FinTech for the underserved

Future of FinTech and payments to drive financial inclusiveness

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ASSOCHAM
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Message from ASSOCHAM

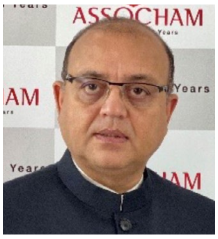
Vineet Agarwal
President, ASSOCHAM, and Managing Director,
Transport Corporation of India Limited

The growth of FinTech, or the designing and provisioning of financial services by using new technological innovations, is one of the most significant developments in the financial sector in the past decade. FinTech can play an important role in increasing access to finance, especially in promoting the growth of MSMEs in the country. The Government of India and the Reserve Bank of India have been making concerted efforts to promote financial inclusion as one of the important national objectives of the country.

Technology has been a critical 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. 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 critical to build a robust digital economy and lead India's transformation. Armed with new data and analytics capabilities, an asset-light platform and almost zero processing costs, FinTech players are complementing and, in some cases challenging the traditional banking and financial services institutions globally.

This comprehensive report jointly prepared by ASSOCHAM and PwC India encapsulates the key areas related to the functioning of the FinTech industry in India. ASSOCHAM'S Fintech Committee has been working closely with the Government and the regulators by advising them on policy and regulatory changes to support the industry. This detailed report can help us expand our discussions on the subject, and I wish the ASSOCHAM team success in this endeavour.

Message from ASSOCHAM



Deepak Sood
Secretary General, ASSOCHAM

India is amongst the fastest growing FinTech markets in the world. The Indian FinTech ecosystem sees a wide range of subsegments, including Payments, Lending, Wealth Technology (WealthTech), Personal Finance Management, Insurance Technology (InsurTech), Regulation Technology (RegTech) etc. India remains one of the largest markets where the structural enablers to set up and incubate fintech have come together strongly and at an apt time. The combination of steady economic growth with low penetration of financial services and availability of supporting infrastructure such as internet data access, smartphones, and utility infrastructure, including Aadhaar-based authentication and India Stack capabilities, are likely to provide the required impetus to India's FinTech sector.

The digital payments landscape has also multiplied over the last decade. India has globally positioned itself as a benchmark in digital payments owing to its resilient payment infrastructure, market practices, and proliferation of digital payments across various retail and merchants' segments. The adoption of digital payments in the MSME space has unlocked several efficiencies that have driven end to end transformation on how small businesses conduct their operations related to cash flow management, operations, and reconciliations.

In the past few years, the central and state governments, regulators, industry bodies, Banks, FinTech players, FS providers and other such organisations have in their capacity launched, partnered or collaborated to drive different financial inclusion initiatives in India. ASSOCHAM has worked extensively with its members to foster a more inclusive and enabling digital ecosystem in India. Through the efforts of the ASSOCHAM 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. This report explores some of the most pertinent trends 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 growth in India.

I would like to thank my colleagues from the ASSOCHAM and the ASSOCHAM Fintech Committee for contributing their valuable insights to this report. I would also like to express my gratitude to the PwC team for putting together this report and being the knowledge partner for this initiative.

Message from ASSOCHAM

Shri Vikas Varma
Chairman, ASSOCHAM Fintech Council &
Chief Operating Officer, Mastercard - South Asia

FinTech in India has thrived on massive untapped markets, easier access to capital and rising customer expectations of getting a super app-like experience from financial services. However, this scenario is still to be optimized for a significant population that still remains under/unbanked. The Reserve Bank of India (RBI) has just published its Financial Inclusion (FI) which pegs India at a score of 53.9 on a scale of 0 to 100, where 0 represents complete financial exclusion and 100 indicates full financial inclusion. While we still rank at a moderate inclusion level, there's been massive changes in recent years, whether it's in the ability of non-banking players to provide credit for the unbanked, the increasing number of digital transactions, the push from demonetization and banks' efforts towards digital transformation. The numbers on no-frills bank accounts with the Pradhan Mantri Jan Dhan Yojana (PMJDY) now stands at 422 million accounts (as of July 2021).

However, while we've addressed the reach or access to financial services on one part, we must still address the critical challenge to ensure these accounts are active and the formal use of financial products or services is meaningful. FinTech can offer or help offer better financial services experience to the customers. This is usually driven by data (more data, better data) and automated/efficient systems using technology. These changes have been part of a larger ecosystem push as seen through the tremendous growth in institutions such as NBFCs, micro-finance and small banks to facilitate better access to credit for the Indian industry. These institutions have brought about an enormous change in how credit is disbursed, with instruments like flow-based lending, micro loans and group-based lending that have been tried and tested successfully and are now increasingly matching credit demand and supply. Recent factoring reforms, efforts towards creating a level-playing field between conventional financial entities and fintech players, digital KYC are game-changing for the Indian FinTech story.

Several studies ranging from the World Bank development research group to the recent RBI survey on retail payment habits suggest that a broader adoption of digital payments significantly helps financial inclusion of disadvantaged sections in society. The advantage we possess for FinTechs to build upon last mile connectivity is hinged on the benefits that we reap around having solved for identity in the form of Aadhaar, scalable platforms to move money (whether, IMPS, UPI, Bharat QR) and the openness to embrace more interoperability in allowing newer players to access more open platforms.

In this report, we have highlighted how a partnership ecosystem can fuel greater financial inclusion towards provisioning relevant, affordable and safe products. A well-executed 'phygital' model can imbue trust of assisted service and seamless, secure and superior user experience of digital services for underserved segments. Digital technology will be the backbone of the economy going forward. Both products and services—be it in retail, health, education, or financial services—will increasingly have a digital as well a physical aspect. In the post-pandemic world, such hybrid models will pave the way towards full-fledged financial inclusion that enables long-term and sustainable economic growth for India.

Message from ASSOCHAM

Richa Mukherjee
Co-Chair, ASSOCHAM Fintech Council, and Director, Public Policy and Corporate Affairs, PayU India

The growth of FinTech is one of the most significant developments in the financial sector in the past five years and has seen an upward growth trajectory over time This is evident by an increase in both the number of FinTech companies founded and the investment they have attracted. As of March 2020, India, alongside China, accounted for the highest fintech adoption rate (87%) as opposed to the global adoption rate of 64%. The Indian Fintech ecosystem currently sees a wide range of sub-segments including Payments, Lending, Wealth Technology (WealthTech), Personal Finance Management, Insurance Technology (InsurTech), Regulation Technology (RegTech), Open banking etc. The fintech market in India was valued at INR 1,920.16 billion in 2019 and is expected to reach INR 6,207.41 billion by 2025, expanding at a compound annual growth rate (CAGR) of 22.7% during the 2020-2025 period.

The key drivers for the surge in fintech landscape are – high volume of funding- in venture and equity, open API platforms like Aadhar, OCEN, UPI, BBPS, GSTN, innovative technologies such as AI, ML, IoT, strong payments and acceptance infrastructure. The Indian government is also making a concerted effort to lay the foundations in digitizing payments and overhaul of the fintech sector. The behaviour change in consumers seen in 2020, as well as the increased availability of cheaper devices and simpler payment modes (such as Unified Payments Interface) are all driving increased e-commerce.

Along with introduction of digital unique identity Aadhaar, the government has taken numerous initiatives to facilitate digital payments ecosystem and promote development of fintech sector in India. In the Union Budget 2021 speech, the finance minister proposed an INR 1,500 Cr scheme to promote digital transactions in the country. The move is aimed to boost digital modes of payment. The Start-Up India initiative launched by the Government of India in January 2016 has paved the way for a revolution in fintech based start-ups along with the proliferation of new forms of businesses and technologies. Tax and Surcharge Relief for digital transactions, tax exemption for start-ups for the first three years, withdrawal of surcharge on online and card payments, etc helped elevate the sector in the initial phase. There was genuine Support from the government in expenses of facilitators for their patents filing, trademark and other design work have also led to easy incumbent of multiple fintech players. Along with Pradhan Mantri Jan-Dhan Yojana (PMJDY) was launched, as a result of which over 80% Indians now own a bank account. This scheme has enabled millions of Indians to have access to financial services and has addressed the supply side issue to a considerable extent. It also acted as a perquisite for digital payments advancement in the country.

In parallel, NPCI introduced the United Payments Interface (UPI) in 2016 provided an easy and faster alternative to the existing IMPS system. It thus served the objective of simplifying the transfer of funds between banks and non-banks while also covering peer to peer (P2P) transactions. To complete the cycle, on the acceptance side, RBI operationalized the Payments Infrastructure Development Fund with a corpus of INR 345 Cr to create new digital payment touchpoints in Tier 3 to 6 markets and NE states. I congratulate our regulators and Government for some of the noteworthy initiatives for fintech promotion launched such as **India stack** (set of APIs that allows presence-less, paperless, cashless and secured consent layered service delivery), **Digital India and Smart Cities initiatives**' (to promote digital infrastructure development in the country and attract foreign investments), multiple efforts by RBI and regulators (creation of fintech division, concerted institutional efforts like ReBIT and RBIH) and various projects and awareness sessions on financial literacy, CBDCs, Blockchain to be attuned to the latest technologies in financial space.

I appreciate the RBI, NPCI and Govt's efforts, during pandemic, to encourage Indian citizens to use digital payment services rather than cash and strengthen the economy by various liquidity infusions and keeping alive the strong macro-economic parameters.

Message from PwC

Vivek Belgavi
Partner, FinTech, and Alliances and Ecosystems Leader
PwC India

Mihir Gandhi
Partner and Leader
Payments Transformation
PwC India

Driving financial inclusiveness continues to be a top priority for India to achieve the target of becoming a USD 5 trillion economy and meet the UN-identified Sustainable Development Goals (SDGs). The digitisation of the broader economy, accelerated by the COVID-19 pandemic, across supply chains, education, agriculture, micro, small and medium enterprises (MSMEs), and others will allow innovative FinTech models to provide access to finance through embedded finance, neobanks, digital lending and digital payments. These new technologies would also enable policymakers to build new national digital infrastructure on the lines of Unified Payments Interface (UPI) and Bharat Bill Payment System (BBPS) as well as help them perform their supervisory roles with greater access to data and insights.

The National Strategy for Financial Inclusion report released by the Reserve Bank of India (RBI) identifies six strategic objectives across the key focus areas – accessibility, skill development, financial literacy, consumer protection, grievance redressal and coordination. Regulators and policymakers have acknowledged digital payments as one of the key enablers for citizens to access the formal financial system. As per the RBI, digital payments have grown at a compound annual growth rate (CAGR) of 43% in the last ten years.[1] Currently, the total market size of digital payments in India is worth INR 1,414 trillion.[2] It is expected to grow exponentially by two–three folds by 2025[3] due to the number of initiatives taken by the Government and regulators around financial inclusion and digitisation. With this extraordinary growth story, platforms such as IMPS, UPI , BBPS, AePS and Bharat QR have become linked with sachet financial products (current and savings accounts, credit, insurance and investments) and are perfectly poised to build the infrastructure required to bring more MSMEs and lower-income households under the ambit of formal financial services.

Certain Government and regulatory initiatives have been taken towards improving digital client onboarding, security, customer convenience, safety of funds, dispute management and loyalty. These factors are critical in delivering seamless and secure financial services to the underserved segment. FinTechs have been at the forefront of adopting and designing innovative products that leverage latest technologies and platforms such as artificial intelligence (AI), machine learning (ML) application programming interfaces (APIs), cloud, automation and IndiaStack.

This report highlights the key trends and emerging models adopted by FinTechs to drive financial inclusion by collaborating with the larger ecosystem. It also outlines the key initiatives taken by the Government and regulators as well as the opportunities that have been created for the ecosystem players to make financial services more affordable, secure and easily accessible for the underserved segment.

We would like to thank the Associated Chambers of Commerce and Industry of India (ASSOCHAM) for arranging this conclave and inviting PwC India to be a knowledge partner. We are glad to share our points of view on this sector which is poised to accelerate financial inclusion.

1 https://m.rbi.org.in/scripts/PublicationsView.aspx?Id=20315

2 https://www.meity.gov.in/writereaddata/files/india_trillion-dollar_digital_opportunity.pdf

3 1.https://rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1322

Table of contents

01

Identifying the gap areas

1.1 Importance and sizing

India has a population of over 1.3 billion spread across 28 states and 8 union territories, comprising over 660,000 villages and 700 districts. Over 850 million people (65% of the population) in the country live in rural areas.[4] A significant percentage of this population is excluded from easy access to financial services. Providing accessibility to financial services specifically designed for the needs of this segment of the population at affordable prices is key to improving financial inclusion in the country.

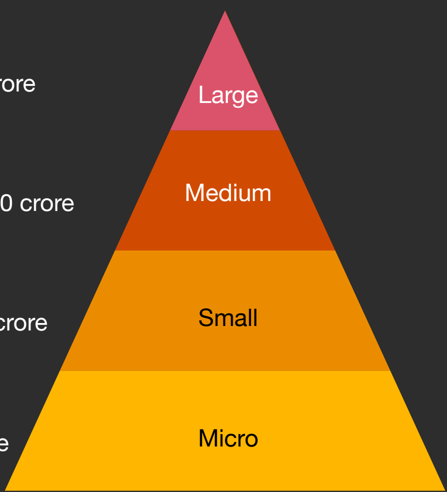
The Government of India (GoI) has been focusing on improving financial inclusion across the country, especially in the underserved areas, with policies such as the Pradhan Mantri Jan-Dhan Yojana (PMJDY), investments in improving the digital payments infrastructure, the New Umbrella Entity (NUE) policy.

However, despite the constant Government and regulatory push towards bringing a larger population into the fold of the formal financial system, a significant part of the population still remains underbanked/unbanked. Further, usage of cash remains high despite the increasing number of digital payments platforms. India's currency-gross domestic product (GDP) ratio rose to 14.6% as of March 2021, after declining to 8.7% due to demonetisation in 2016–17.[5]

This under-penetration of financial services and heavy reliance on cash can be attributed to a variety of factors, including lack of physical bank branches, lack of trust and low internet penetration prohibiting the shift to branchless banking.

The need for financial service coverage is not limited to the retail segment alone. The micro, small and medium enterprise (MSME) segment is also in need of further impetus. The MSME sector forms the backbone of India's economic structure, accounting for 28% of the country's GDP and 49% of its exports. The GoI aims to increase the contribution of MSMEs to India's GDP to over 50% and exports to more than 60% in the forthcoming years.[6]

Sectoral overview and significance of MSMEs



<table>
<tr><th>Annual turnover</th><th></th><th>Contribution to GDP</th><th>Contribution to exports</th><th>Overall credit exposure (in INR lakh crore)</th><th>Non-performing assets (NPAs)</th></tr>
<tr><td>>INR 250 crore</td><td>Large</td><td>71.1%</td><td>51%</td><td>46.7</td><td>18.7%</td></tr>
<tr><td>INR 75–250 crore</td><td>Medium</td><td rowspan="3">28.9%</td><td rowspan="3">49%</td><td>4.7</td><td>18.1%</td></tr>
<tr><td>INR 5–75 crore</td><td>Small</td><td>8.9</td><td>10.8%</td></tr>
<tr><td><INR 5 crore</td><td>Micro</td><td>4.6</td><td>8.9%</td></tr>
</table>

Source: MSME Annual Report 2018–19 and TransUnion CIBIL MSME report (January 2020)

4 https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=IN

5 https://paynearby.in/blog/new-trends-and-opportunities-in-digital-payments/

6 https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1652664

A large number of MSMEs are yet to be integrated in the formal financial ecosystem despite their prominent role in India's economy. The exclusion of these MSMEs from formal payments and lending ecosystems hinders their growth. According to the report prepared by the UK Sinha led Reserve Bank of India (RBI) Expert Committee on MSMEs (2019), the sector has an estimated credit gap of INR 20–25 trillion.[7] A majority of MSMEs do not have access to sufficient credit and liquidity required for daily working capital needs. Furthermore, a significant portion of these MSMEs remain cash driven with digital payments yet to be fully integrated in their operations.

The adoption of formal financial services initiatives such as digital payments and lending is yet to experience a significant uptick among these enterprises due to their reliance on cash-driven models.

1.2 Factors preventing financial inclusion

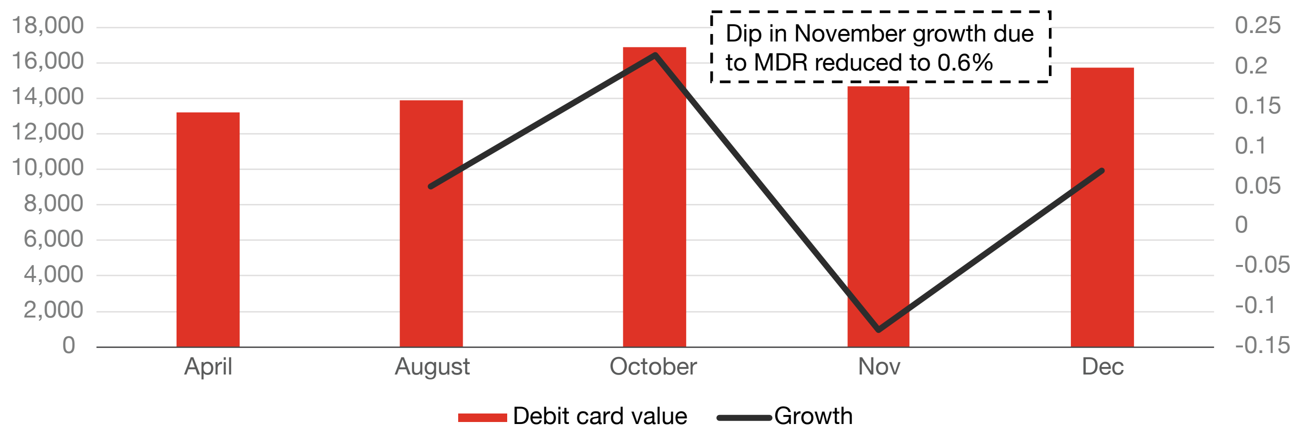
Financial inclusion is an important aspect of inclusive development for any country. Enabling the underserved segment (individuals and small businesses) to effectively access financial services is important for financial inclusiveness. The level of financial inclusion in any country can be measured and assessed by the Financial Inclusion Index.[8] This index is based on three basic parameters of an inclusive financial system – banking penetration, availability of banking services and usage of the banking system:

- Banking penetration is the most basic parameter and measured as the ratio of bank accounts to the total population of a country.
- The availability of banking services (including physical branches, banking correspondents and ATMs) indicates bank outlets that deliver financial services per 1,000 people.
- The third parameter looks at usage of banking administration beyond simple opening of records and is evaluated on the basis of outstanding deposits and credits.

While all three parameters are important in assessing the gaps that need to be addressed, the second one is particularly relevant as the financial services and FinTech sectors look to tackle the issues of distribution and reach through innovative strategies built on digital tech and smart incentivisation structures. We explore the key challenges that need to be addressed while tackling the issue of financial inclusion.

Banks and FinTechs have been compelled to forgo the revenue earned in the form of merchant discount rate (MDR) on RuPay and UPI transactions due to the introduction of the Zero MDR policy. The policy disincentivises firms from introducing new products and services that leverage UPI and RuPay. The effect of Zero MDR has resulted in significantly reduced margins for key stakeholders despite the noteworthy amount of investment in the payments space by the GoI and FinTech companies. This move has had a negative knock-off effect in achieving the policy objectives of a cashless society and serving the underserved customer segment. A previous reduction in the MDR rate by 0.60% resulted in a dip in the volume of RuPay debit card and UPI transactions which did not show expected growth following the 2018 reduction in MDR rates.

RuPay debit card growth vs transaction volumes



Source: RBI

7 https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=924#CH2

8 https://www.bis.org/review/r120802f.pdf

Although digital financial services have made significant progress in terms of scale and large-scale adoption, there is still a long way to go to realise the Government's 'Digital India' vision and popularise digital financial services amongst the unbanked segment of the population. As per the Digital Readiness Index released by the Switzerland-based Institute of Management Development (IMD) in 2020, India ranked 48 out of the 63 economies that were evaluated.[9]

There are still several challenges for the Indian financial services industry in delivering an inclusive digital experience for its citizens. The table below maps the various challenges faced by relevant digital financial services with the corresponding impact on digital delivery. Some of the severity levels that have been mapped across various impediments are given below:

High: Poses a significant challenge in the provision of digital services.

Medium: Poses a somewhat serious challenge in the provision of digital services.

Low: Negligible impact on the provision of digital service.

Challenge	Description	Lending	Payment	InsurTech	Neobank	WealthTech
Lack of infrastructure and connectivity	Telecommunications facilities and high-speed internet may be continuously available across urban India. However, intermittent networks and low speed are still some of the problems that exist, especially in mountainous terrain and other remote hilly regions. While many people from rural areas now have access to mobile devices, many of them continue to lack robust and reliable internet connectivity options. Additional issues like uneven power supply and poor network connectivity continue to prevail in rural/remote areas. Completing real-time banking transactions in remote areas continues to be a challenge and takes longer due to poor internet connectivity and frequent power failures.	●	●	◑	◑	◑
Lack of financial literacy	Lack of financial literacy is a major area that needs intervention to achieve last-mile financial inclusion in India. For example, the beneficiaries of Direct Benefit Transfers (DBTs) do not know about the process and what steps to take when their payments get rejected. This lack of accountability and absence of grievance redressal at the scheme level continue to impact all DBT programmes. Similarly, borrowers are reluctant to use online lending products due to many reasons, including lack of awareness, tech savviness and knowledge of required documentation.	●	●	●	●	●

9 https://www.imd.org/wcc/world-competitiveness-center-rankings/world-digital-competitiveness-rankings-2020/

Lack of trust	Cyber security and fraud issues dissuade the underbanked population from being a part of the digital economy. Security related issues resulting in frauds have the potential to undermine public confidence and dissuade retail consumers from using electronic channel based products. A large financial bank recently reported a financial fraud where large loan amounts (approximately INR 2,500 crore)[10] offered to a real estate developer were not reported as bad loans despite the developer's financial stress and default on repayments. This caused several inconveniences for the bank's depositors and resulted in withdrawal restrictions imposed by the RBI. Cybercrimes, including debit and credit-card fraud, rose by 51% in Maharashtra[11] during the COVID-19 pandemic. An increasing number of digital-wallet frauds has also led to the leakage of know-your-customer (KYC) details of users to unknown parties.	Medium	High	High	High	High
Unsustainable business models	Traditional financial services providers are profit-seeking organisations with high fixed costs for marketing, outreach and customer onboarding. They tend to rely on and target the middle- and high-income population to recover such costs as the large ticket-size transactions are able to cover the high cost of acquisition and operations. The services and investment required to service low-density areas and low-income populations are not financially sustainable under traditional financial services business models.	High	High	High	High	Medium
Lack of product/process localisation and customisation	It is imperative to understand that standard products and processes are not always going to work for the underbanked segment. They need to be customised in a way that will cater to the underbanked segment's needs to drive adoption. For example, introducing language options as per geography can help in promoting use cases like customer grievance processes. Traditional lenders are rigid when it comes to documentation such as bank statements and GST return forms for small businesses and these are not always accessible to the underserved segments, resulting in formal lending becoming challenging for such borrowers. Localisation of offerings/processes remains a challenge that needs to be addressed by banks and FinTechs alike to tackle the key pain points on switching from informal to formal and digital modes.	High	Medium	Medium	Medium	Medium
Change resistance and social stigma	Prevalent norms passed down through generations have resulted in some consumers developing a negative outlook towards banking and financial institutions, and continuing to prefer cash-based transactions through informal channels. Furthermore, in certain regions, women still do not have the freedom to access financial products due to patriarchal and other sociocultural mindsets and practices. This is particularly true in the case of collateral lending where the lack of collateral in the borrower's names makes it difficult for women borrowers to avail loans.	Medium	Medium	Medium	High	High
Uncertainty in policy changes (business model)	From a revenue-model perspective, the Indian regulator has generally followed a downward pricing regime like Zero MDR. This poses a risk to future cash flows for incumbents and new players. From a service perspective, not incentivising industry participants can hamper innovation and deter the introduction of new services that can be offered to the underserved.	Medium	High	Medium	Medium	Medium

High Medium Low

10 https://www.businesstoday.in/industry/banks/story/pmc-bank-crisis-rs-2500-crore-loan-hdil-biggest-reason-behind-rbi-clampdown-report-230497-2019-09-25

11 https://timesofindia.indiatimes.com/city/mumbai/e-payment-frauds-in-mumbai-up-70-in-5-months-this-year/articleshow/77581954.cms

02

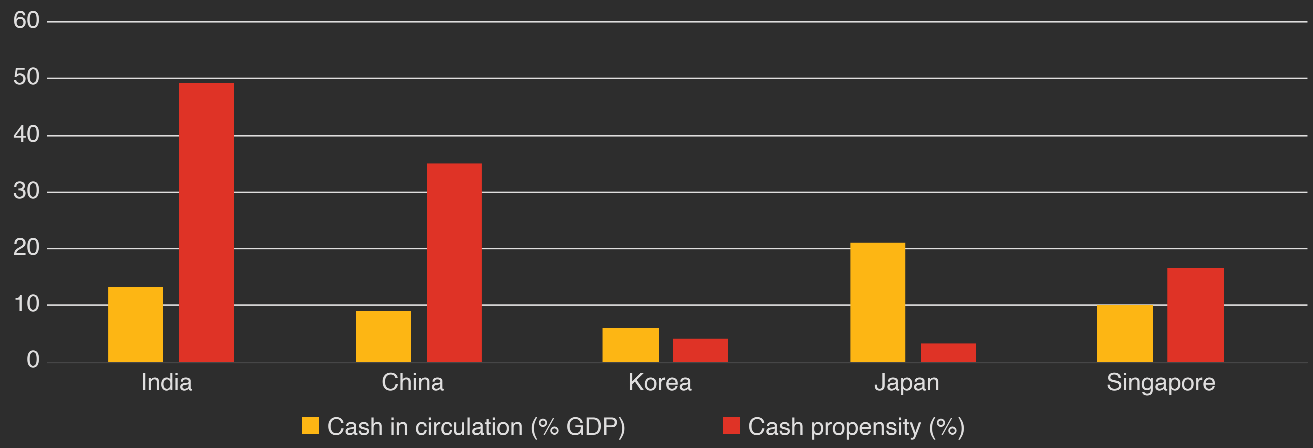
Learning from recent innovations

A number of innovative approaches and models driven through technological disruption have been developed in the last few years to address the issues highlighted in the previous section. Some examples that can inspire the development of solutions to tackle the problem of financial inclusion – particularly addressing the issues of awareness and acquisition – are explored below.

2.1 Payments innovation

The digital payments industry has contributed significantly towards bringing underserved customers into the digital economy in the last five years. The introduction of the Unified Payments Interface (UPI), expansion of the payments infrastructure, innovative payments methods and regulations have catalysed the growth of digital payments in India. A few innovative steps taken to further popularise digital payments are discussed below.

Cash economy in major Asian countries



Source: RBI

Reaching underserved individuals through mobile-phone penetration: Digital payments channels provide an easy, convenient, fast as well as rewarding payments experience to customers. The ever-evolving payments industry has continued to innovate and augmented its products to include last-mile customers in the digital economy. Rural markets where bank branches and ATMs are not operationally profitable, UPI, mobile wallets, payments banks, mobile ATMs, etc., have penetrated to serve customers excluded from the digital economy. As viable distribution models for the underserved segment, digital channels have gained popularity due to the large penetration of feature phones and smartphones within the segment, along with a customisable interface for various phone types. This, coupled with a substantial increase in rural point of sale (POS) infrastructure on the acquiring side, has laid down the foundations for payments service providers (PSPs) to reach the underserved segments via digital channels. As per the India Brand Equity Foundation (IBEF),[12] there were around 160 million unique digital transacting customers in 2020 and this number is expected to go up to 800 million in the next five years.

Merchant acceptance and payments infrastructure: Merchants have also adopted digital payments as they are more convenient, faster and result in less cash to manage. The GoI and regulators are also playing a crucial role in expanding the merchant base to rural and small merchants. Zero Merchant Discount Rate (MDR) on UPI and RuPay, and the Payment Infrastructure Development Fund (PIDF) scheme of implementing POS and QR in rural India are some initiatives that

12 https://www.ibef.org/news/digital-payments-market-in-india-likely-to-grow-3folds-to-rs-7092-trillion-by-2025-report

have been undertaken. There are currently six million POS machines and over three million Bharat QR codes in India, and private players are also aggressively investing in expanding their merchant base to drive growth. One of the key differentiated strategies adopted by private players in this regard is to provide a comprehensive service portfolio along with payments. For example, value-added services such as inventory management applications and micro ATMs help in further popularising digital payments.

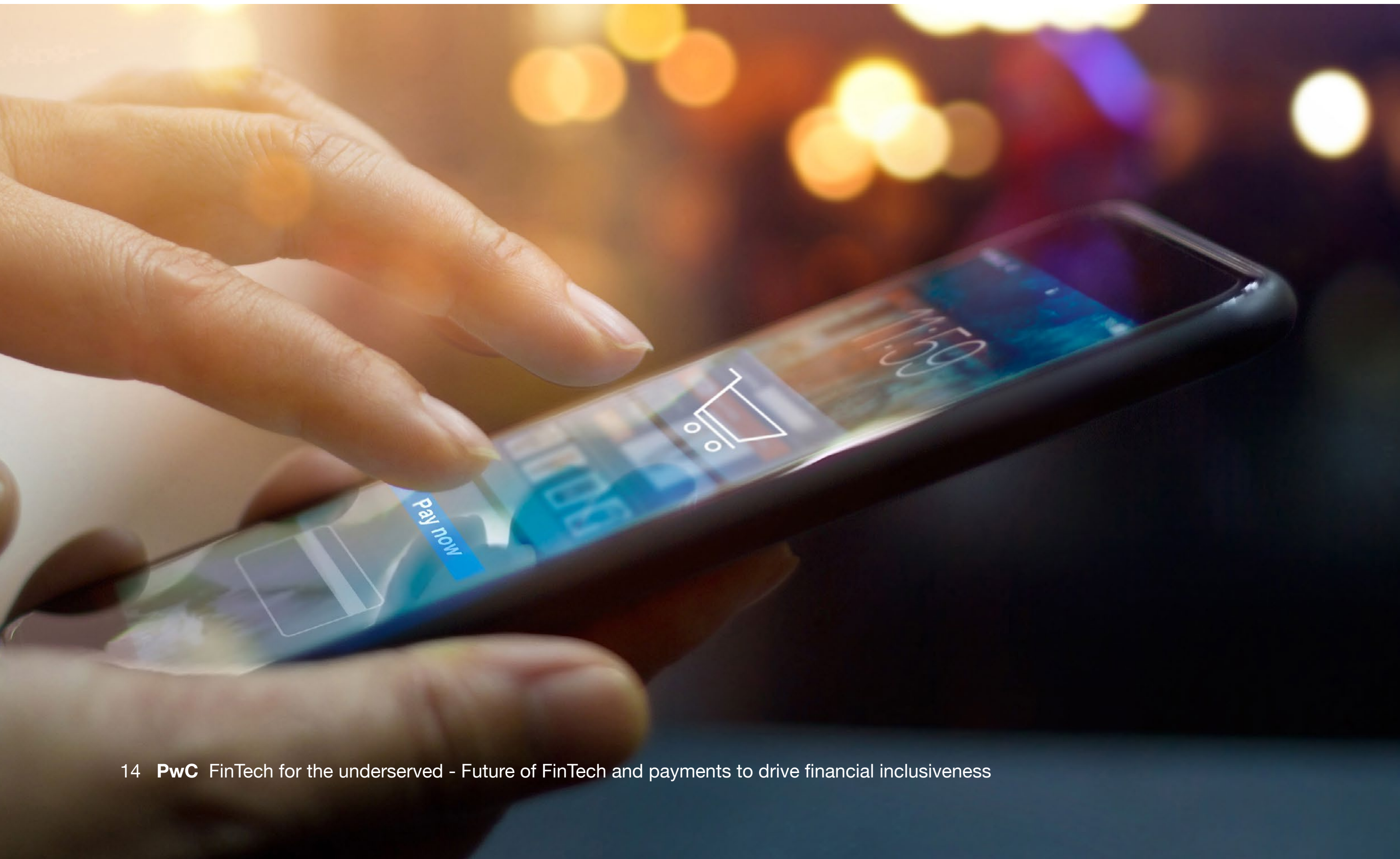
MSME digitisation trends: The MSME sector has undergone important systemic developments in the past couple of years that have changed how they conduct their day-to-day operations. The impacts of demonetisation, implementation of GST and the COVID-19 pandemic have transformed how MSME's view payments. The multichannel integration provided by digital payments alternatives has allowed MSMEs to improve both front- and back-end processes. One of the major developments for MSMEs is their level of digitised interaction with the Government, wherein digital modes are not only being encouraged but also incentivised.

2.2 Digital lending FinTechs

With access to credit continuing to be a key issue in solving the larger problem of financial inclusion, the Indian lending landscape has witnessed the development of a number of interesting customer-acquisition strategies that can be emulated from a larger inclusion perspective.

While the first wave of digital lenders revolutionised key value-chain components through advanced analytics and alternative data-driven strategies, the new crop of digital lenders have adopted an embedded finance- and ecosystem-based approach to acquire customers:

- **Acquiring customers through POS channels:** A number of lenders have leveraged smart partnership strategies with online and offline merchants to integrate instant lending offerings at checkout points, utilising available transactional data and the using checkout points as acquisition channels. This opens up significant inclusion opportunities based on the availability of checkout points.
- **Acquiring customers through B2B2C channels:** A key benefit of the gig economy is the inclusion of a considerable section of traditionally underserved consumers into a formal financial framework. Gig-based companies have digitised these gig-worker ecosystems and thus lowered the cost of acquisition for various players, including lenders. A number of digital lenders have tied up with such companies to provide lending options to gig workers based on reliable and digitised financial data obtained from the hiring company.



2.3 Neobank innovations

Neobanks and their operations are evolving despite them being a relatively recent entry into the FinTech ecosystem. They are transforming themselves from complete digital and online-driven operations, and changing the narrative to focus on superior customer experience backed by online and offline mediums that enable them to reach their target customer base more efficiently.

Neobanks are going beyond the technologically savvy segment of the population and focusing on providing customised and targeted services to those who are financially underserved, both in retail and MSME segments.

For instance, a neobank targeting customers requiring banking services in tier-2 cities and beyond has collaborated with an assisted services platform for its customers. The platform provides them with a host of financial and non-financial services via its agent network of over 100,000 small stores which are located across the regions providing last-mile access to the neobank. The services platform is focusing on providing small-ticket financial services such as loans and insurance as well as non-financial services such as ticket booking and assisted e-commerce on a single platform to a specific target group of customers. The strategy of creating incentive structures for last-mile stores to participate as distribution points and facilitating this distribution capability through digital technology can be applied to address the issue of inclusion on a larger scale.

There are multiple neobanks which are emerging to provide an integrated product platform to MSMEs – a combination of banking, payments, accounting and compliance. These neobanks aim to provide MSMEs with key financial pillars of services required to run businesses and thereby, allowing them to focus on running their core business. These neobanks are not only enabling their customers to seamlessly receive and transfer payments but also providing them with a single access point to get instant loans, manage operations, etc. Neobanks have been able to garner participation from traditionally underbanked MSMEs, specifically address their business needs and facilitate such product consumption via innovative distribution channels. Furthermore, they have also adopted a combination of offline and online acquisition strategies, providing them with a seamless onboarding experience to enable digitisation and financial inclusion of MSMEs operating in the informal economy.

The neobanking model has evolved beyond only digitising financial services. Such banks are providing financial inclusiveness in a much broader manner and bringing in targeted services via focused customer-access channels.

2.4 Innovative acquisition channels of non-financial services models

Embedded finance is an emerging theme and is expected to grow exponentially in the coming decade. It integrates financial services within a non-financial services product/customer experience flow and serves users with contextual financial services within a company's platform/app. This can essentially turn any company into a FinTech company. Apart from making processes more linear, faster and convenient, embedded finance also has the potential of driving financial inclusion in India and thus helping the customers become more aware of new financial products.

A key example of embedded finance can be seen in how a few digital MSME marketplaces had initially started with a core proposition and later built products to help their merchants access a wide array of financial products. These marketplaces mainly focused on enabling offline stores to run as online stores with a focus on increasing sales while trying to give them a wider customer base, along with inventory management options and other key features. But these non-financial services tech providers have also embedded finance propositions in providing such technology services. Apart from integrated payments gateway solutions, these platforms also underwrite credit based on the payments transaction data if required for capital or operational expenditure. Such marketplaces are also exploring invoice discounting propositions since they have both account receivables and account payables data.

There are a number of other examples to consider where non-financial services flows have seen FS synergies. A leading bicycle manufacturer in India tied up with a sachet insurance provider to help customers buy cycle insurance at the time of purchase. The cost for such sachet insurances is generally low and they help customers get introduced to the concept of insurance while breaking the barriers of high cost and low awareness. A similar example would be online travel portals offering flight or travel insurance by tying up with insurance manufacturers. Major e-commerce players are also providing small-ticket insurance for mobile phones, white goods and other such appliances, helping in acquisition and distribution for insurance providers. Since insurance is such an underpenetrated market in India, such sachet insurance options bundled with a product help companies in acquiring future insurance customers.

India’s leading messaging platform with over 400 million users is planning to provide its users with greater access to financial solutions by facilitating the purchase of affordable sachet-sized health insurance through its platform. It is engaged in developing a pilot project that aligns with other sectors like EdTech and AgriTech, apart from co-creating and distributing sachet health insurance products. Additionally, the messaging platform is also working with an incumbent financial institution and a PensionTech platform in enabling retirement savings for the underbanked and underserved people who do not have formal employment benefits or a retirement corpus.

An AgriTech start-up from India has created an end-to-end solution for farmers by integrating technology across each stage of the farming process. The solution works towards empowering farmers digitally and helping them procure credit, improving market linkages with other farmers and farmer producer organisations (FPO)s along with guiding them on seed buying and cropping. It has the potential to overhaul the functioning of India’s agricultural sector.

Another example of embedded finance would be of a Korea-based FinTech start-up that launched operations in India a few years back. It initially started as a balance checking app before evolving into an embedded payments app and later expanding to offer other financial and non-financial services. It utilises a strategy of incentivising its customers by empowering them to become its agents. This agent-led model approach has furthered financial inclusion by onboarding customers with smartphones and providing services to potential consumers who do not have smartphone access.

A few HRTech platforms that help in processing payroll and attendance records have recently pivoted to provide financial products like short-term loans or payday loans based on an employee’s income. This also helps employees in accessing lending products easily, especially if they are freshers and have no credit score or history.

The common thread in the above-mentioned examples is the utilisation of digital networks of traditionally underbanked customers for embedding financial services consumption. The financial services industry has benefitted from the large-scale use of technology in adjacent industries, including health, education and agriculture, apart from the larger MSME space. These technology disruptions are seeing a number of players onboarding end customers onto digital platforms and digitising data and information related to these customers in an effort to meet their core financial needs. This sets the foundation for the penetration of financial services via these digitised ecosystems.

03

Trends and interventions driving inclusion

We have analysed some strategies and learnings to consider from an acquisition and awareness standpoint. In the following sections, we will look at the trends, models and interventions that have focused on driving inclusion through product and distribution strategies.

3.1 Payments

3.1.1 Growth of digital payments in India

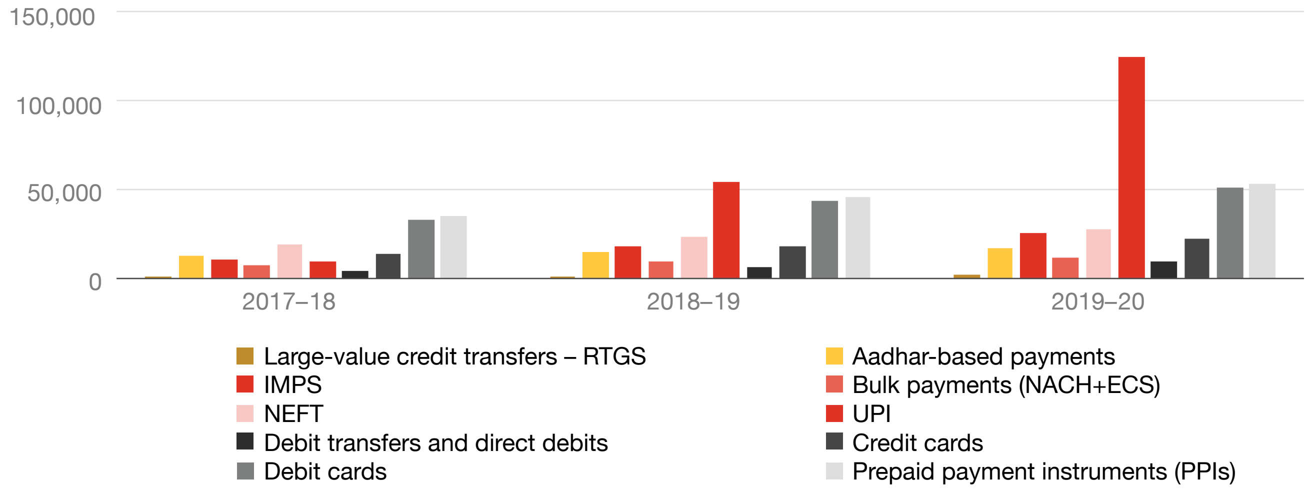
The digital payments landscape has grown rapidly over the last decade. India has globally positioned itself as a benchmark in digital payments owing to its resilient payments infrastructure, market practices and proliferation of digital payments across various segments, including both retail and merchants. The volume and value of digital payments in India have been on an upward trajectory with the volume increasing at a compound annual growth rate (CAGR) of approximately 50% between 2015–16 to 2019–20.[13] In January 2020, the RBI Governor claimed that digital payments account for around 97% of daily payments system transactions in terms of volume.[14] Some of the key themes which have stood out as a result of this paradigm shift to digital payments have been:

- traditional payments service providers have embraced a mobile-first approach
- usage of channels such as cards, UPI and wallets has increased significantly
- NPCI's novel efforts in improving the central retail payments infrastructure and launching new digital initiatives such as the Bharat Bill Payment System (BBPS), FASTags, National Common Mobility Card (NCMC) and offline payments.
- rationalisation of merchant and acquiring rates to encourage adoption on the acquirer side in order to boost consumer adoption.

13 RBI data

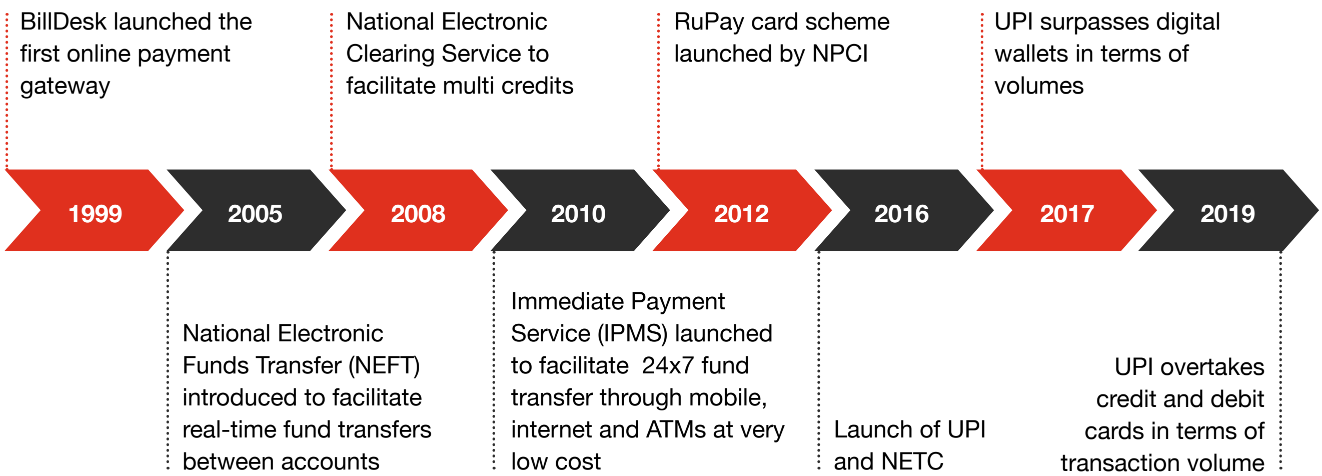
14 https://m.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1106

Digital payments volume (in lakh)



Source: RBI

Evolution of the Indian payments landscape



Source: PwC analysis

The Indian payments market is not exclusive to traditional banks anymore with new FinTech start-ups, telecommunication companies, BigTechs and conglomerates forming an essential part of the ecosystem. This development has enabled new players to launch innovative products that cater to various segments of the population. Some of the key drivers that have positioned Indian payments as a valuable proposition for new and existing market participants are discussed below:

- **Buoyant regulatory framework:** Payment regulators have taken proactive approaches to limit monopolies in the payments space and encourage competition and cooperation among market players.
- **Booming start-up ecosystem:** India has the third-largest start-up ecosystem in the world with an expected year-on-ear (YoY) growth of 12–15%.[15] This has led to technology-nimble start-ups entering the payments space by offering newer and innovative products.
- **Evolving customer needs:** The needs of customers have drastically evolved over the past decade with convenience taking precedence over actual service. This has aided in new business models being developed and encouraged by the industry as a whole.

15 https://www.startupindia.gov.in/content/sih/en/international/go-to-market-guide/indian-startup-ecosystem.html

3.1.2 Recent developments

Retail digital payments adoption

Rural growth has always been an indicator of the Indian economy's overall and sustainable economic development. Many FinTechs in the recent past have focused on expanding their value proposition in rural areas.
Many organisations have positioned overlay services around person-to-person (P2P) and person-to-merchant (P2M) transactions that run on the faster payments rails of UPI for the rural segment. One of the key disruptors that fuelled the growth of digitisation in rural areas was the demonetisation of 2016 which brought a sense of urgency to the Government's Digital India initiative and saw many merchants opting for digital payments channels as an alternative to traditional modes. One of the key boosts in terms of value and volume post demonetisation was seen in the *99# payments service that helps feature phone users make digital payments over the unstructured supplementary services data (USSD) network. USSD payments clocked 0.31 million transactions compared to 0.03 million transactions in December 2016, a nine-time increase in volume.[16] However, post that surge, USSD payments have failed to generate the intended traction and transaction volumes fell by approximately 85% between 2017–2021.[17]

More recently, payments done using the Aadhaar Enabled Payment System (AePS) surged substantially in April 2020 with value and volumes increasing by approximately 100% and 30% respectively compared to January 2020. AePS payments volumes have continued to grow sustainably, increasing by 20% from November 2020–March 2021.[18]

DBTs have been availed by the rural segment through AePS into their Aadhar-linked accounts. In addition to this, AePS allows end users without smartphones to withdraw and transfer funds using biometric authentication at micro ATMs.

Adoption of digital payments by MSMEs

From a supply perspective, merchants have been proactively incentivised by regulators to accept digital transactions. This has been achieved by focusing on the cost perspective by rationalising MDR rates and also providing a subsidy of 0.5% per transaction for small-value payments capped at INR 150 per transaction and 2,000 per month.

The adoption of digital payments in the MSME space has unlocked several efficiencies that have driven end-to-end transformation on how small businesses conduct their operations related to cash flow management, operations and reconciliations. Some of the factors that drive the adoption of digital payments among MSMEs – given the wide range of payments solutions – available are given below:

- **Beyond transaction costs:** Digital payments reduce transaction costs related to cash handling as well as the time required for payments clearing and reconciliation. These ensure better cash flow management and lower operational risks.
- **E-invoicing trends:** As per a Government mandate issued in 2020,[19] it is compulsory to generate GST e-invoices for B2B transactions. To comply with such regulations, MSMEs would need to have integrations with allied processes like tax payments. For example, it would be easier to generate e-invoices for a digital transaction with a verifiable audit trail and use it in other allied processes like reconciliation and tax payments.
- **Digital identity:** The wide usage of Aadhar to fulfil KYC requirements has prompted MSMEs to shift to digital methods for authenticating and confirming customer data which in turn will reduce customer acquisition costs for MSMEs.
- **Audit trail:** Digital transactions lead to the creation of a verifiable audit trail that enables businesses to seamlessly generate periodic reports and provides easy access to financing.

16 https://www.npci.org.in/what-we-do/99/product-statistics

17 http://digipay.gov.in/dashboard/default.aspx

18 https://www.npci.org.in/what-we-do/aeps/product-statistics/2020-21

19 https://irisgst.com/notification-e-invoicing-becomes-mandatory-from-1st-october-2020/

Payments applications repositioned as super applications

Payments applications were initially developed for the sole purpose of providing payments interfaces for customers. However, such applications are presently providing a range of other services like e-commerce, cab hailing, insurance and food ordering. UPI has provided PSPs with the ability to build overlay services in addition to the basic payments infrastructure that gives them the perfect opportunity to extend the use-case proposition beyond payments. Such applications have been successful through BigTech adoption in China.

Such super applications can connect a wide variety of individuals and service providers on a common platform, providing economies of scale and more.

Emerging digital payments use cases for financial inclusion

Many market participants have enabled a host of alternative solutions and innovative use cases to drive new engagement models to enable financial inclusion for the underserved. A key point to note here is that some of these new models are driven by not only traditional participants but also new market entrants like conglomerates and technology companies. A few examples of some such innovative engagement models are given below:

- Regulatory push for offline transactions through a digital financial services (DFS) model by limiting the reliance on internet connectivity for making digital payments.
- 'Phygital' model for last-mile delivery of digital payments services which provides an omnichannel experience for end users.
- Hyper localisation of payments applications to drive end-user adoption and make payments applications relevant for the underserved.

3.1.3 Business models adopted by FinTechs and banks

Banks and interchange companies (card network and payment processors) had a virtual monopoly on payments services in the past. An interchange company acts as a bridge between issuing and acquiring banks. It ensures remission of funds as per service-level agreements (SLAs), legal intervention in case of disputes, payments security, etc.

Banks on the other hand function as both issuing and acquiring entities. Issuers can issue financial instruments like cards whereas acquirers are mainly responsible for processing a transaction. Banks charge a certain percentage of the transaction as processing fee for the roles they play.

The payments landscape has transformed significantly with the emergence of payments banks, FinTech companies and BigTechs. This transformation has been further aided by the emergence of digital payments modes like wallets, online payments methods and QR-based payments built on national payments infrastructure like UPI. These have become successful alternatives to POS-based and cash transactions. The details of the business models of some of the prominent market players are given below:

- **Payments aggregators:** These entities directly onboard merchants for processing transactions through online payments modes like UPI-based digital wallets and QR payments. A payments aggregator relies on the services of its partner banks. The cost of goods sold to a payments aggregator would be dependent on the revenue collected from signed-up merchants and the concurrent cost paid to partner banks.
- **Banks:** Traditional Indian banks are no longer restricted to acting as either issuers or acquirers in the payments space. They are actively participating and building business models around digital payments modes like UPI-based wallets and QR payments. Additionally, banks are developing their own wallets, acting as payments gateways, partnering with payments aggregators to process merchant transactions, etc. The revenue model and the associated costs differ on the basis of the context and specific action being performed by the bank.
- **Card schemes:** Card networks charge a percentage of the transaction known as interchange fee which is normally around 0.3% for debit cards and approximately 1–5% for credit cards. This is charged from merchants and is factored into the cost of doing business. The key role of a card scheme is to act as a link between issuing and acquiring institutions in addition to providing a uniform set of rules governing transactions and communication across all parties in the value chain.

The table on the next page details the various adjustments that can be made by banks and FinTechs in their business models to address service gaps from a financial inclusion perspective.

Business model	Description/impact
Loyalty programmes	PSPs have been introducing loyalty programmes for end users to encourage adoption. This is helpful for new product launches. Loyalty programmes are an essential tool used for customer engagement, retention and an important driver for various marketing campaigns. They have evolved from a buy-now-and-spend-later model (reward points accumulated on plastic cards) to instant cashbacks and omnichannel offers on both online and physical outlets.
Service portfolio	The core payments service offering that is required by any merchant must enable the acceptance of an exhaustive set of payments options to enable universal customer acceptance. However, the overall service offering needs to also include value-added services that enable merchants to seamlessly execute peripheral payments services like KYC, API hubs, reconciliation and data analytics.
Payment application localisation	For a country as diverse as India, a digital payments solution built for the mass population may not be suitable for remote areas due to various factors like language barriers, end-user responsiveness and literacy rates. These factors make it imperative for players to develop localised strategies to fill/address these gaps through customised payments applications. For example, the inclusion of local languages on a payments application interface makes it more accessible to a larger section of the population.
Digital financial literacy model	It is imperative to drive awareness about customer rights and processes for payments to be used in an effective and secure manner. Traditionally, banks have used the physical model through banking channels to drive adoption and literacy. On the other hand, newer players are driving this model through merchants, extensive digital promotion and digital channels.
Targeted payment offering	Organisations have targeted specific digital payments methods integrated on applications to drive need-based adoption. For example, offline payments mechanisms using alternative technologies like interactive voice response (IVR) and SMS in areas with low internet connectivity are becoming popular.
New overlay services	Newer overlay services like request to pay, QR and electronic bill payment using BBPS have been used in extending the payments value proposition to help launch innovative and relevant rural payments products with higher adoption.

3.1.4 Initiatives by the Government and regulators

The Government and RBI have played a crucial role in expanding digital payments to the underserved segment of the population. The policies developed by them can be classified into the following three categories.

Payment security

1. Tokenisation
2. SRO for payments systems
3. Digital payment security controls
4. Additional factors of authentication

Redefining business and operating models

1. Zero MDR on UPI and RuPay
2. Interoperability of PPI and limit extent
3. Zero and extended hours for RTGS and NEFT transactions
4. NUE for retail payments

Developing the payments infrastructure

1. PIDF
2. Offline payments
3. Centralised settlement platform for non-banking

Source: PwC analysis

Redefining business and operating models

- **Zero MDR on UPI and RuPay:** The GoI in December 2020 announced Zero MDR on UPI and RuPay transactions to boost merchant acceptance for digital payments. This led to a wider adoption of UPI across rural India and amongst small merchants. UPI transactions have grown significantly post the implementation of this rule and crossed INR 5 trillion[20] in March 2021, though industry players were hit by this decision as they lost one of their primary revenue sources.

- **Interoperability of PPI and increased limit:** The RBI in April 2021 increased the account limit to INR 2 lakh and allowed interoperability for PPIs.[21] This will further extend the adoption of e-wallets. The MSME segment will be most benefited by this as they can engage in high-value transactions with customers and suppliers.

- **Zero fees and extended hours for RTGS and NEFT:** The RBI extended the RTGS and NEFT settlement cycle to round the clock in July 2019 to encourage electronic fund transfers. It also abolished RTGS and NEFT services fees. Both retail customers and the MSME sector benefited due to quick settlements and zero-cost payments services.

- **NUE for retail payments:** The RBI has released a draft framework for an NUE for retail payments systems.[22] It will further encourage innovation to meet the demands of a wider customer base. As per the draft framework, NUEs are entrusted with the responsibility to operate new payments systems in the retail space to promote interoperability and innovation in the wider Indian payments framework.

- **Regulatory sandbox for driving offline payments:** The RBI has onboarded technology start-up companies in the sandbox for testing and effectively deploying the offline payments model.

Payments infrastructure

- **PIDF:** The RBI unveiled the PIDF[23] in June 2020 to deploy 10 lakh physical and 20 lakh digital POS outlets in tier 3–6 cities and the North Eastern states. This fund was operationalised in January 2021 for three years to boost the digital payments ecosystem in rural India and include the underserved population in the digital economy.

- **Offline payments:** The RBI released a circular[24] for offline payments in August 2020 with regard to internet connectivity being an impediment. Cards, wallets and mobile payments are the methods which can facilitate offline payments. Internet penetration is still a challenge in rural India and technology innovation enabling offline payments would be a game changer in these areas.

- **Centralised settlement platform for non-banking players:** The RBI released a notification in April 2021 allowing non-banking players to leverage NEFT and RTGS facilities. Underserved customers who do not have bank accounts or internet banking facilities can make payments using wallets, cards and other instruments offered by non-banking players.

20 https://www.npci.org.in/what-we-do/upi/upi-ecosystem-statistics

21 https://rbi.org.in/Scripts/NotificationUser.aspx?Id=12074&Mode=0

22 https://m.rbi.org.in/scripts/bs_viewcontent.aspx?Id=3832

23 https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=49905

24 https://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=11947

Payments security

- **Card tokenisation:** Payments frauds and lack of awareness are among the major reasons which restrict customers from leveraging the benefits of digital payments. The RBI issued a press release in January 2019 describing the process of tokenisation[25] with a mask on card, a unique token that hides the actual card details for secure transmission of relevant cardholder details, to enhance the security of the payments system.

- **SRO for payments system:** The RBI in October 2020 came up with a framework for a self-regulatory organisation for payment system operators.[26] This organisation will develop system security, pricing practices, customer protection measures, a grievance redressal system, etc. This will encourage underserved customers to adopt digital payments as the framework will protect their rights and diligently address their complaints.

- **Digital payment security controls:** The RBI released the directions for digital payments security controls[27] in February 2021 for payments channels like internet, mobile banking and cards. The directions set certain minimum standards on common security controls for any new payments[28] products to include overall business strategy and the inherent risk and mitigation measures. This will ensure the robustness of payments channels and enhance customer experience.[29]

- **Additional factor of authentication:** The RBI has introduced additional factors of authentication to make card transactions more secure. This provides an extra security layer for customers at high risk and encourages them to make card payments. However, customers have an option to opt out of the factor of authentication for transactions amounting to INR 5,000 as per the RBI guidelines[30] released in December 2020. This will provide a seamless and convenient experience, and ensure safety measures for card payments.

3.2 Digital lending

The emerging digital-driven financial services landscape has seen continuous innovations in the ways of doing business and lending. The digital lending market in India (defined as cases where loans are sourced, underwritten and sanctioned digitally) was estimated to be worth INR 2.7 trillion as of March 2019 and is expected to grow up to INR 15 trillion (at a five-year CAGR of 41%), accounting for nearly 16% of retail lending in FY24. India was estimated to have over 1,200 digital lending start-ups at the end of 2020 with around 12% of them backed by venture capital (VC). The sector saw considerable VC interest – USD 2.4 billion worth of VC between 2014 and Q3 2020.[31]

A lot of emerging trends in the lending ecosystem are visible as the shift towards digital ecosystems strategies continues. A few such trends are listed below:

- **Digital-first strategy:** New-age lending FinTechs are focussed on either end-to-end digitisation or digital tech-driven 'phygital' models. Many of them are not reliant on physical channels and customers are serviced mostly through partnerships and digital marketing channels.

- **Ecosystem orchestration:** Start-ups are creating value for their customers by offering non-financial services and bundling financing offerings at the point of consumption, such as a marketplace for raw material procurement along with financing bundled at the point of procurement.

- **Asset distribution and securitisation:** FinTech non-banking financial companies (NBFCs) are using securitisation as a method to mobilise capital for growth. They are targeting affluent investors in India by providing them with alternative investment options by pooling loan assets. This helps lenders raise cheaper funds by improving the internal rate of return (IRR) and providing flexibility in product pricing, leading to wider customer-segment applicability.

25 https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=45954

26 https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=11986&Mode=0

27 https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=12032&Mode=

28 https://www.npci.org.in/what-we-do/upi/upi-ecosystem-statistics

29 https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=12032

30 https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=11999&Mode=0

31 https://inc42.com/datalab/digital-lending-in-india-the-rise-of-consumer-lending-report-2020/

- **Alternative credit scoring models:** FinTechs are redefining underwriting models by going beyond traditional underwriting parameters and using alternative data points such as POS transactions, account receivables and psychometric tests to assess the credit worthiness of customers. These strategies provide greater ability to widen the ambit of customers who can be catered to as well as the types of products that can be designed.
- **Increased collaborations and partnerships:** The trend of lenders and FinTechs partnering continues to see traction. FinTechs are looking to partner with banks to co-lend to creditworthy customers. Banks (lenders) provide capital while FinTechs bring in expertise to lend to customers in new customer segments by offering differentiated and customised product offerings.
- **Improved customer experience:** Digital lenders and FinTechs have made the entire lending process paperless and presence less. With a strong focus on user interface(UI)/user experience (UX), lenders use intuitive digital journeys, smart integrations with data providers and contextual product placement to provide customers with a different experience compared to traditional lenders. These approaches reduce the friction and time required by customers and help lenders in improving conversion and reducing costs by pruning redundant physical operations.

3.2.1 Emerging models

Digital lending has witnessed the emergence of multiple business models that cater to the bottom of the pyramid. A few popular digital lending models targeted towards financial inclusion are analysed below.

Business model	Description/impact
P2P lending	P2P platforms are digital channels that match borrowers with individual lenders or institutions. The platform plays a central role in managing both parties, including borrowers and lenders. Thus, it helps new/unserved customers to get formal lending.
Supply chain financing	Supply chain financing is a technology-based solution to connect buyers and sellers linked in sales transactions. It aims to lower the financing cost for both parties and also provides suppliers with quicker access to money to keep their operations running smoothly. This is particularly helpful for small-sized businesses with little credit history which makes it difficult for them to obtain financing based on sales transactions. With the onset of Government-backed initiatives such as the Account Aggregator Ecosystem, TReDS, Factoring Regulation (Amendment) Bill, 2021, and digitisation across supply chains, this financing model has gained traction within the MSME segment.
Invoice financing	Invoice financing is used by businesses to pay for their operational expenditure by borrowing against the amounts due from customers. Thus, businesses can further expand their operations. A number of invoice-financing FinTechs are helping small MSMEs (traditionally underserved) in unlocking capital based on their invoices.
POS lending	POS lending consists of a partnership model between financial services lenders and merchants. In this model, shoppers get financed by lenders at the point of checkout, based on their transaction history along with conventional data. Such lending provides more flexibility for new-to-credit and thin-file customers to get access to credit and build credit history.
Buy now pay later (BNPL)	BNPL models act like digital credit cards, allowing consumers to utilise credit lines at various merchant checkouts. Just like credit cards, users enjoy interest-free credit lines (as long as payments are made within due dates). BNPL players are looking to capitalise on the low credit card penetration in the country to provide credit lines to the underserved segments.

Crowdfunding	Crowdfunding platforms are digital platforms that offer funding for a project or venture by raising small amounts from a large number of people. Thus, this model is quite useful for new-to-credit entrepreneurs.
Mobile lending	Mobile lending allows people to use smartphones to get instant digital loans. The entire process is completed on a smartphone with minimal/no interaction with the lender. Most mobile lenders utilise data from the smartphone to make instant credit decisions about the borrower using alternative data models that expand the scope of credit to the underserved segments.
Cash flow based lending	In this model, lenders assess the credit worthiness of companies based on their projected cash flows. A version of this model can be seen with merchants selling on e-commerce platforms. Such platforms are tying up with lenders to provide credit to merchants based on their gross merchandise value (GMV) trends/sales via the platform, thus allowing small merchants to get access to credit.

3.2.2 Initiatives by the Government and regulators

The RBI has introduced the following facilitating initiatives to boost lending:

P2P lending guidelines: The RBI introduced a master directive in October 2017 to formalise P2P lending and introduced guidelines around it for NBFCs in the country. The central bank also introduced fair practices, participant grievance redressal mechanisms, data security framework, etc., to safeguard the ecosystem participants.

Setting up a working group (WG): The RBI has set up a working group to study all the aspects of digital lending activities to address emerging concerns around the possibilities of digital lending based financial frauds. The WG aims to boost the confidence of consumers in the formal digital lending space.

Introduction of account aggregators: Account aggregators are RBI-licensed new financial entities which assist in sharing of customer information (with consent) between entities. Thus, they have the potential to revolutionise the digital lending ecosystem by offering speedier access to customer data, allowing lenders to make quick and informed decisions.

Introduction of Open Credit Enablement Network (OCEN) framework: OCEN is the new credit-protocol infrastructure that aims to facilitate digital lending. It allows lenders, loan service providers and account aggregators to seamlessly interact with each other. Loan service providers (FinTechs, e-commerce players, digital platforms, aggregators, etc.) would be able to embed lending into their existing operations by connecting with lenders, along with account aggregators facilitating consented data exchange.

3.3 Strategies from other FinTech sectors

3.3.1 WealthTech

A number of efforts have been undertaken by the WealthTech ecosystem to provide for inclusive investment opportunities and ensure financial security. Building awareness via omnichannel outreach, rapidly increasing the number of digital platforms to provide seamless experiences across the value chain and building a strong regulatory framework to address grievances and redressals of retail consumers are some such efforts. These endeavours along with the rise of investors from tier-2 cities and beyond are expected to be the foundations of a growth rate of 300% for WealthTech investors – from around four million investors and a USD 20 billion market in FY20 to nearly 12 million investors and a USD 63 billion market by FY25.[32]

32 https://redseer.com/product/indian-wealthtech-a-60-bn-opportunity-by-fy25

Although there seems to be an increased interest among citizens to save, invest and earn from exposure to capital markets in the COVID-19 situation, a majority of these new investors are presumably digital millennials. These new classes of investors are working in the organised sector with some form of exposure to formal banking and savings channels, and looking to take advantage of work-from-home/remote working situations, surplus savings, benign interest rates and global liquidity-chasing risk assets. Despite the increasing interest, only about 2% of the Indian retail diaspora invest in the stock market[33] and mutual funds,[34] and over 93%[35] of the workforce employed in the unorganised sector has inadequate-to-no economic security post retirement.

The pandemic has had adverse financial impact, especially on a majority of blue- and grey-collar workers, and their families. The economic effects of the pandemic have impacted their financial well-being stemming from factors such as decreased mobility, effect of reduced consumption and demand, resulting in increased unemployment rates in the unorganised sector and apprehensions around pay cuts or deferred salaries.

As per a report by one of the largest hyperlocal FinTechs, though over 80% of Indians have access to a bank account, a significant section (more than 70%) of individuals from low-income groups[36] continue to avail informal savings and investment schemes such as chit funds or non-yielding resources such as storing cash under mattresses to keep their surplus incomes. The fundamental reasons noted for this trend include technology and process intimidation, operational timings, lack of financial awareness and the inability to access formal financial systems.

There are crucial supply-side impediments too which contribute towards the lack of savings and investments products, and solutions catering to the bottom of the pyramid. People belonging to this social strata are mostly marginal earners with sporadic income and find it challenging to maintain regular cash flows. Hence, they usually avoid saving through formal mechanisms and committing to any fixed-value regular savings product. The goals of different genders, age groups and income groups also differ significantly within the mass retail segment – from buying a bike or jewellery to funding a child's education to buying land or building a house. These key deterrents arising from uncertainty in income flows, unforeseen expenses and varied life goals necessitate innovation in financial offerings which provide for flexibility in amounts to be saved, tenure of investments and basic personalisation of products for goal-based saving.

Low-income groups have been largely underserved by incumbent banks and financial institutions while choosing savings products. Such groups traditionally give preference to localised trust, security, accessibility and flexibility over return on investment or transaction costs. Hence, informal systems have been resilient in catering to these marginalised segments with products such as chit funds by forming strong social inertia through ease of transaction and hyperlocal availability.

A few FinTechs and incumbent financial institutions are innovating their business models, technologies and customer services to provide formal savings and investment services at the grassroots level to the underserved. For example, a personal financial management application helps in instilling the habit of savings amongst the underserved through a technology-enabled micro-savings platform where the investment can be as low as INR 1. The FinTech application acquires customers through other platform economies such as e-commerce and food delivery, and ride-hailing services. It provides them with an easy-to-understand savings platform and flexible pay-in investment solutions which are catered to their goals.

Another FinTech specialising in providing social financial services has developed a digital platform service for a chit fund product that caters to people belonging to the low-income group. The platform helps them to save and invest in trusted digital groups as well as borrow from them. Although chit funds have been recognised in India for many years, the products and processes are rooted in manual procedures and cash transactions, and often lack transparency. This FinTech's platform leverages technology to make savings convenient. Analytics and artificial intelligence (AI) are used to match borrowers and lenders based on investing patterns, backgrounds, demographics and risk profiles. The platform aims to provide lower-interest loans, fast and flexible access to funds, and an opportunity to users to join multiple groups as per financial goals. By doing so, it formalises investment and savings products for the marginalised segments on a safe, secure and trusted platform.

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33 https://redseer.com/product/indian-wealthtech-a-60-bn-opportunity-by-fy25

34 https://www.amfiindia.com

35 https://www.inventiva.co.in/stories/riyarana/india-lockdown-most-affected-is-unorganized-sector-it-is-93-of-the-total-workforce-41-crore-people-lack-economic-security/

36 https://paynearby.in/media/55-of-bharat-wants-to-save-more-to-manage-covid-19-like-situation-paynearby-study

3.3.2 InsurTech

The COVID-19 pandemic has emerged as a crucial disruptor for the insurance industry with renewed interest in both life and health insurance. The health insurance industry recorded a 6% YoY growth in premiums in 2020, increasing to USD 553.93 million from USD 554.29 million.[37] Although the overall market size of the insurance sector is poised to grow favourably in India, a considerable segment of the population still lacks basic insurance coverage. Insurance penetration (calculated as gross written premiums as a percentage of the GDP) was 3.76% in FY20,[38] much lower than other Asian emerging economies such as Malaysia and Indonesia.

Personal financial management and insurance are integral parts of financial inclusion. The bottom of the pyramid, comprising daily wagers, contract labourers, marginalised farmers, etc., are least likely to have insurance coverage though they require it the most. Insurance provides financial protection to individuals and families, and those engaged in risky professions require it the most. Financial inclusion is incomplete without safeguards against loss of income or life/health emergencies, and insurance aims to provide that. As an underinsured nation, some of the impediments that are faced by a vast majority of the population are comprehending the relevance of cost-benefit analysis of an insurance product, decoding jargonistic policy wording, terms and conditions, limited or no access to buying an insurance policy and low consumer trust in the insurance industry and its intermediaries.

The insurance sector, by and large, has relied on a multifaceted ecosystem of agents, brokers, intermediaries, third-party administrators for functions ranging from customer acquisition to claim settlement. The incremental cost of operations and customer servicing translates into premium sizes which are non-viable for a sizeable proportion of middle- and low-income groups.

Digital and business-model transformation initiatives by InsurTechs in partnerships with incumbent insurance providers are playing a crucial role in digitising customer acquisition and onboarding journeys as well as innovating to create sachet and contextual insurance to reach the unserved and underserved consumer segments. Additionally, InsurTechs are also innovating distribution models to not only build in-roads from urban to rural India but also build trust and simplify user experience. Some of the distribution channels to assist consumers in buying appropriate insurance for the underserved pockets include a mix of local influencers as resellers or agents, various POS outlets such as kirana stores and local bodies such as farmers organisations who are utilising their existing customer bases and journeys to sell customised insurance offerings based on specific needs.

For example, hailstorms and extreme weather conditions affected the harvest in Uttarakhand in 2020 and severely damaged crops. Marginal farmers with small landholdings were affected more. In Chamba village, a farmer who owns an apple orchard in five acres of land had signed up for insurance cover with a start-up to help him weather through financial losses. He had paid a small premium which helped him cover and sail through such risks.

This tech-enabled composite insurance broking start-up focuses on product design, development and distribution in rural India. They aim to reduce costs and inefficiencies through innovative distribution and servicing models. The company follows a hybrid model to train and deploy village-level entrepreneurs to distribute customised and affordable rural insurance products, including a host of key Government schemes like the Pradhan Mantri Fasal Bima Yojana (PMFBY). The company provides crop insurance, livestock insurance, farm equipment and motor insurance products, and sachet health insurance for farmers and their families. Their tech-enabled models for rural insurance have helped them make significant inroads within a short span of time. The start-up is currently operational in over six states and 8,000 villages, serving more than 1.3 million customers.

Another FinTech aims to make health, auto and home insurance policies more accessible and inclusive by providing insurance premium financing services to policy seekers. Steep premiums are a major hindrance for Indians while buying insurance. The FinTech provides digital and seamless financial support to citizens in both metro as well as tier-2 cities. It partners with insurance companies, aiding them with higher conversion and policy sales, and ties up with financial institutions to provide loans for paying upfront insurance premiums for the underserved customer segments.

37 https://www.ibef.org/download/Insurance-January-2021.pdf

38 https://www.ibef.org/industry/insurance-sector-india.asp

04

Strategies adopted by the larger ecosystem

Central Governments, state governments, regulators, industry bodies, banks, FinTechs, financial services providers and other relevant organisations have, in their respective capacities, launched, partnered or collaborated with each other to drive different financial inclusion initiatives in India in the past few years. Since the launch of the National Mission for Financial Inclusion (NMFI) by the GoI in August 2014, several initiatives have been introduced and implemented to boost financial inclusion in India.

- The Pradhan Mantri Jan Dhan Yojana (PMJDY) programme envisaged universal access to banking facilities with at least one basic bank account for every household. As of July 2021, 42.2 crore accounts have been opened and a total of INR 145,408.07 crore has been deposited in them.[39]
- A few other financial inclusion schemes and their details (as of FY21) are given below:
  - Pradhan Mantri Jeevan Jyoti Bima Yojana (life insurance worth INR 2 lakh at INR 330 per year) has 10.27 crore enrolments.[40]
  - Pradhan Mantri Suraksha Bima Yojana (accidental insurance worth INR 2 lakh at INR 12 per year) has 23.26 crore enrolments.[41]
  - Atal Pension Yojana (retirement saving fund) has 3.02 crore enrolments.[42]
  - Pradhan Mantri Mudra Yojana (providing loans up to INR 10 lakh to non-corporate, non-farm small/micro enterprises) has 28.16 crore accounts.[43]

Heavy on-ground promotion along with regular advertisements have helped drive such initiatives to onboard hitherto unbanked citizens.

The formation of the National Payments Corporation of India (NPCI), a joint initiative of the RBI and Indian Banks' Association (IBA) for operating retail payments and settlement systems has helped drive faster adoption in rural regions through different payments innovations. UPI, launched by the NPCI in 2016, has seen tremendous response and acceptance throughout the country. Apart from UPI, several other NPCI products such as AePS, BBPS, BHIM and RuPay have successfully managed to break the financial onboarding barrier for citizens through unique innovations and tailor-made products. The NPCI has made payments more universal and easier, and their efforts to include the informal strata into the formal banking sector over the last few years have been fruitful.

39 https://pmjdy.gov.in/

40 https://www.moneycontrol.com/investor-education/insurance/classroom/all-you-need-to-know-about-pradhan-mantri-jeevan-jyoti-bima-yojana-15119941.html

41 https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1744145

42 https://www.hindustantimes.com/india-news/atal-pension-yojana-sees-79-lakh-new-additions-in-fy21-total-subscriber-base-crosses-over-3-crore-mark-in-march-101619112647309.html

43 https://www.mudra.org.in/

RBI's Monetary Policy 2021 outlined a Financial Inclusion Index to be published every year in July to measure the extent of financial inclusion in the country.[44] The central bank also launched a 'National Strategy for Financial Education 2020–2025' initiative with a multi-stakeholder approach to promote financial education for school students. Certain private-sector banks are utilising a portion of their corporate social responsibility (CSR) funds to partner with NGOs and help drive financial literacy programmes throughout the country.[45] The Association of Mutual Funds in India (AMFI) has launched advertising campaigns on print, media and digital channels over the last four years. During this time, the Indian mutual fund industry's assets under management (AUM) have grown from INR 12.33 trillion in FY16 to INR 31.43 trillion in FY21.[46]

FinTechs have also partnered with various institutions to help drive financial inclusion awareness and onboarding programmes. A public sector bank partnered with an Indian WealthTech start-up to develop a personal financial management app targeting digital millennials. The app helps its users in practising better financial behaviour and to shift to saving and investing. E-commerce and food delivery executives have been upskilled to complete KYC processes and other doorstep financial banking activities. Last-mile agents on ground have also been used for opening of bank accounts and other such activities. In the recent past, many established firms based out of India have partnered with local bodies to help drive financial inclusion. A leading global banking and financial services provider tied up with a premier Indian management institute to initiate a FinTech accelerator lab to help start-ups that drive financial inclusion and serve people at the bottom of the pyramid. Similarly, a leading global payments processor partnered with India Post to deliver doorstep banking services to the underserved segments in India. Also, an international digital financial technology company partnered with a private bank in India to initiate essential transaction services through an agent-led model that primarily focuses on the rural customer segment.

Partnerships between different stakeholders and organisations should be promoted and cultivated to enable front end financial services players to serve the underserved and develop more products. To foster and promote such partnerships between the Government, ecosystem industry bodies, and start-ups, proactive measures and steps are required to further strengthen financial inclusion and help modernise the economy. The Regulatory Sandbox approaches by the RBI and Insurance Regulatory Development Authority of India (IRDAI) are initiatives taken in the right direction. This approach is used to experiment with innovative start-up solutions in a safe environment where the consequences of failure can be contained, and if successful, can be gradually rolled out.[47] The RBI is currently testing its first cohort of six start-ups under the 'Retail Payments' theme.[48] The Startup India programme has also rolled out a comprehensive initiative to support start-ups throughout various phases such as funding (fund of funds, tax benefits and credit guarantee), hand-holding support (legal, intellectual property rights and exit) and incubation support (innovation centres, competition, grants, incubators, start-up events).[49] More such programmes should be initiated by various state governments, industry bodies and corporates to promote innovations that make the financial process efficient for end customers. Such cross collaborations and partnerships in the ecosystem are essential to create awareness, drive product distribution and help India become a financially inclusive country for all its citizens.

44 https://rbi.org.in/Scripts/PublicationsView.aspx?id=20350

45 https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/NSFE202020251BD2A32E39F74D328239740D4C93980D.PDF

46 https://www.amfiindia.com/indian-mutual

47 https://www.irdai.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo4224

48 https://rbidocs.rbi.org.in/rdocs//PublicationReport/Pdfs/REGULATORYSANDBOX2333CA3224ED4B7991A2B55DBEFDA745.PDF

49 https://www.startupindia.gov.in/content/sih/en/international/go-to-market-guide/government-initiatives.html

05

Recommendations

5.1 Policy recommendations

While there are a number of initiatives focusing on digital payments and formal credit penetration, certain key issues still exist. A few policy recommendations that may help address such issues are given below.

5.1.1 Partnerships and commercial viability

a. Banks to partner with NBFCs through co-lending models: Regulators could incentivise banks to partner with NBFCs and FinTech lenders to extend their credit lines via the co-lending route. As NBFCs tend to focus on specific geographies and customer segments, they could be better positioned to serve under/unserved customers in such geographies.

b. Commercial viability of payments businesses for continuous innovations

   i. **Government support for revenue losses:** Since MDR on UPI and RuPay cards has been abolished, the Government can compensate industry players such as banks and UPI apps to cover their revenue losses. This will allow businesses to continue their services and continuously innovate to cater to the needs of underserved customers.

   ii. **Building a larger ecosystem:** Regulators also need to devise a strategy for NUEs for retail payments to promote competition with the NPCI and cater to the limitations of unserved customer needs for adopting digital payments.

   iii. **Tailor-made products:** MSMEs still prefer cash for ease of operations though they find value proposition in digital payments. Regulators need to direct industry players such as banks and FinTechs to provide integrated and modular digital payments solutions specifically catering to the needs of more than six crore MSMEs. Since the internet infrastructure is a constraint in rural India, solutions such as offline payments and mobile ATMs would make it easier for customers to adopt digital payments.

   iv. **Enhancing value propositions:** Customers would need a stronger value proposition other than alternative transaction modes to change their preferences from cash to digital payments. Payments applications need to extend their value proposition beyond payments to conversational commerce, cross-selling financial services, financing, etc. Moreover, new policies can encourage innovations such as a central bank digital currency (CBDC) and encourage the issuance of more neobanking licences.

Interoperability plays an important role in providing a secure framework for customers to transfer funds from disparate and proprietary payment platforms. Given that interoperability features present an important source of risk, the payments operator is required to implement adequate standards covering legal, organisational, technical and procedural practices. Interoperability from an Indian perspective is a key value proposition for wallet users who will not have to specifically look for merchants accepting certain types of wallets, bringing them on par with cards in terms of universal usage. Transit payments are one of the important use cases that have been a key driver for the GoI's Smart Cities Mission. There have been specific use cases in the transit payments space that have targeted the implementation of a large-scale, open loop and interoperable framework with the help of NCMCs that can be used across multiple engagement points like parking and fuel payments.

5.1.2 Regulatory support

a. **Encouraging platformisation:** Digital payments, e-commerce and FinTech usage have grown rapidly in India. These can act as platforms for low-cost customer acquisition and digitise consumption data that financial services players and FinTechs can use to onboard and cater to underserved customer segments. The regulator can look to facilitate such platform-FinTech partnerships which would also incentivise non-financial services players with deep customer penetration to contribute towards underbanked penetration. Initiatives such as the Account Aggregator and OCEN frameworks are the right steps in this direction. Regulators and the Government could also look to capitalise on initiatives such as the API SETU where common financial inclusion APIs could be hosted to create standards and facilitate financial inclusion partnerships between FS and non-FS players.

b. **Revised priority sector lending (PSL) guidelines:** The RBI may also consider revising the PSL guidelines to include a dedicated MSME portfolio within PSL. As MSMEs generate more jobs and the employment graph shifts from agriculture to self-employment/MSME sectors, they may benefit from a dedicated portfolio within PSL. This move would help improve formal lending penetration among self-employed individuals/families.

5.1.3 Incentivisation

a. **Incentivising banks to focus on new-to-credit customers:** CIBIL scores of only 300 million individuals are available in India while only 7.5 million MSMEs are ranked on CIBIL MSME Rank (CMR).[50] Thus, it is important to focus on left-out individuals/businesses in order to cater to their financing needs formally. Thus, we recommend that the Government/regulator focus on launching additional initiatives that cater to low ticket size and collateral-free loans to new-to-credit customers with no CIBIL score. For example, the GoI's MUDRA Yojana is one such scheme that provides collateral-free loans to people without a CIBIL score. These customer segments have already benefited from FinTech models like buy now, pay later (BNPL). This will incentivise FS players to focus on this left-out segment and provide them with an opportunity to build a credit score.

b. **Encourage digital payments via:**

   i. **Customer/merchant onboarding:** Underserved customers could be incentivised to adopt digital payments. Both monetary value via cashbacks and loyalty programmes, and customised solutions as per geography, local language, segments, etc., can bring the section under the ambit of digital economy. Merchants can be incentivised with affordable infrastructure setup for digital payments in the form of QR codes rather than physical POS outlets which require a costlier upfront investment.

   ii. **Tax incentives:** The Government can relax tax norms for both customers and MSMEs who make a majority of their payments through digital modes. On the other hand, cash transactions can be disincentivised to shift customer/MSME preference towards digital payments over cash.

   iii. **New initiatives:** FinTechs will be leveraging entrenched faster payment rails to offer seamless cross-border payment services. Integration of UPI with the faster payment systems of different jurisdictions, will enable cross border payments through this route.. A specific use case that addresses the cross-border initiative from a financial inclusion perspective would be the inward remittances from foreign jurisdictions that will enable seamless money transfers.

CBDC is another key trend observed. Central banks globally are exploring CBDC as the future of money. The RBI is working towards a phased implementation strategy and exploring certain use cases which could be carried out with zero or little disruption.[51] Financial inclusion is one of the potential use cases that can be examined to understand the direct benefits of CBDC to consumers and the ecosystem participants. CBDC could be a cheaper alternative to the current payments mechanisms and eventually become a cost-effective solution for the underserved segment.

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50 https://economictimes.indiatimes.com/industry/banking/finance/banking/just-a-third-of-credit-worthy-consumers-tapped-by-banks-report/articleshow/64256383.cms?from=mdr

51 https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1111

5.1.4 Customer protection and safeguards

a. **Awareness schemes through panchayats:** Awareness about the benefits of digital financial services is still low in rural India and the unorganised sector. Panchayats in India are effective in promoting awareness regarding social issues. Thus, the same channels could be leveraged to encourage the adoption of digital financial services in rural India.

b. **Enhancing the payment security framework for stakeholders:** Payments security is essential to build trust in society and encourage faster adoption, especially in rural India where the level of financial literacy is low. The common digital security framework issued by the RBI focuses on basic security standards and it may be required to be upgraded to a more sophisticated set of guidelines on data and cyber security. An example of such standards could be detailed guidelines around data governance, storage and reusability.

c. **Dispute management system:** Failed transactions and refund processes are genuine concerns among users of digital payments methods. Moreover, with the substantial increase in new users and payments channels, the number of failed transactions in payments modes like AePS has increased significantly. In such cases, it is essential to create a real-time dispute management framework for better traceability and transparency. NPCI has developed an instant dispute redressal mechanism wherein customers can raise and track complaints till they are resolved.

5.2 Future roadmap and opportunities

There is significant untapped potential in improving India's digital payments framework and reaching the country's large underbanked and underserved population. New-age tech platforms have a golden opportunity to innovate, build, serve and scale-up a suite of financial products such as savings accounts, credit cards, investment funds and insurance policies. The development of infrastructure rails such as IndiaStack and efficient and cost-effective internet connectivity, increased usage of smartphones and a growing aspirational middle-and lower-middle class would aid in the expansion of digital payments.

However, the ecosystem will require the support of regulatory initiatives and policies. Regulatory initiatives formed to improve operational environments and create nationwide digital ecosystems will play a pivotal role in reaching the underserved. Regulatory policies would have to encompass multiple facets of the digital economy, striking a balance between ensuring smooth flow of data between partners and safeguarding the usage of customer data.

Financial institutions

- Large customer base
- Established customer trust
- Robust infrastructure
- Capital access
- Access to regulatory licences
- Access to in-depth customer data

Partnered ecosystem

- Innovative solutions with scale of operations
- Analytics capabilities with deep customer data
- Customised products
- Last-mile customer acquisition strategies combined with infrastructure access

FinTechs

- Agile operations
- Access to technology
- Customised products that cater to specific segments
- Analytical tools
- Agility and speed to market
- Innovative customer access strategies

For both FinTechs and incumbent financial institutions, critical form factors to acquire, engage and serve underserved consumers would play crucial roles in easing operational processes and innate inconveniences such as travel time required to consume services and filling up elaborate and complex applications. Additionally, solving operational deterrents calls for a novel and trust-instilling distribution and sales framework which can be developed well via a combination of partner-agent models and digital platforms. FinTechs can build upon last-mile connectivity and engagement, and partner with an incumbent to deliver low-cost and tailored products. These products that are affordable and designed for low-income segments can also bridge the trust gap, leading to higher adoption. A well-executed 'phygital' model can help underserved segments trust assisted services and provide a seamless, secure and superior user experience of digital financial services to them.

About ASSOCHAM

The Associated Chambers of Commerce & Industry of India (ASSOCHAM) is the country's oldest apex chamber. It brings in actionable insights to strengthen the Indian ecosystem, leveraging its network of more than 4,50,000 members, of which MSMEs represent a large segment. With a strong presence in states, and key cities globally, ASSOCHAM also has more than 400 associations, federations and regional chambers in its fold.

Aligned with the vision of creating a New India, ASSOCHAM works as a conduit between the industry and the Government. The Chamber is an agile and forward-looking institution, leading various initiatives to enhance the global competitiveness of the Indian industry, while strengthening the domestic ecosystem.

With more than 100 national and regional sector councils, ASSOCHAM is an impactful representative of the Indian industry. These Councils are led by well-known industry leaders, academicians, economists and independent professionals. The Chamber focuses on aligning critical needs and interests of the industry with the growth aspirations of the nation.

ASSOCHAM is driving four strategic priorities - Sustainability, Empowerment, Entrepreneurship and Digitisation. The Chamber believes that affirmative action in these areas would help drive an inclusive and sustainable socio-economic growth for the country.

ASSOCHAM is working hand in hand with the government, regulators and national and international think tanks to contribute to the policy making process and share vital feedback on implementation of decisions of far-reaching consequences.

In line with its focus on being future-ready, the Chamber is building a strong network of knowledge architects. Thus, ASSOCHAM is all set to redefine the dynamics of growth and development in the technology-driven 'Knowledge-Based Economy. The Chamber aims to empower stakeholders in the Indian economy by inculcating knowledge that will be the catalyst of growth in the dynamic global environment.

The Chamber also supports civil society through citizenship programmes, to drive inclusive development. ASSOCHAM's member network leads initiatives in various segments such as empowerment, healthcare, education and skilling, hygiene, affirmative action, road safety, livelihood, life skills, sustainability, to name a few.

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