial services: India's GDP is expected to grow at 6-8%[2] for the next decade, thus driving income and consumption levels of households as well as businesses. Coupled with low penetration of household credit in tier 2 and 3 cities, mortgage, investment and asset management services, the banking and financial services market is likely to grow at 2-2.5 times of real GDP growth, thus sustaining both incumbents and new FinTech entrants. Further, improvement in digital infrastructure (E.g. internet and smartphone penetration) outside urban and metro centres will drive adoption of digital financial services.

02. Large public sector banks and insurers lagging market growth: On an aggregate basis, Public sector banks and insurance firms are gradually but continuously losing market share to private banks and insurers respectively, due to their inability to outgrow the market. Notwithstanding this steady loss, Public sector banks still account for 70% market share of deposits and credit. Going forward, new private sector banks, including new differentiated banks are likely to be the beneficiaries of emerging market opportunities. Along with the differentiated banks, emerging FinTech players in the areas of payments, lending and investment management will also benefit from low penetration and focus on niche areas.

03. Regulatory forbearance toward FinTech: Indian regulatory authorities including RBI, SEBI and IRDA have adopted an accommodative stance toward an emerging FinTech sector, without bringing in prohibitive guidelines to overregulate the sector. Despite catching up with the rapidly evolving eco system, Indian regulators have adopted a consultative approach and have been proactively foreseeing the need for adequate regulations, especially in the areas concerning public funds i.e. peer-to-peer lending, crowd sourcing and alternative currencies.

04. Indian Millennials rapidly ascending the adoption S-curve of digital financial services and thus perceiving higher friction from incumbents: With nearly 440 Mn Millennials, India has one of the youngest populations that is becoming productive and will drive consumption and household savings. Moreover, this age cohort is increasingly adopting digital channels to initiate product search, make inquiries, undertake online fulfillment and finally, make payments through digital channels. This segment is likely to perceive higher friction in the services offered, particularly by public sector banks and insurers, and hence, will gravitate towards new platforms.

[2] World Bank Report

05. India Stack and internet data proliferation to improve financial services utility infrastructure and connectivity to support digital financial services: India Stack is a set of Application Programming Interfaces (APIs) that allows FinTech companies, developers and governments to utilize India's unique digital Infrastructure towards presence-less, paperless, and cashless financial service delivery. Although India stack, powered by Jan Dhan, Aadhaar & Mobile trinity, can enable incumbent banks and financial service providers, but its true power is harnessed by FinTech Companies in significantly reducing costs of acquisition and servicing. UPI can be a game changer, as it has mass appeal, owing to its universal acceptance and security features. Aadhaar, which now extends to ~1.1 Bn Indians can be levied for effective biometric authentication of financial transactions. It is proving to be an optimal digital identity, and it gives users the ability to securely utilize their biometrics, when undertaking financial transactions.

Exhibit 5 India Stack

India Stack

India Stack		
Consent Layer	Utilize power of data	Personal data store
Cashless Layer	Transition to cashless economy - new approaches to credential checking	IMPS, AEPS, APBS and UPI
Paperless Layer	Transactions performed in a paperless manner	Aadhaar e-KYC opening bank account, e-sign, Digital Locker
Presence-less Layer	Unique digital biometric identity and authentication from anywhere	Aadhaar Authentication

Source: Credit Suisse reports, News articles, Deloitte analysis

06. Advances in technology and adoption of cloud services leading to asset light models with almost zero unit costs at transaction levels could enable subsidization without building scale: A key barrier to entry in traditional financial services. FinTech companies will also pass on the benefits of lower transaction costs to end users, thus improving their propositions. This aspect further gets accentuated by the legacy free environment in which most FinTech companies operate, thus relying on cloud based services to align their overall cost structures.

07. Lower real interest rates in Indian economy: With real interest rates remaining low (OECD estimates, long term interest rate forecasts of 6.8% pa, 2018), avenues to introduce new asset classes through P2P platforms, low cost money market funds, investment management and robo advisory services, are likely to gain acceptance from urban and financially savvy investors.

Breakout of FinTech companies

Key factors leading to success of FinTech companies
Out of the many FinTech players in India, a small number of players will emerge as winners, creating sustainable business models that withstand the ups and downs of economic cycles. These business models will focus on retaining customer loyalty, among evolving customer expectations; strengthening IT infrastructure, in an environment of exponential technology advancements; using data-points to their advantage; seeking appropriate funding; lowering cost of operations; and offering value-added offerings.

Exhibit 6 Key Factors leading to success of FinTech companies

Funding Environment
Availability of Funding through VC and PE firms is imperative for FinTech companies to grow. In the past three years Indian FinTech has witnessed more than 120 deals worth $2.0 Bn.[3]

Customer Loyalty
The most important element for FinTech companies to concentrate on is customers. They must find innovative and cost effective ways to acquire and retain customer loyalty in an environment where the impediments to churn are lower. For e.g. gaining customer trust, providing a seamless experience by reducing friction in digital transactions. Within payments interoperability between players will improve customer convenience.

Value Proposition
Most FinTech companies began by focusing on segments where customers are most receptive. They understand the pain points of customers, and address them to build a sustainable business that creates value. Across FinTech, three segments i.e. Millennials (440 Mn), small business, and underbanked, offer most opportunities to FinTech businesses

Technology & IT Infrastructure
Technology and IT infrastructure is the foundation of FinTech. The FinTech infrastructure backbone has been strengthened tremendously with the host of options available to market participants such as BBPS, Bharat QR, India Stack, UPI.

Cost of Operations
Most FinTech companies have a cost advantage over incumbents. They leverage technology to
- Seamlessly on board, leading to lower customer acquisition cost
- Reduce servicing cost for customers
- Reduce cost of distribution

E.g. Payments Bank leverage technology to expand customer base while limiting physical presence

Innovative use of Data
Big Data and analytics offer tremendous potential to understand the needs of customer and offer personalized products & services and drive operational cost efficiencies that give rise to altered business models

Source: Deloitte Internal Analysis

[3] CBINSIGHTS - The Global FinTech Report: 2016 in review

Breakout FinTech Segments

All the segments of Indian FinTech have started gaining ground albeit to different extents, due to different underlying characteristics that impact scalability, adoption and viability. Moreover, not all the segments are likely to breakout at the same time. In order to assess the breakout potential, as well as the timing of breakout, Deloitte has developed a customized FinTech breakout assessment framework for the Indian FinTech market, drawing from the learnings of the Future of Financial Services study. For example, circa 2017, the digital payments segment has clearly witnessed a breakout due to a host of business, market and extrinsic regulatory reasons including a push towards digital payments post demonetization. The digital payments segment weighs positively on most of the characteristics in the framework. The framework qualitatively grades the 20 FinTech segments across the seven characteristics on three parameters (High, Medium and Low) highlighted in exhibit 7 below:

Exhibit 7

	FinTech Breakout Characteristics	Strategic Theme Addressed
01.	FinTech companies that are addressing areas and functions where customer friction meets largest profit pools (economic value)	Creating new value propositions
02.	FinTech companies that employ business models that are platform based, modular, data intensive, and capital light to start with	Designing new business model
03.	FinTech companies that actively shape customer and user behaviors, thus resulting in long-term structural change of the financial services industry	Shaping long term customer behavior
04.	FinTech providers that offer services to the underserved population, small and mid-sized businesses, using sophisticated capabilities on viable basis	Expanding market
05.	FinTech companies that actively collaborate with Banks and other FIs and also operate within the regulatory purview or active consideration purview of regulators	Fostering collaboration and working within regulatory purview
06.	FinTech companies operating in segments with significant legacy issues and prevalence of conventional business models, that lack scalability	Eliminating legacy constraints
07.	FinTech companies that target customers and make curated offers through use of analytics and alternative / big data sources	Leveraging data and analytics

Likelihood of Breakout

■ High ■ Medium ■ Low

The framework aims to address the considerations across a range of business aspects including scalability, business and operating model alignment, addressing new market opportunities, ability to create and serve new market segments, collaborating and partnering with banks. Using the above framework, our team analyzed various aspects of businesses and consulted industry participants to understand their breakout potential. Based on the analysis of the 20 segments, the results are summarized in exhibit 8 below. The areas marked in darker shades indicate a higher likelihood of breakout when compared to other FinTech segments. Based on the detailed analysis covered subsequently, digital payments and alternate lending emerge as the FinTech segments with the stronger breakout potential. A few of the segments including crypto currency and InsurTech rank lower in the Indian market context, though globally these segments probably have the same likelihood of breakout when compared to a few segments that are rated higher in the Indian context.

Exhibit 8 Indian FinTech Breakout Grid

Likelihood of Breakout

■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

Alternate Lending

Alternate lenders including P2P lenders, marketplace platforms, digital lending platforms are targeting specific credit needs of retail consumers and micro and small businesses that remained underserved by banks and NBFCs, or specific market segments including e-merchants and other internet enabled businesses.

The alternative lending business model is built around technology that enables highly efficient customer acquisition, approval and servicing activities within a relatively light-touch regulatory environment. Most Indian banks' and NBFC's operating models, in contrast, include physical branches operating expenses, significant regulatory overheads, collections and recoveries functions that are needed to service an aged loan book. Despite the low cost of funds enjoyed by banks, these factors add to the average cost of a loan. The alternative lending model enjoys significant operating cost advantage as compared to the traditional banking and NBFC business model.

Till now, most of the borrowers serviced by alternative lenders tend to fall outside the banks' risk appetite, and segments that value speed and convenience enough to pay a premium (for example SMEs, particularly in term loans, or high-risk retail borrowers applying for personal loans). In the medium to long term, emergence of alternative lenders is likely to have an impact on the NBFC's business in India. Unlike banks, most of NBFCs do not have access to the low cost of funds, and with higher acquisition and servicing costs, NBFCs may be outcompeted as alternative lenders gain traction in the Indian market. The robustness of the credit algorithm of FinTech players in this space is yet to be tested as the industry is yet to complete a full credit cycle. As the industry matures, appropriate controls need to be put in place to avert NPAs. Alternate lenders will have to focus on keeping NPA percentages lower than conventional banks. They must not prioritize quantity over quality of loans. This will ensure success of this model.

Exhibit 9 Alternative Lending Breakout Grid

Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collabora-tion and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
A. Credit	01. Peer-to-Peer Lending	Medium	High	High	Low	High	High	Medium
	02. Crowd Funding	High	High	High	Low	Medium	Low	Medium
	03. Market Place for Loans	High	Medium	Low	Medium	High	High	High
	04. Online Lenders – NBFCs using own capital	Medium	Low	Medium	Low	Medium	Medium	High
	05. Credit Scoring Platforms	Low	High	High	High	Low	Low	High

Likelihood of Breakout High Medium Low

Source: Deloitte Analysis based on interaction with Industry participants

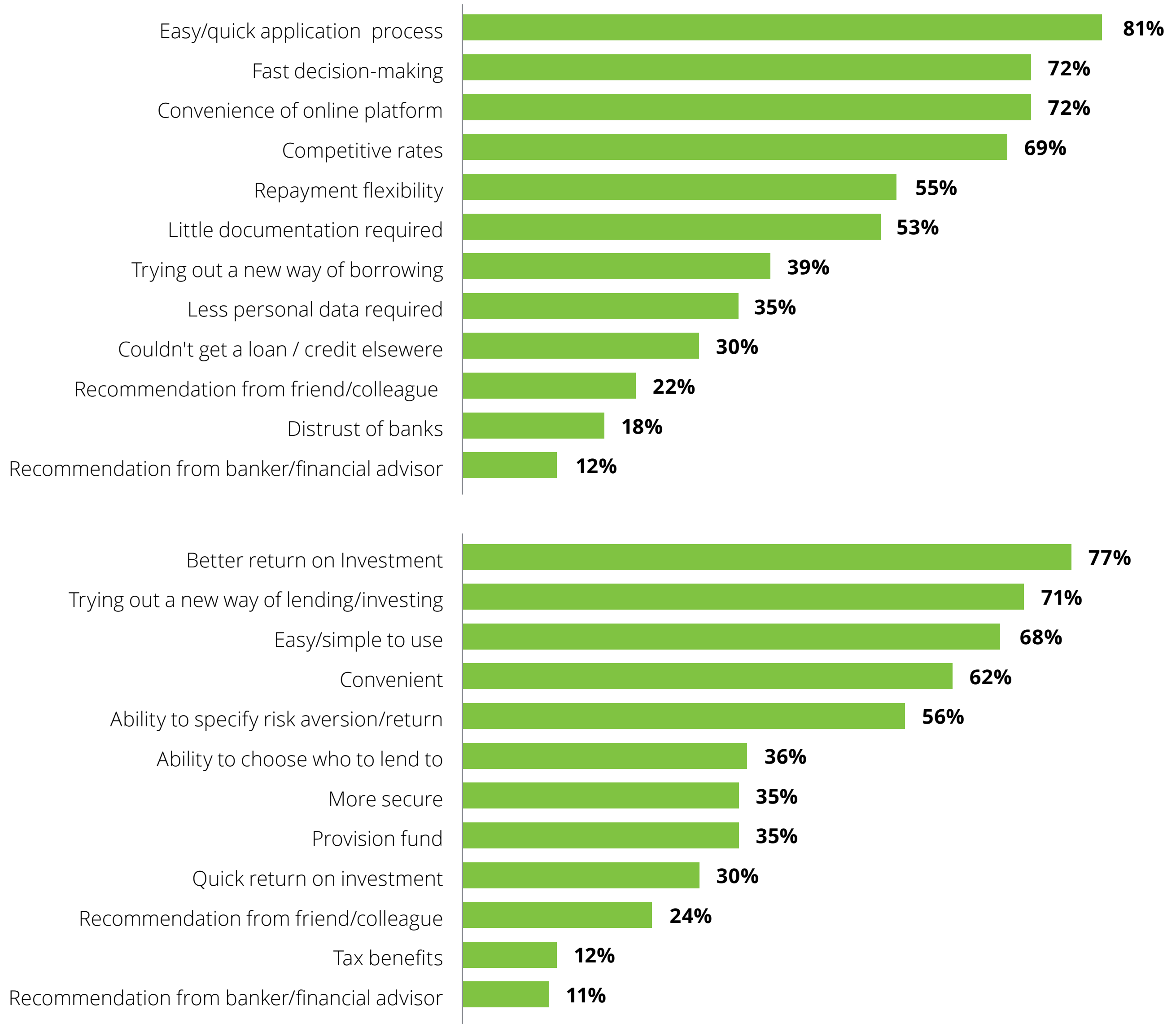
Within alternative lenders, peer-to-peer lenders and market place lending platforms are likely to breakout faster, as these lenders target profitable niches of Indian borrower segments, pioneer new business models by having only digital presence, target underserved market segments, and shape user behavior by gaining trust.

Peer-to-Peer Lending

Peer-to-peer lending is an innovative model for transferring credit risk from banks and financial institutions, dispersing it among individual lenders. These lenders are typically individuals and households with surplus funds and savings who are seeking better returns. In India, P2P lending through informal ways such as borrowing from family, friends, and unorganized money lenders has traditionally been the primary source of capital for micro and small businesses, as well as individual borrowers meeting their exigent financial requirements. Online P2P platforms institutionalize and scale up this age old financing mode and act as a matching platform between borrower and lender groups.

Online P2P platforms significantly address the key areas of customer friction. Based on Deloitte research, P2P platforms have been able to attract borrowers mainly due to an easy supplication process and quicker turnaround times. Moreover, the convenience offered by these platforms is valued by borrowers and as inferred from borrower responses, interest rates are not the sole criteria for borrowers. However as expected, financial returns (from lending) remain the top most reason why individual lenders use P2P platforms, along with seeking diversification in investment avenues.

Exhibit 10 Reasons for using the services of market place lender – Borrowers and Lenders



Source: Deloitte UK Analysis

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The Indian P2P lending segment is evolving rapidly as new entrants play the role of market makers and industry champions. Most of the P2P platforms currently focus on unsecured loans (Personal loans and Microfinance) and the MSME segment, by targeting borrowers that remain underserved by Banks and NBFCs.

Two different business models have emerged in the P2P lending segment. Currently players have adopted either the 'direct disbursal model' or the 'partner assisted disbursal model'.

01. Direct disbursal model – The P2P platform directly matches the requirements of borrowers and lenders and is similar to global P2P platforms. Its current focus is on the personal loans segment for urban, educated and middle class customers, who understand the marketplace model and transact online. A few of the large P2P platforms have started to maintain nodal / escrow accounts for better monitoring and control. This allows both borrowers and lenders to deposit funds in an escrow account held by the P2P platform, and both disbursements and repayments are routed through these escrow accounts.

02. Partner assisted disbursal model – In this model P2P platforms tie-up with a field partner (local NGO or Micro Financer) to manage customer acquisition, disbursement, and collections for a fee. The P2P platform is primarily responsible for onboarding lenders and offering matching services. This model is focused on unsecured loans (micro-finance) to low income households ranging from $100-500.

Exhibit 11 P2P – Business Models in India

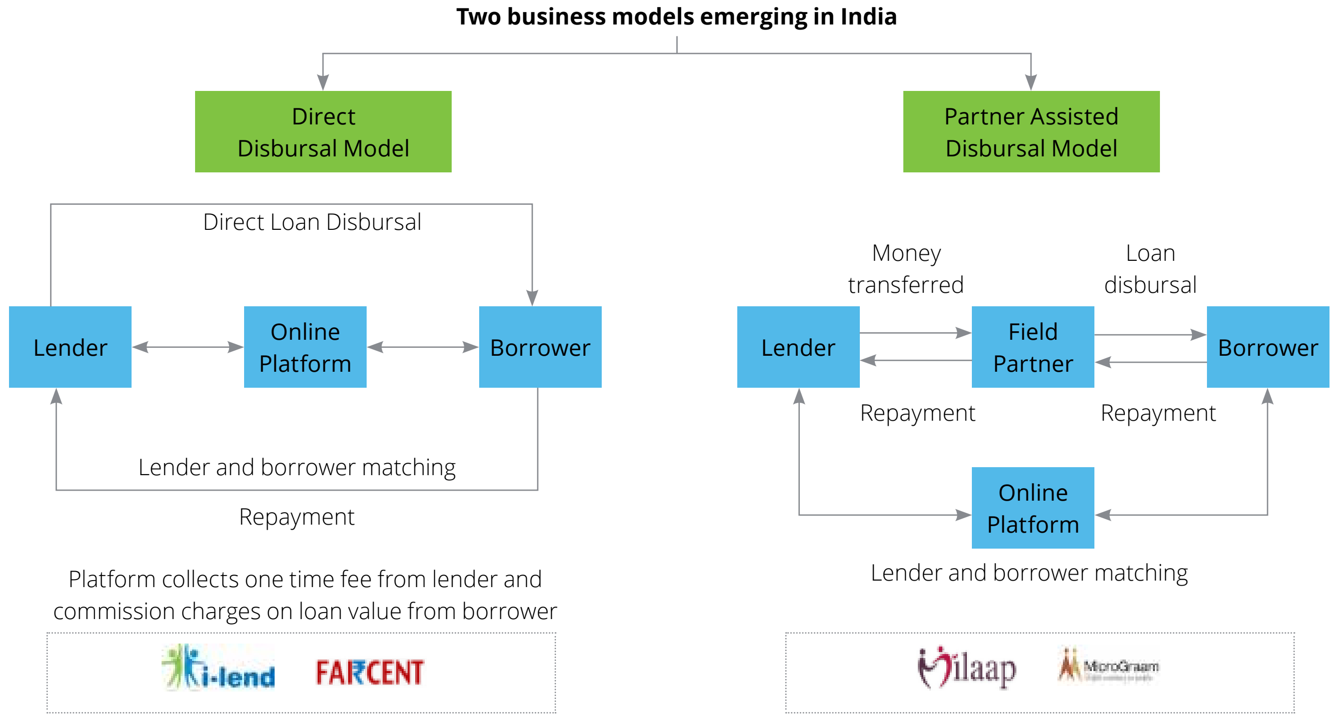

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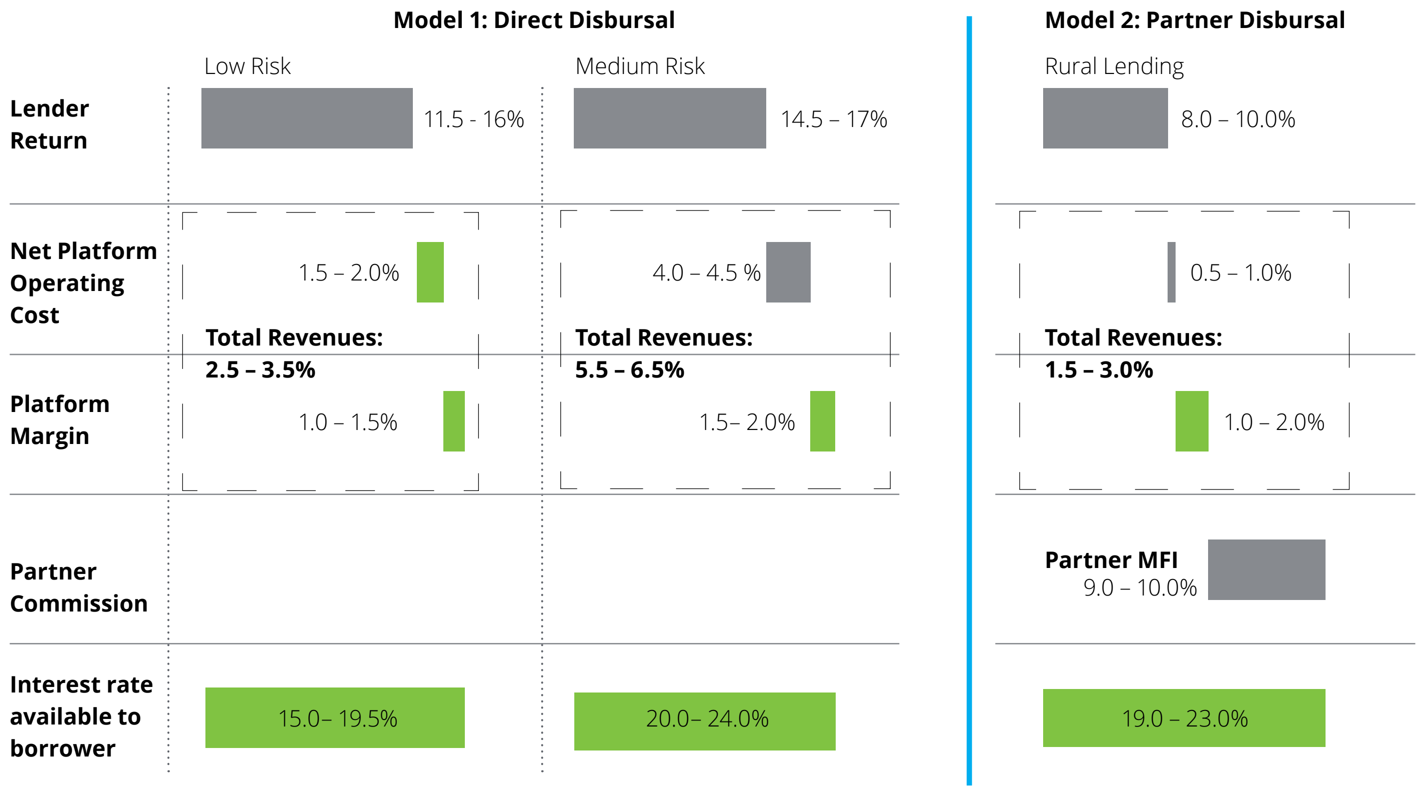
Exhibit 12 P2P – Business Models in India



Source: Deloitte analysis and data based on interviews with P2P lenders.

Note - Net Cost of Operations includes verification and documentation costs, collection costs, marketing costs and staff expenses netted with one time registration fee. In the partner model, the partner would incur the costs of customer acquisition, collections, customer relationship management.

As observed, in most of the borrowing cases, P2P platforms are increasingly offering competitive interest rates to borrowers along with extending significant premium to lenders, owing to very low platform operating costs (1-2% of the loan value administered). Considering that P2P platforms offer new investment avenues and prospects of significantly higher financial returns, the supply side factors could exponentially drive the growth of this segment, as it attracts return conscious lenders, and as these platforms gain trust amongst investors, as well as, build strong underwriting, credit risk management and, fraud management capabilities. Developing very rigorous risk management procedures will lay a strong foundation required not only to gain the trust of lenders, but also to meet regulatory scrutiny.

RBI had already released a consultation paper in April 2016, where it had taken an approach to create a separate category for the P2P lending business within the NBFC segment. The final guidelines are expected to provide regulatory clarity on most of the critical business and operational issues. This would not only facilitate infusion of new capital in the existing P2P platforms, but also attract new entrants in this segment.

Summary of business and operational requirements that RBI can consider while formulating the final guidelines

- In-line with the loan aggregator's guidelines, P2P can also be regulated through a new "Differentiated NBFC" structure with minimum capital requirement of INR 2 crore[4].
- Capital requirement for P2P can be linked with the overall outstanding loans facilitated through the platform in a way that provides some factor of safety to borrowers– This can be in the form of **Lender Security Reserve,** where a certain portion of fees earned is earmarked as a reserve to compensate for loss suffered, in case the loan defaults.
- With direct transfers from lenders to borrowers, P2P platforms have limited ability to control disbursements and repayments. P2P lenders can be permitted to setup a Nodal escrow account. Fund transfer between borrowers and lenders can flow through the Nodal escrow account for operational efficiency, better monitoring, risk management, as well as enhanced experience for platform users.
- P2P lenders must have a transparent reporting mechanism – with a number of borrowers and lenders, cases open, total funds disbursed, delinquencies /defaults etc. All this information must be filed with regulators and be available on the website for all the borrowers. Any adverse change must be brought to the attention of users (both lenders and borrowers).
- P2P must submit the loan data to Credit Information Companies (CICs) – for both, borrowers and lenders. Any defaults must be reported in line with the CIC requirements.
- Individual lenders must be permitted to do ECS on borrowers i.e. failure to repay automatically results in default.
- Lenders must be asked to undertake a brief refresher course (set of scenarios that can rendered through online modes) to help them understand the risks, and take cognizance that they may lose their capital, and that there is no recourse for capital protection.
- RBI can consider allowing lending from NRIs if it will be done through NRO accounts.
- Secondary trading of loans (through the existing securitization framework) can also be considered. Due inputs from SEBI can be taken to ensure regulatory alignment.

Note - The above mentioned business and operational requirements were prepared basis discussion with Industry participants

Market Place Lending (MPL)

Market Place lending can be considered as an extension of P2P lending, for both business and individual loans, including secured loans mortgages. Moreover, market place lenders typically tend to connect individual borrowers with institutionalized lenders, including banks and NBFCs. Globally, MPLs have gradually transitioned to the model where most of the loans are funded by financial institutions and not by individual lenders.

In India, most of the MPLs have agency arrangements with banks and NBCFs, and primarily play the role of loan originators. The responsibility of servicing and collections is with the institutional lenders. Another aspect which is strikingly different in the Indian context is that MPLs don't transfer these loans on their books for servicing, and hence do not securitize these loans. Indian MPLs only offer origination and perform credit assessment and credit scoring services, with actual underwriting being done by a partner bank or NBFC. The only exception to this is in the case of NBFCs that use alternative credit scoring and use digital channels to acquire and service borrowers, but fund the loan themselves.

Three unique MPL models are currently prevalent in India, depending the nature of services provided by these platforms.

01. MPL Platform as Originator - Acts as an aggregation and origination platform to route leads to partner banks and NBFCs

02. MPL Platform to route to NBFC - Acts as an origination platform between borrowers and in-house NBFC

03. MPL Platform as matchmaker - Connects lenders and borrowers enlisted based on loan requirements with no / limited role in loan disbursements and repayments

Notwithstanding the difference in business models, in order to target new borrower segments, MPLs assess the creditworthiness of borrowers based on metrics beyond the credit scores and metrics used by banks and NBFCs (e.g., banking transaction history, asset ownerships, spend analysis, reference checks from suppliers, customers, peer business groups). Most MPLs are also likely to refine their risk engine more frequently than banks to incorporate feedback based on empirical analysis and market scenarios. Typically, borrowers who can't have banks service their requirements, are targeted.

[4] https://rbidocs.rbi.org.in/rdocs/content/pdfs/CPERR280416.pdf

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Exhibit 13 Marketplace lending models in India

	Type 1 (Platform as Originator)	**Type 2 (Platform to route to NBFC)**	**Type 3 (Platform as match-maker)**
Role of platform	• Act as an **aggregation and origination platform** to route leads to partner banks and NBFCs	• Act as an origination platform between borrowers and in-house NBFCs • Also, plays the role of originator for other banks and NBFCs depending on the risk profile and nature of loans	• Has both, lenders and borrowers enlisted on a common matching platform • Connects the borrowers and lenders with no/limited role in loan disbursements and repayments
Regulatory considerations	• Falls under the purview of **Account Aggregators Guidelines** of RBI • Business scope limited to generating loan applications for partner banks and NBFCs. Funding of loans by NBFCs not applicable.	• **There could be perceived conflict** as platform is acting both as an aggregator and also as an NBFC, funding loans	• Will fall under the proposed P2P guidelines of RBI
Capital Intensity	• **Low -** Though RBI guidelines mandate a leverage ratio of 7 times, the platform cannot fund the loan by itself, so capital buffer not required to scale-up • No liability in case of any loan defaults	• High - Funding the loans extended will **block** the funds of in-house **NBFC's** and **strain their capital** • No capital strain on platform	• Medium - Capital buffer may be required in the form of lender protection reserve
Examples	policybazaar.com bankbazaar.com	Capital Float	ZOPA LoanMeet.com

Source: Deloitte Internal Analysis

With low Retail and SME credit penetration in India, MPL offers an alternative financing avenue for both individual and MSME borrowers. Due to their reliance on multiple data sources, besides financials statements / income proofs, MPLs also address the structural issues of information asymmetry faced by Banks and institutional lenders. P2P and Market Place lending segments are the most promising breakout candidates in the Alternate Lending segment. Supported by regulatory clarity and a clear focus on customer needs, the Indian alternative lending space is likely to be a North Star for banks to improve their underwriting and risk assessment capabilities, along with developing customer centric origination and servicing processes.

In the Indian context, both banks and alternate lending platforms will continue to co-exist and serve different segments in the market. FinTech is not likely to disintermediate banks, and will rather grow by partnering with the incumbent financial institutions to develop extended ecosystems. Banks in turn, will improve their underwriting and servicing capabilities, digital channels and back-office automation.

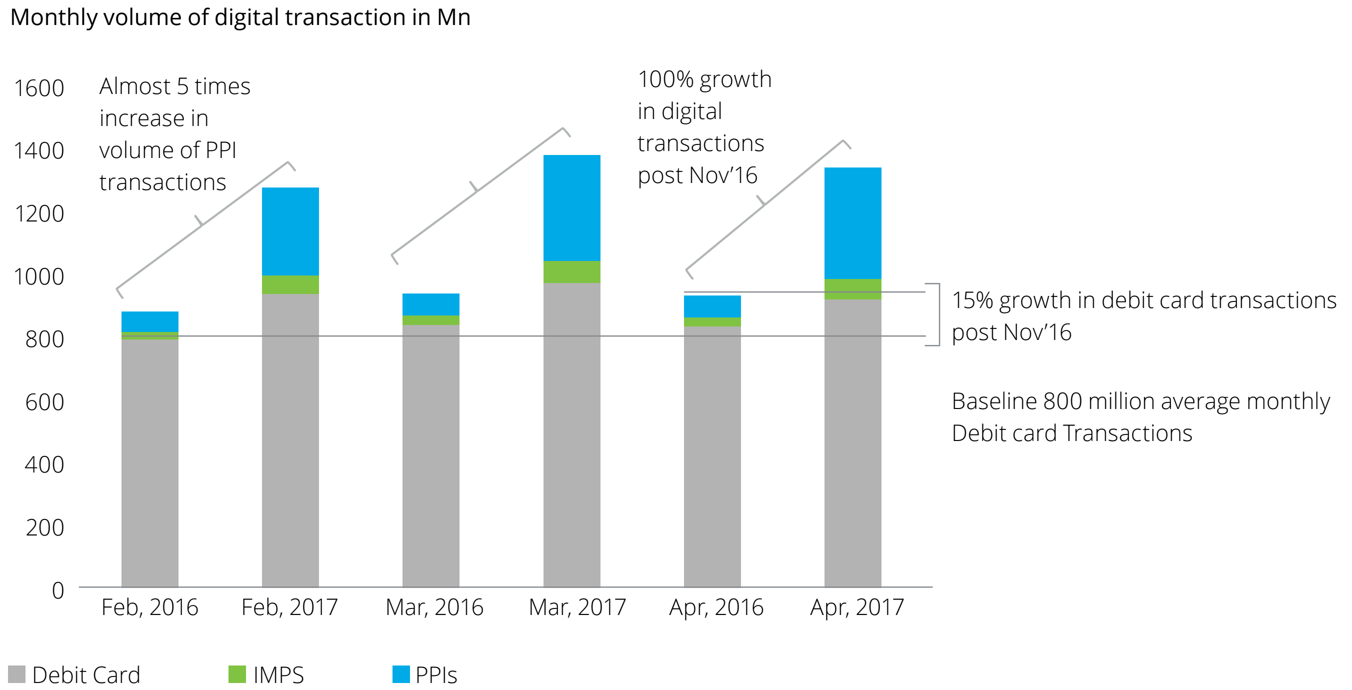
In addition to P2P Lending and Market Place lending, a few FinTech companies also offer credit risk assessment and underwriting as a service to banks and NBFCs. For instance, Credit Mantri[5] is a platform that uses a combination of traditional data (such as credit reports), alternative data (such as social media), and data from mobile phones, to create a credit profile for customers. This profile helps customers understand their credit potential and enables them to make informed credit decisions. Subsequently, it also serves as a conduit, connecting these customers to potential lenders based on this score.

[5] https://www.creditmantri.com/
https://www.crunchbase.com/organization/creditmantri#/entity

Payments

Digital payments in India are undergoing a revolution. A combination of factors are disrupting the payments landscape, as India, in the black swan event of "demonetization", transitions to a 'less cash society'. Payments infrastructure in India has significantly evolved in the past 12-18 months, with new payments modes and interfaces including UPI, BHIM and Bharat QR Code being introduced to drive digital transactions. Driven by this regulatory push, and supply side interventions, digital transactions have grown by leaps and bounds. Post demonetization, digital transactions have increased by 100%, with PPI (primarily m-wallets) transactions accounting for a lion's share of this growth. Average monthly digital transactions have crossed a Billion transactions in 2017. Excluding NEFT transactions, PPI transactions contribute nearly a quarter in digital retail transactions. Average monthly PPI transactions have grown more than five times in the past year.

Exhibit 14 Growth in digital payments



Source: RBI Database

100% growth in digital transactions post demonetization, resulted in India's cash to GDP ratio coming down to single digits from the pre demonetization figure of 10.6%[6]. Given how digital payments were inundated with excess demand post demonetization, and customers learnt to transact digitally (a major factor in influencing adoption of digital transactions), one would expect the digital rally to continue. This was not the case. As the economy moved to normalization, usage of digital payments dropped, reflecting the customer's preference for cash.

An impact assessment of new interfaces and payments modes introduced in India on broader payments FinTech companies yields an optimistic scenario for Payments focused FinTech companies. Few payments FinTech companies are leveraging these developments to pivot their business models and change their focus from consumer payments to enabling banks, merchants, and other payment intermediaries. Moreover, all of these newly introduced instruments, channels, and interfaces do offer a better and effective payments architecture, but still are mere enablers to the payments business. None of these in themselves are likely to create new business propositions – something payments FinTech companies aspire and aim for. Indian payments FinTech companies are likely to thrive in the backdrop of rapidly expanding digital issuance of multiple issuance instruments – Debit card, virtual debit cards, NFCs, Bharat QR, wallets, as well as extremely low penetration of acquiring infrastructure. Payment FinTech companies are creating new use cases for merchants and users, and strengthening their value propositions.

Exhibit 15 Impact assessment on Payments FinTech

Interface / Modes	Description	Impact on Payments Fintech
UPI 2.0	Unified inter-bank consumer payment system with limited information required to push transactions (wallets likely to be included as per RBI announcements)	Neutral
Bharat Bill Payment System	Bill presentment and payment system accessible through multiple channels, enabling multiple payment modes, and providing instant confirmation of payment	Marginal due to increased competition
Contactless cards	Payments for small purchases by tapping a card with no signature, or PIN verification required	Favorable for Merchant PoS
BHIM -Bharat Interface for Money	BHIM is a free app based interface for pushing payment transactions using UPI. Users can make bank-to-bank payments, pay and collect money using just a mobile number, or a Virtual Payment Address (VPA)	Enables banks to improve functionalities
Cloud Based POS	Cheap, flexible and convenient software that enables merchants to sell products and access all customer data, online	Favorable for Merchant PoS
USSD	Facilitate financial and non-financial transactions from any phone available in 12 regional languages	Neutral
Adhaar Enabled Payments	Unique digital biometric identity and authentication can be used from anywhere to check credentials	Favorable for Merchant PoS
Bharat QR Code	Common QR code jointly developed by all the four major card networks—NPCI, MasterCard, Visa, and American Express	Enables banks to improve functionalities

Breakout assessment of Payments FinTech
Not coincidentally, M-wallets and PPIs remain one of the preferred breakout candidates and in the last one year this segment has definitely outgrown other segments in terms of breaking boundaries for adoption, scaling-up and brand recall. However, there are emerging headwinds including tighter regulatory stipulations going forward that could slow the momentum of M-wallets in particular.

[6] https://www2.deloitte.com/content/dam/Deloitte/in/Documents/tax/budget2017/in-tax-budget-impact-fs-noexp.pdf

Exhibit 16 Payment FinTech breakout Grid

Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collabora-tion and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
B. Pay-ments	01. M-wallets and PPIs	Low	High	High	Low	High	Medium	Low
	02. Merchant Payments and PoS Services	High	Low	Medium	Medium	High	Medium	Low
	03. International Remittance	Medium	Medium	Medium	Medium	Medium	Low	Low
	04. Crypto Currencies	Low	High	High	Low	Low	Low	Low

Likelihood of Breakout ■ High ■ Medium ■ Low

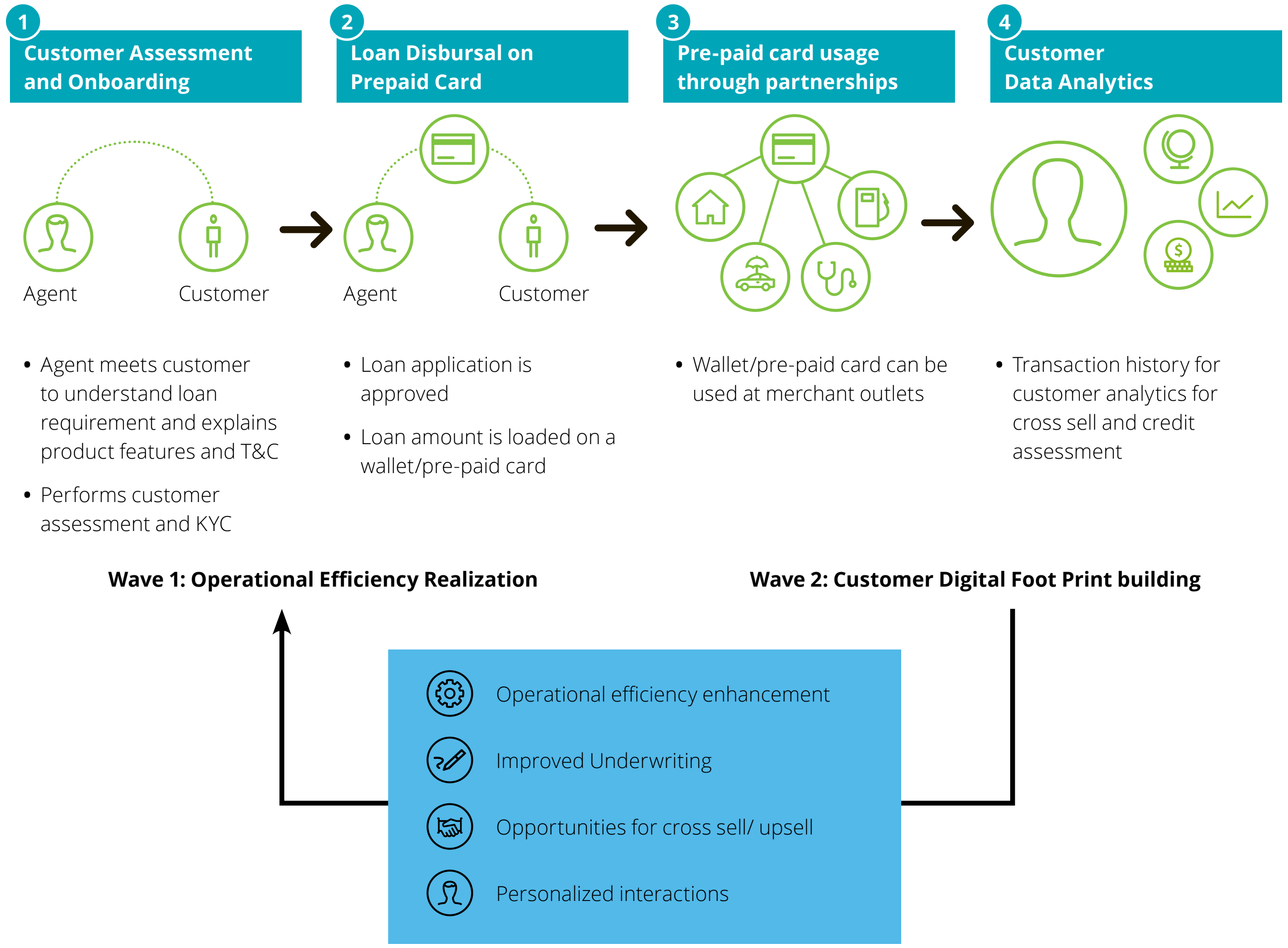
Source: Deloitte Analysis based on interaction with Industry participants

The proposed new PPI guidelines are likely to mandate a full KYC requirement post 60 days of activation. This change may discourage both merchant, and users to adopt wallets for small value payments. At the same time, the proposed roadmap for wallet and PPI interoperability will provide a great impetus for merchant adoption, for acquiring wallet transactions. Moreover, wallets are currently not included in the UPI architecture, and banks may get some heads up to catchup with wallets. However, the recent announcement from the RBI to include wallets in UPI via interoperability, will clear clouds of doubt on the efficacy of their business model. Interoperability will increase competition amongst wallets to retain their customer base (as switching cost for customers decreases), pushing wallets to provide better services and customer experience. It will also drive up transaction volumes, as the same set of customers and merchants need not be acquired/ targeted by each wallet. Wallets are likely to add new merchant categories, such as government payments, public transportation, toll, parking and other social payments, and also increase use-cases to increase overall engagement levels with users.

Payments FinTech companies, including wallets and PoS solutions providers, are also working towards integrating credit offerings, by analyzing the transaction history of users. Most of the large wallets players are working with NBFCs and banks to offer small value loans to their users. These loans can also be used to effect purchase in case of shortfall in funds in the wallet. By leveraging transaction history and developing spend patterns, wallets are effectively able to generate a proprietary credit scope, which can be used to offer loans by partner banks and NBFCs.

Exhibit 17 Integrated Payments and Credit Operating model

Credit underwriting and servicing using wallets/PPI



Source: Deloitte analysis based on discussion with NBCFs and wallets

Notwithstanding the innovations that have emerged, enabled by cheaper processing and data capabilities, and all the time connected users, most FinTech companies in the payments segment are likely to focus on improving front end interfaces and processes to enhance user experience. The payments sector in India has relatively low barriers to entry compared to other financial services, and perhaps, that could be one of the reasons for the fast pace of innovations in this segment. Going forward, partnerships with large merchants and an unerring focus to drive the unit transaction cost to near zero, will be the two decisive factors for payment FinTech companies.

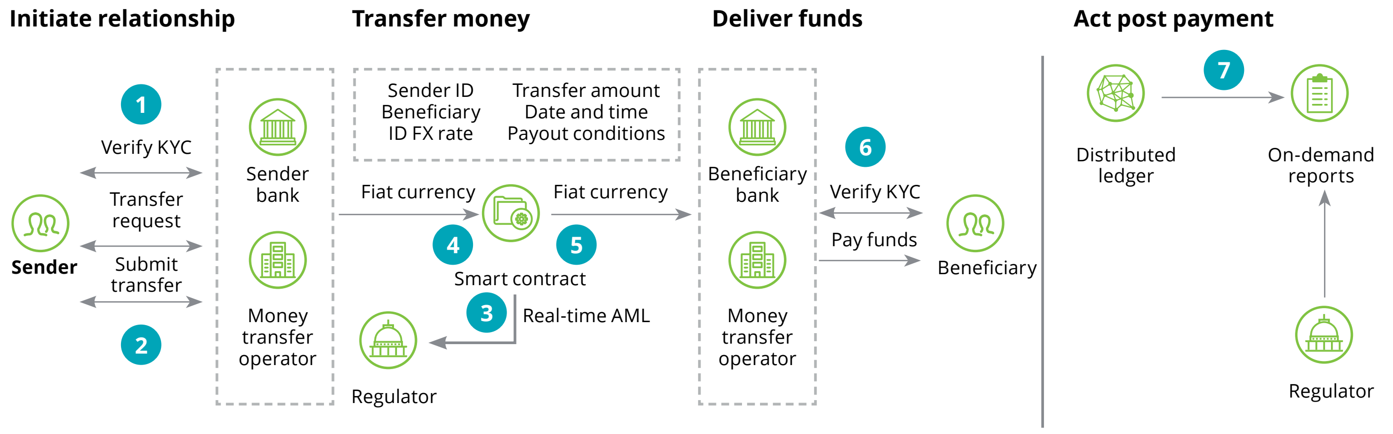
Cypto currency and cross border payments.

Despite the global spotlight, crypto currencies including bitcoins had a slow start in the Indian market. Not only could this be due to the regulatory decree on the use of cryptocurrencies, but also due to the lack of clear understanding of the potential applications of the underlying blockchain technology. In the past 2-3 years, few Indian FinTech players have setup bitcoin exchanges in India to facilitate the purchase and use of bitcoin as an alternate currency for paying for mobile credit, data card and DTH bills. Global block chain startups including Ripple have partnered with Indian FinTech Companies to offer their proprietary blockchain enabled currency – XRP. Ripple uses the same currency (XRP) to undertake international remittance business by setting up exchanges in host markets. Unlike other popular cryptocurrencies, XRP is a pre-mined currency used for settlement and it has the advantage of increased settlement speed over other cryptocurrencies.

In India demand for bitcoins increased post demonetization, with one daily[7] quoting demand of bitcoins to be INR 40-50 Cr daily as of April 2017. In recent months increased demand of bitcoins has increased its value exponentially, from INR 1,10,000 per bitcoin as of May 2017 to INR 1,90,000 by June 2017, with India accounting for 16,754.76 bitcoins by trade volume[8]. The use case of international remittance for blockchain technology is one of the promising use cases for the Indian market. India is the biggest market for remittances, with over $62 Bn[9] sent to India from abroad in 2016. With low cost and real time transfers, blockchain currencies such as XRP, Ethereum, Bitcoin etc. can transform India's cross border payments business and offer real benefits to customers, banks and regulators, subject to adequate trust, credibility and regulatory acceptance. More importantly, these transactions will also have to meet the AML and KYC standards, to ensure genuine transactions.

The likely benefits of using blockchain in enabling cross border payments are described in the illustration below:

Exhibit 18 Blockchain - Benefits under cross border payments



01. Seamless KYC: leveraging the digital profile stored on the decentralized ledger establishes trust and authenticates the sender
02. FX liquidity capabilities: through smart contracts, foreign exchange can be sourced from participants willing to facilitate the conversion of fiat currencies
03. Real-time AML: regulators will have access to transaction data, and can receive specific alerts based on predefined conditions
04. Reduced settlement time: cross-border payments can be completed in real time
05. Cost savings: with fewer participants, the improved cost structure can generate value
06. Automated compliance: the regulator will have on-demand access to the complete transaction history over the ledger

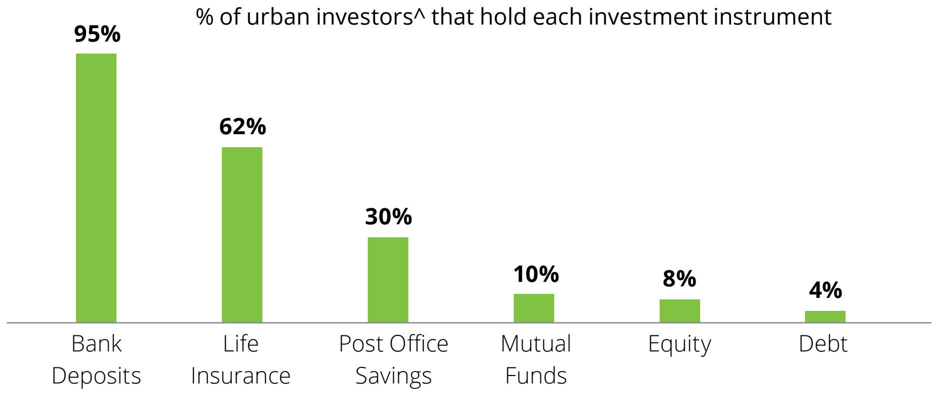
The Reserve Bank of India (RBI) has commented on the potential of Block chain in its financial stability report[10]. RBI believes that blockchain can bring about a major transformation in financial markets. While it has taken cognizance of the multiple use cases offered by blockchain technology, it has also expressed caution over use of virtual currencies. In its press release in Feb'17[11], RBI cautioned against the use of virtual currencies, highlighting potential legal, customer protection, and security related risks. Despite RBI's cautious stance, Institute for Development and Research in Banking Technology (IDRBT) came out with a white paper[12] on the application of blockchain technology, to the banking and financial sector in India. In the white paper, IDBRT's working group has proposed a road map for the adoption of blockchain technology in India. Recently, the Indian government has decided to regulate the bitcoin market, and is in the process of establishing a task force to create regulatory frameworks[13].

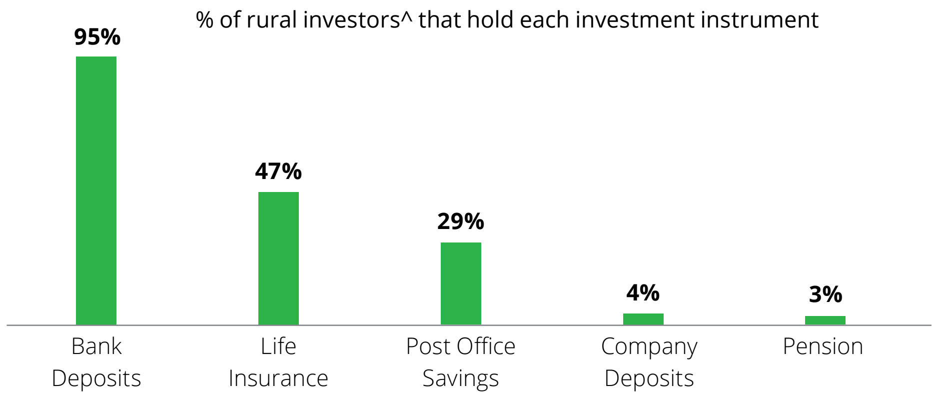
[7] http://indiatoday.intoday.in/story/bitcoin-value-cryptocurrency-demonetisation/1/963293.html
[8] https://www.thequint.com/technology/2017/06/20/bitcoin-trades-from-india-10-percent-of-global-market
[9] http://economictimes.indiatimes.com/nri/forex-and-remittance/remittances-to-india-dropped-by-nearly-9-per-cent-in-2016-world-bank/articleshow/58302935.cms
[10] RBI Financial Stability Report, December 2015 (Chapter III : Financial Sector Regulation) https://rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=832
[11] https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/PR205413F23C955D8C45C4A1F56349D1B8C457.PDF
[12] http://www.idrbt.ac.in/assets/publications/Best%20Practices/BCT.pdf
[13] http://www.zerohedge.com/news/2017-06-20/bitcoin-surges-back-above-2700-india-legalizes-cryptocurrency

Investment Management

With the development of digital tools and services in Investment Management, this FinTech segment is attracting a new set of first time millennial investors. The current penetration of investment management services is very low, as most investors prefer to channel their savings in deposits, through banks. With innovation, advisory services are likely to break off from the product. As customers move to automated platforms, fewer investment management products will be sold through own advisory channels. This is likely to result in increased competition amongst existing players in specialized segments or services. Data is seen as a major disruptor in investment management, empowering investors and service providers alike. Service providers monetize data assets by targeting product and service decisioning. Investors benefit as they are readily provided of their financial position, and are empowered with tools to execute investment strategies.

Exhibit 19 Investment preference of Indian investors





1 SEBI investor survey 2015, published October 2016
^ Investor - investing in banking, post office or capital market products

Exhibit 20 Investment Management breakout Grid

Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collaboration and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
C. Investment Management	01. Robo Advisors	Low	Medium	Medium	Low	Medium	Low	Low
	02. Discount Brokers	Medium	High	Low	High	High	Low	Low
	03. Online Financial Advisors	High	High	Low	High	High	Low	Low

Likelihood of Breakout ■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

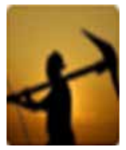
Driven by technology evolution, a few FinTech companies have introduced Robo-advisory services, offering automated financial advisory services based on a pre-defined set of rules and algorithms at a significantly reduced cost. These platforms leverage customer information and run algorithms to develop automated portfolio allocation. Information is then provided on a portal, and via call, with a personalized financial planner. Unlike traditional discount brokers, Robo advisory platforms in India, do not provide trading facilities, and the business model is purely geared around investment advice for balancing MFs, SIPs, Loans, and Equity portfolios. The share of assets managed by robo-advisers in India is still low (less than 1% of assets), and their services are mostly targeted toward younger and financial savvy investors.

Compared to Robo advisors, the Indian market has witnessed rapid growth of discount brokering FinTech companies. These FinTech companies offer complete online and digital trade execution facilities, at a fraction of the fees, as compared to traditional brokers. Discount brokers have no overheads of physical branches, large research and onboarding teams, and pass on the benefits to the investors who can trade paying a very small fees. Specialized discount brokers have developed customized APIs that are extended to sub-brokers and retail investors for setting up customized trading platforms. A few of the discount brokers have also partnered with specialized equity screeners, to offer investor stock screening services, based on thematic and strategic research. However, the investors are yet to adopt these services, with these services remaining in the purview of the investing niches.

Exhibit 21 Illustrative Equity Screens being offered by a market player

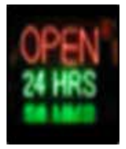
The GST Oppurtunity
1Y Return **35.16%**

The GST Oppurtunity - ...
1Y Return **34.89%**



Rising Rural Demand
1Y Return **48.87%**

Smart Cities
1Y Return **49.55%**



India 24x7
1Y Return **36.93%**

Affordable Housing
1Y Return **62.82%**

Source: Sample of equity screen offered by a market player

The FinTech segment likely to be a strong candidate for breakout is online financial advisors and distributors. These FinTech companies operate via the online platform, and consolidate all existing investment accounts, such as mutual funds, equity/depository accounts, bank accounts, credit cards, and other accounts, and provide a 360 degree view of financial assets and the financial health of users.

While digital investment management is growing, face to face consultative services are not expected to become obsolete. Skilled financial advisors that can create value and offer tailored recommendations involving high value transactions will continue to be in demand. We foresee a hybrid advisory model, combining personal and digital components, as the most promising scenario.

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Banktech

Within the bank-tech segment, globally, blockchain remains one of the breakout candidates in the short term; however, in India, application of blockchain is currently limited to a few proof of concepts conducted by the regulator and a few private banks. The RBI has suggested a roadmap for the adoption of blockchain in India, and has already conducted a proof of concept (POC) for Trade Finance, jointly with NPCI, SBI, PNB, HDFC, Citi Bank, Deutsche Bank and MonetaGo.

Exhibit 22 Banktech Breakout Grid

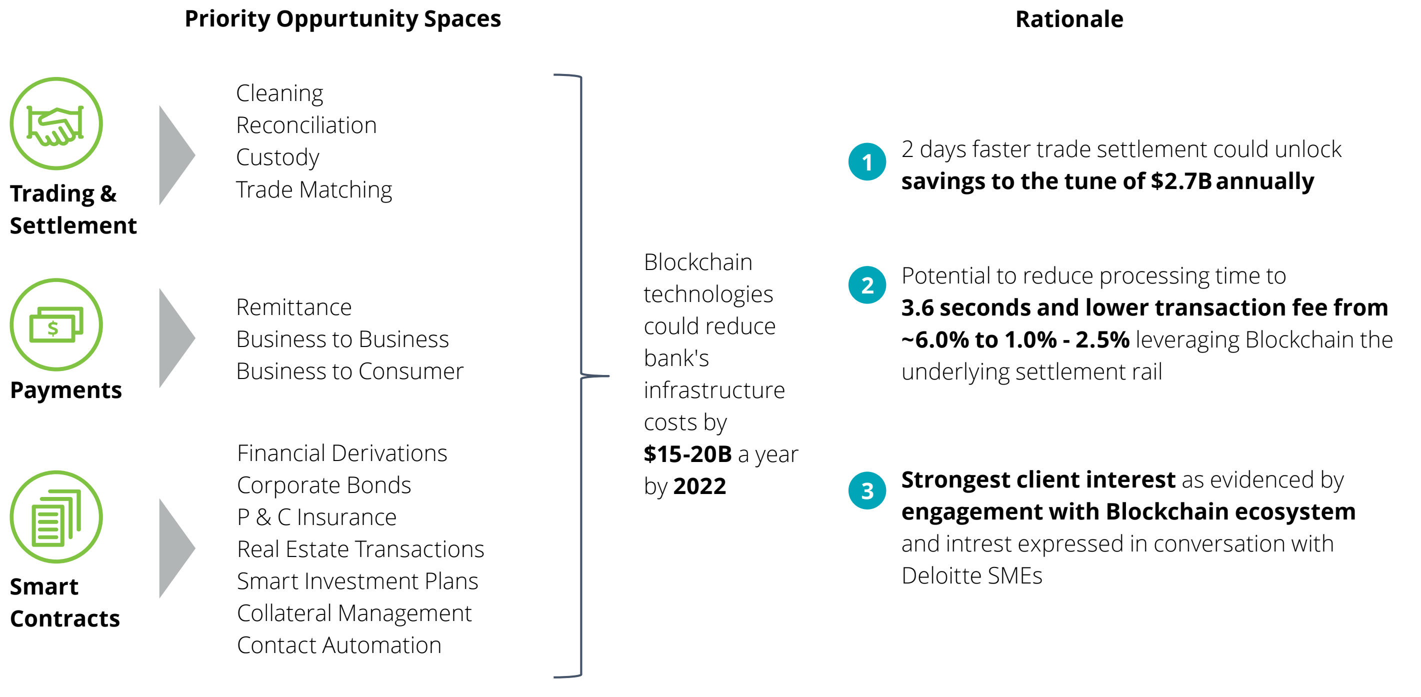
Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collabora-tion and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
E. Bank Tech	01. Big Data, AI and Robotics	Medium	Medium	High	High	Medium	Low	Medium
	02. Blockchain	Medium	High	High	High	Medium	Low	High
	03. Customer Onboarding Platforms	Medium	Medium	Low	High	High	High	Medium

Likelihood of Breakout ■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

Apart from trade finance, blockchain technology can be used for facilitating cross border payments, insurance claim processing, equity trade settlements, syndicated loans with multiple lenders, and asset hypothecation. In addition to the benefits, most of these use cases will result in cost optimization across the financial services industry.

Exhibit 23 Use cases of blockchain technology in Banking



Source: Deloitte Analysis

Despite strong reasons and ongoing PoCs, the barriers to adoption of blockchain will remain high for a few years. Issues including Data security, associated financial risk, and regulatory acceptance are major barriers for FinTech companies operating in this segment.

Customer onboarding remains an area where there is high degree of customer friction. A few of the FinTech companies focusing on customer onboarding and authentication solutions in India have received recognition, not only from partner banks and NBFCs, but also from regulatory authorities. FinTech companies are also deploying Artificial Intelligence (AI) and blockchain to authenticate, validate identity and undertake background checks on customers. These capabilities are likely to improve the overall quality of digital onboarding for both, incumbent banks, as well as, other FinTech companies. FinTech companies focusing on digital customer onboarding are likely to face tailwinds as other FinTech companies rely on these basic services to gain trust and improve fraud management capabilities.

Emerging FinTech segments in the areas of Artificial Intelligence (AI), Machine Learning (ML) and robotics are emerging, albeit in the nascent stages. Most of these FinTech companies are working with banking partners to improve current operations and servicing. A few private sector banks have been working with FinTech companies to automate certain customer servicing activities in call centers. Globally, financial services are also adopting AI for compliance, anti-money laundering and risk management. However, some of these underlying technologies remain a niche in India.

InsurTech

Despite strong improvement in penetration and density in the last 10 years, India largely remains an under-penetrated market. The market today is primarily dependent on push, tax incentives, and mandatory buying for sales.

InsurTech primarily aims at enabling a better reach of insurance products & services, as well as a greater personalization of insurance products, and proactive management of key risks.

Exhibit 24 InsurTech breakout Grid

Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collabora-tion and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
F. Insure Tech	01. Insurance Aggregator	High	Medium	Medium	High	Low	High	Low
	02. IOT and Wearables	Medium	Low	High	Low	Low	Low	Low

Likelihood of Breakout ■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

Insurance aggregators compile and provide information about insurance policies on a website, and are regulated as per the Insurance Regulatory Development Authority (IRDA) Web Aggregator regulations, 2017. Insurance aggregators are essentially a digital distribution channel allowing customers to compare scope of coverage, term, premium, and terms relevant for customers to enable them to make an informed decision. With a penetration of over 400 Mn Smart Phones by 2020, the digital insurance channel will be an important medium for distribution of Insurance products. We believe the most likely break out due to the Insurance aggregation business model, will be the aggregators disaggregating the distribution of policies and the ownership of customer relationships from Insurers. This will lead to reduced customer stickiness, self-service models, and competitive benchmarking of insurance products.

Increasing adoption of connected devices e.g. telematics, and wearables presents an opportunity for Insurers to better understand customers and personalized customer engagement. This will require Insurers to work closely with device and service providers. A key consideration will be, definition of boundaries in using personal data of customers. It will require close partnerships between insurers, re-insurers and product/ platform companies. For example, Max Bupa recently announced an alliance with GOQII, a wearable and a fitness technology player, and Swiss RE, a global re-insurer. With wearables shipments at 2.5 Mn[14] units in 2016 and growing, we believe that wearable data will increasingly be leveraged by Insurance companies to personalize insurance policies, actively manage the insured's risks, and eventually broker personal data by partnering with 3rd party players for improved health & wellness of an individual.

[14] https://www.idc.com/getdoc.jsp?containerId=prAP42423317

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Personal Finance Management

Personal Finance Management refers to a software/ app or a platform that helps the user manage his/ her money. Managing, spending, and investing money are important decisions that have a profound impact on the financial health of the individual. Most customers know the basics of money management, but are not financially savvy enough to manage on their own. This is where the personal finance management app comes into the picture. These apps have gained popularity in the last couple of years and they assist customers in keeping a watch on their expenses at a single place. Key enablers in support of the personal finance management app are:

01. Regulations: The RBI, in its guidelines has instructed banks to send notifications on every transaction to customers. Personal Finance Management apps have leveraged this, to provide an overview of all spends of a customer.
02. Data scraping: Another important factor in the development of the personal finance management app is the technology of data scraping. Data scraping has enabled personal finance management apps to read messages of customers, and analyze transactions.

Exhibit 25 Personal finance breakout Grid

Areas	Fintech Segments	Creating new value propositions	Designing new business model	Shaping long term customer behavior	Expanding market	Fostering collabora-tion and working within regulatory purview	Eliminating legacy constraints	Leveraging data and analytics
D. Per-sonal Finance Manage-ment	01. Tax Filing and Processing	Low	Medium	Medium	Low	Medium	Low	Low
	02. Spend Management and Financial Planning	Medium	Low	High	Low	High	Low	Low
	03. Credit Services	Low	Medium	Medium	Low	Medium	Low	Low

Likelihood of Breakout ■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

Key challenges for Indian FinTech

The Indian FinTech sector faces common challenges that could impact its growth momentum. Most of these are structural, and are likely to have an impact on most of the FinTech segments.

01. Regulations: Balancing Act to foster innovation

Regulation will be a double edge sword for Indian FinTech companies, as increased regulation could stifle innovation – the hallmark of FinTech, and drive up operational costs. However, regulatory clarity will strengthen the sector in the long run, help it gain customer trust, and thereby attract more capital. As FinTech companies, scale-up, they are likely to face more scrutiny from regulators. A number of interventions have been undertaken including Bharat Bill Payment System (BBPS), Payments Bank Licenses, Unified Payment Interface (UPI) etc. RBI has also adopted a consensus driven approach to introduce regulations for new sectors, including P2P and aggregators. The key challenge for the regulator is to create an environment that fosters innovation, while adequately addressing concerns on customer protection, data security and privacy. Due to the accelerated rate of innovations, regulators end up playing catch-up ,and may have a knee jerk response to certain market activities.

02. Gain trust and improve perceptions through literacy

Trust has always been an important factor in the Financial Services industry. Indian consumers are known to have a conservative mindset and traditionally had more comfort in physical transactions, including the use of cash. Although the percentage of population under the ambit of banking has increased, the unbanked and underbanked segments have limited knowledge of banking services. Hence, it's a challenge to build trust and adopt services offered by FinTech companies. FinTech is a relatively new segment and it is yet to gain trust as a reliable financial services alternative. Changing the way consumers perceive and avail financial services is fundamental to the widespread acceptance of the FinTech sector. It is equally important to educate the target audience about the merits of availing financial services through FinTech, and the onus will lie on FinTech to improve literacy and perceptions.

03. Financial Infrastructure and utilities

Building a new-age FinTech business calls for building data and infrastructure, which is not easily available in India. FinTech companies need more data to create a value proposition for customers. Currently, only a small percentage of the working population is represented by credit bureaus or traditional banking channels.

Further, most of the companies are focused on consumers/ payers with less emphasis on acquiring infrastructure by broader base of merchants. Non-availability of digital infrastructure at merchants, is a major challenge. There is an urgent need to expand digital infrastructure at merchants. The Government, in the last three years, has taken major steps to expand digital infrastructure, such as internet penetration, and Merchant QR code in the country.

04. Cyber and Data security

As Indian FinTech companies scale up in number and sophistication, they are likely to establish interfaces with banks and other information sources such as the UID database. Interfaces between systems could present cyber vulnerabilities, and data security issues. Moreover, as FinTech companies embark on data based differentiation, the issues of data privacy and customer protection have to be paramount. FinTech companies will not have access to sensitive financial information about customers, but are likely to collect personal customer information in their quest to know more about the customer. Interfaces and APIs that facilitate seamless data hoops with multiple applications may also be most vulnerable and create prospects for malware propagation, in case of cyber-attacks. Developing strong defense mechanisms and procedures to address these concerns will be an imperative for the FinTech sector, just the way it is for incumbent banks and financial institutions.

Conclusion

Indian FinTech companies could address a few of the critical structural issues afflicting Indian financial services - increase outreach, improve customer experience, reduce operational friction and foster adoption and usage of the digital channel. Legacy prone processes and higher operating cost models of incumbent banks and financial service providers will give digital FinTech companies an edge, as banks play catch-up with these more nimble and innovative start-ups. The opportunity for FinTech lies in expanding the market, shaping customer behavior, and effecting long term changes in the financial industry.

Indian FinTech companies have the potential to reshape the financial services landscape in three ways:

- The FinTech startups are likely to **reduce costs and improve quality** of financial services. Not being burdened with legacy operations, IT systems, and expensive physical networks, benefits of leaner operating models can be passed on to customers.
- The FinTech industry will **develop unique and innovative models of assessing risks.** Leveraging big data, machine learning, and alternative data to underwrite credit and develop credit scores for customers with limited credit history, will improve the penetration of financial services in India.
- FinTech will **create a more diverse, secured and stable financial services landscape.** FinTech companies are less homogenous than incumbent banks, and offer great learning templates to improve, both, capabilities and culture.

Just as incumbents have a lot to learn from emerging FinTech companies. Fintech companies can also learn and adopt best practices around risk and internal controls, operational excellence, compliance culture, and employee engagement, that has stood the test of time for most the banks, and financial services providers in India.

Appendix

Approach
In the Indian context, FinTech can be broadly aligned across twenty segments, across six broad financial services areas. The contours of these twenty segments are broadly in line with the findings of Deloitte global research on "Future of Financial Services", which was jointly conducted along with World Economic Forum and highlights the emerging areas of innovations in the financial services sector. The twenty segments are described in the table below.

Areas	FinTech Segments	Brief Description
A. Credit	01. Peer-to-Peer Lending 02. Crowd Funding 03. Market Place for Loans 04. Online Lenders – on-book lending by NBFCs 05. Credit Scoring Platforms	• All forms of lending market places including Peer-to-Peer lenders and market places that connect borrowers with both institutional and non-institutional lenders; • Also, includes crowd funding and equity funding platforms • NBFCs that use alternative scoring and digital channels for acquisition
B. Payments	06. M-wallets and PPIs 07. Merchant Payments and PoS Services 08. International Remittance 09. Crypto Currencies	• Services that enable transfer of funds for various use cases - P2P (Person-to-Person), P2M (Person-to-Merchant), G2P (Government-to-Person) etc. • Services targeted at both Payee and Merchants by enabling requisite payment infrastructure through mobile or other technologies
C. Investment Management	10. Robo Advisors 11. Discount Brokers 12. Online Financial Advisors	• Wealth advisory services delivered through technology governed rules and investment strategies
D. Personal Finance Management	13. Tax Filling and Processing 14. Spend Management and Financial Planning 15. Credit Scoring Services	• Tools and services for active management of individual financial profiles (e.g. spend, investments, credit profile, etc.)
E. Bank tech	16. Big Data 17. Blockchain 18. Customer Onboarding Platforms	• Services that utilize many data points such as financial transactions, spending patterns to build the risk profile of the customer. This provides an alternate to traditional underwriting methods that are unable to serve people with limited credit data. • There is significant value in unstructured data. However, it is difficult to derive value from unstructured data, owing to challenges in analyzing it. A number of new tools are being developed to derive value from large data sets.
F. InsurTech	19. Insurance Aggregator 20. IOT, Wearables and Kinematics	• Small business insurance • Usage based insurance

Source: Deloitte Analysis

All the segments of Indian FinTech have started gaining ground albeit to different extents, due to different underlying characteristics that impact scalability, adoption and viability. Moreover, not all the segments are likely to breakout at the same time. In order to assess the breakout potential of each segment of Indian FinTech companies, as well as the timing of breakout, Deloitte has developed a customized FinTech breakout assessment framework for the Indian FinTech market, drawing from the learnings of the Future of Financial Services study. The framework qualitatively grades the 20 FinTech segments across the seven characteristics on three parameters (High, Medium and Low) highlighted in the table below:

	FinTech Breakout Characteristics	Strategic Theme Addressed
01.	FinTech companies that are addressing areas and functions where customer friction meets largest profit pools (economic value)	Creating new value propositions
02.	FinTech companies that employ business models that are platform based, modular, data intensive, and capital light to start with	Designing new business model
03.	FinTech companies that actively shape customer and user behaviors, thus resulting in long-term structural change of the financial services industry	Shaping long term customer behavior
04.	FinTech providers that offer services to the underserved population, small and mid-sized businesses, using sophisticated capabilities on viable basis	Expanding market
05.	FinTech companies that actively collaborate with Banks and other FIs and also operate within the regulatory purview or active consideration purview of regulators	Fostering collaboration and working within regulatory purview
06.	FinTech companies operating in segments with significant legacy issues and prevalence of conventional business models, that lack scalability	Eliminating legacy constraints
07.	FinTech companies that target customers and make curated offers through use of analytics and alternative / big data sources	Leveraging data and analytics

Likelihood of Breakout High Medium Low

The framework aims to address the considerations across a range of business aspects, including scalability, business and operating model alignment, addressing new market opportunities, ability to create and serve new market segments, collaborating and partnering with banks. Using the above framework, our team analyzed various aspects of businesses and consulted industry participants to understand their breakout potential. Based on the analysis of the 20 segments, the results are summarized in the figure below. The areas marked in darker shades indicate a higher likelihood of breakout when compared to other FinTech segments.

Likelihood of Breakout

■ High ■ Medium ■ Low

Source: Deloitte Analysis based on interaction with Industry participants

References

1. Deloitte Internal Analysis
2. RBI
3. World Bank
4. Credit Suisse reports
5. Deloitte Internal Report – Disaggregating FinTech : Brighter shades of disruption
6. World Economic Forum Report – The future of Financial Services
7. Chicago Booth: Future of Financial Services Initiative
8. RBI - https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home
9. Other News articles
10. https://letstalkpayments.com/digital-innovation-summit-hdfc-bank-platform-startups-FinTech-potential/
11. RBI – Applications of Block Chain Technology
12. https://knoema.com/xxnxggb/india-gdp-growth-forecast-2015-2020-and-up-to-2060-data-and-charts
13. http://www.livemint.com/Consumer/M0ujLwL2ThZiR3KE3GyF0N/Smartphones-to-make-up-62-of-all-mobile-phone-sales-in-2018.html
14. http://timesofindia.indiatimes.com/companies/rbis-mobile-wallet-interoperability-faces-a-few-hurdles/articleshow/57691058.cms

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The Internet and Mobile Association of India (IAMAI) is a young and vibrant association with ambitions of representing the entire gamut of digital businesses in India. It was established in 2004 by the leading online publishers but, in the last 13 years, has come to effectively address the challenges facing the digital and online industry including mobile content and services, online publishing, mobile advertising, online advertising, ecommerce ad mobile and digital payments among others.

Thirteen years after its establishment, the association is still the only professional body representing the online industry. The association is registered under the Societies Act and is a recognised charity in Maharashtra. With a membership of nearly 300 Indian and overseas companies, and with offices in Mumbai, Delhi, Bengaluru and Kolkata, the association is well placed to work towards charting a growth path for the digital industry in India.

IAMAI
Internet And Mobile Association Of India

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Acknowledgements

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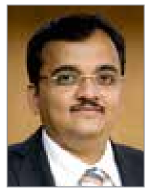

Kalpesh J. Mehta
Partner
Country Leader, Financial Services
+91 98216 19013
kjmehta@deloitte.com

Monish Shah
Partner
Consulting Leader, Financial Services
+91 98200 85827
monishshah@deloitte.com

Authors

Vaibhav Anand
Director
Financial Services
+91 98738 26460
vaanand@deloitte.com

Puneet Bhatia
Director
Financial Services
+91 98739 09428
bhatiap@deloitte.com

Acknowledgements

Nitin Mahajan
Senior Manager
Financial Services

Nitant Kaushal
Consultant
Financial Services

Karan Nihalani
Consultant
Financial Services

Contact us

infsinetwork@deloitte.com

Deloitte.