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.

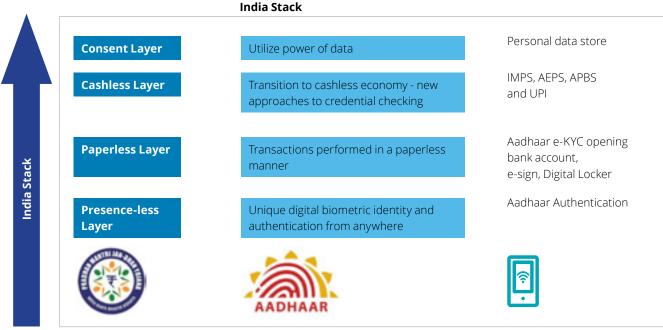
04. Indian Millennials rapidly ascending the adoption S-curve of digital financial services and thus perceiving higher friction from incumbents: With nearly 440 Mn Millennials, India has one of the youngest populations that is becoming productive and will drive consumption and household savings. Moreover, 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.

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



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

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.

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.

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

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

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

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

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

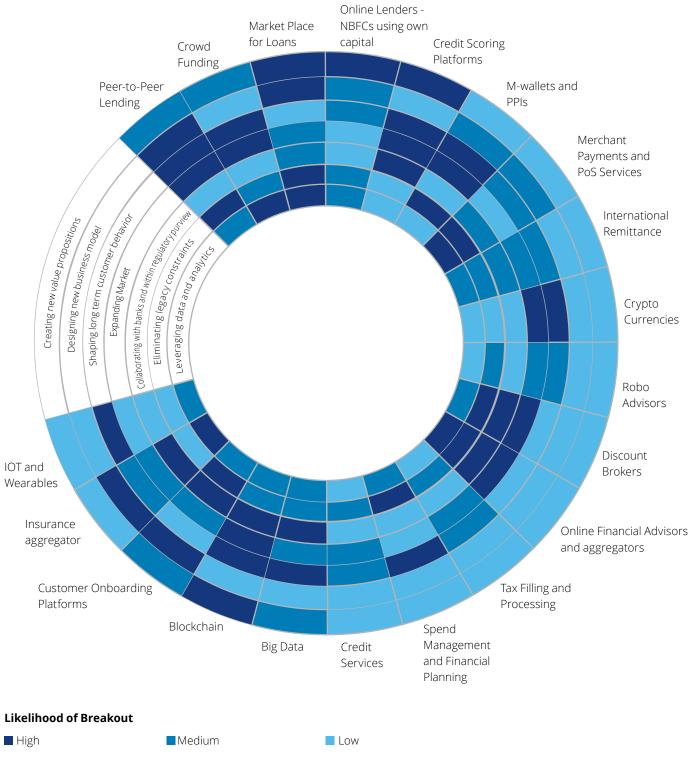
■ High ■ Medium ■ Low

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



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.

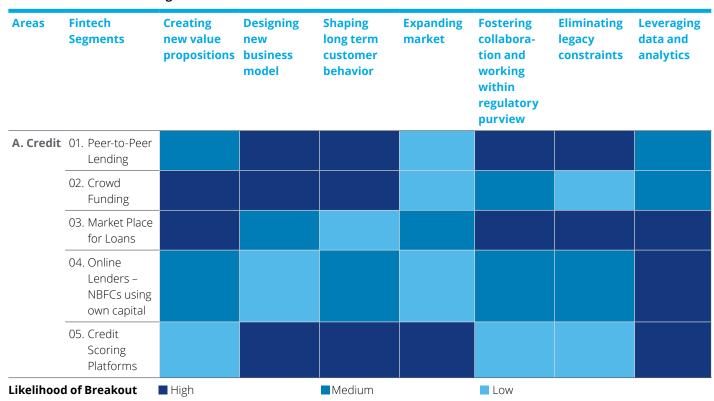
The alternative lending business model is built around technology that enables highly efficient customer acquisition, approval and servicing activities within a relatively light-touch regulatory environment. Most Indian banks' and NBFC's operating models, in contrast, include physical branches operating 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



Source: Deloitte Analysis based on interaction with Industry participants

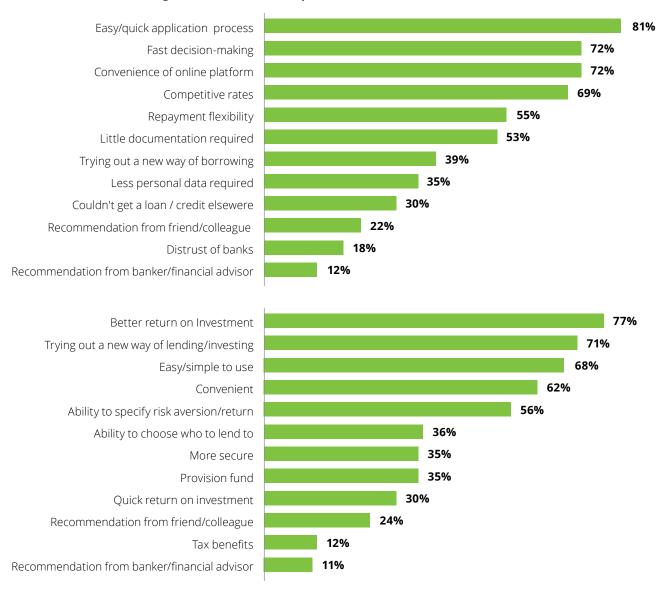
Within alternative lenders, peer-to-peer lenders and market place lending platforms are likely to breakout faster, as these lenders target profitable niches of Indian borrower segments, pioneer new business models by having only digital presence, target underserved market segments, and shape user behavior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

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

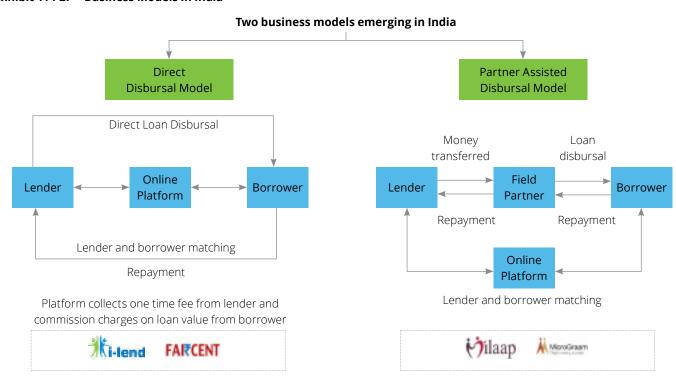


Exhibit 12 P2P - Business Models in India



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 crore⁴.
- 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

Exhibit 13 Marketplace lending models in India

Type 1 Type 2 Type 3 (Platform as match-maker) (Platform as Originator) (Platform to route to NBFC) • Act as an aggregation and • Act as an origination platform • Has both, lenders and borrowers origination platform to route between borrowers and in-house enlisted on a common matching leads to partner banks and NBFCs **NBFCs** platform Role of • Also, plays the role of originator • Connects the borrowers and platform for other banks and NBFCs lenders with no/limited role depending on the risk profile and in loan disbursements and nature of loans repayments • Falls under the purview of · There could be perceived • Will fall under the proposed P2P **Account Aggregators** conflict as platform is acting guidelines of RBI **Guidelines** of RBI both as an aggregator and also as Regulatory an NBFC, funding loans • Business scope limited to considerations generating loan applications for partner banks and NBFCs. Funding of loans by NBFCs not applicable. • High - Funding the loans • Medium - Capital buffer may be • **Low** - Though RBI guidelines extended will **block** the funds required in the form of lender mandate a leverage ratio of 7 of in-house NBFC's and strain protection reserve times, the platform cannot fund their capital the loan by itself, so capital buffer Capital not required to scale-up • No capital strain on platform Intensity • No liability in case of any loan defaults Capital Float ZOPA policybazaar.com **Examples** bankbazaar.com 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 Mantri⁵ 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

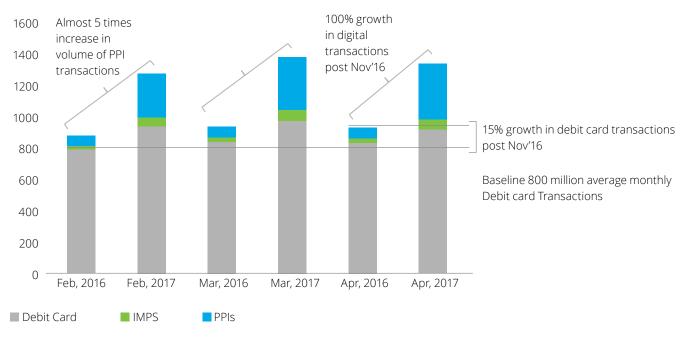
Payments

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

Monthly volume of digital transaction in Mn



Source: RBI Database