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Financial Inclusion & Future of Financial Services in India Vision 2030

September 2022

THE ASSOCIATED CHAMBERS OF COMMERCE AND INDUSTRY OF INDIA

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MESSAGE

Financial inclusion includes essential features such as access to modes of payment, access to credit, insurance, and investment, which is enabled through efficient government implementation. The desirability of nationwide financial inclusion is supported by empirical findings that the idea can strengthen sustainable socio-economic growth.

The expansion in digital financial inclusion in the country has been driven by significant innovation in the public and private sectors. Additionally, government policy that explicitly prioritizes access to the banking system has been an effective tool for poverty reduction and inclusive growth.

The world's largest financial inclusion initiative, "Jan Dhan Yojna", has helped new bank account enrolment for direct benefits transfer and accessibility to various financial services applications. It has enabled remittances, credit, insurance, and pensions helping FinTech players build technology products to penetrate the large consumer base in India.

The banking business is changing rapidly as products and services are built and delivered through disruptive technologies that are increasingly being provided to end customers. Banks' behaviours are changing in terms of customer convenience, transparency, pricing, and customer service.

ASSOCHAM & APAS have jointly prepared a comprehensive knowledge paper on 'Financial Inclusion & Future of Financial Services in India- Vision 2030'. ASSOCHAM acknowledges the valuable contribution made by the APAS research team and their effort in preparing this in-depth ready reckoner.

We hope this report and the discussions during the Banking and Financial Services Summit will help the regulators, market participants, government departments and research scholars to develop financial services further.

Ashvin Parekh
Managing Partner
Ashvin Parekh Advisory Services LLP

MESSAGE

Ashvin Parekh Advisory Services LLP (APAS) and ASSOCHAM are proud to present the Knowledge report for the ASSOCHAM Annual Summit & Awards on Banking & Financial Sector Lending.

The summit will discuss 'Financial Inclusion and future of financial services in India – Vision 2030'. The last few years in general and last three years in particular have changed all the aspects of financial services in India and globally. One observes that India has emerged as a front runner in several areas in the financial services, particularly in reshaping products, services and its delivery to the final consumers by way of innovation and extensive usage of technology. We recall that during the pandemic period, the industry was classified as essential services and despite lockdowns, the sector continued to serve all the consumers. All the four major constituents that make an effective and vibrant sector – institutions, investors comprising of shareholders and deposit holders, instruments in the form of products and services, and intermediaries both at the branches and digital channels, went through a metamorphosis. New solutions were evolved in the WFH environment and quite seriously, the sector found new methods of servicing the end users.

Vision 2030 will certainly be influenced by the pace of this innovation and new cost-effective methods to serve the economy. In year 2021-22, a study of the growth of the BFSI sector suggests 3 core factors which influenced this vision. A rapid growth of credit based on higher mobilisation, an increased intermediation from banks and NBFCs, a remarkable recovery of NPAs by the financial lenders of INR 8.6 lakh crore resulting in far more strengthened financials of the financial lenders. This will certainly pave way for much higher economic growth for India by year 2030.

During the years in question, the policy maker, being the largest shareholder of the banking system, also consolidated its presence both in terms of consolidation of the public sector banking companies and the balance sheets of the merged entities. This factor will also play its role in expanding credit in the organised sector.

After the summit deliberations, ASSOCHAM will recognise, reward and celebrate models of inclusive growth and sustainable development as well as innovative approaches to creating value for society and business together, based on the performance of some of the players who have evidenced the above.

APAS and ASSOCHAM deliberated the theme of the summit and the awards, keeping the above backdrop in mind. For the awards, like in the past, an eminent jury was constituted to guide the process of determining the awards, both in terms of categories of awards and classifications of all banking companies and NBFCs. The jury then determined the parameters on which the nominations were received from institutions from the above two sectors and were evaluated. The jury decided on two broad categories, namely, lending and non-lending achievements of the banks and the NBFCs and determined the size of the organisation by way of total

assets. Accordingly, the following award categories and classifications evolved. There are also awards for overall performance for a bank and an NBFC.

Categories:

- Lending
- Non-lending
- Overall champion

Classes:

- Banks – large, medium and small
- NBFCs – large and small

A very transparent process was evolved under which the parameters were announced to the nominees to submit their nominations. The parameters comprised of quantitative as well as qualitative factors. A period of two months was made available to nominees to submit their nominations. Based on the weightages determined by the jury and announced to the nominees, the nominations were evaluated. The outcome was scrutinized by the jury members and the awards were decided after detailed deliberations.

Despite several difficulties faced by members, we received 63 nominations from 45 institutions.

We at APAS are very happy to observe that the nominations were rich in content and noted several innovative approaches adopted by the nominees in all areas, namely, products and services, reduction of turnaround time particularly in the lending areas where in-person contact was difficult, in collecting evidence and evaluating it with the use of technology and in non-lending nominations, we have observed some fascinating and cost effective approaches to deposit gathering, payments and other fee based services. A particular area worthy of mention is the payments services where growth, the regulatory guidance and industry response showed world class solutions. However, we observed that we need to put in more efforts to involve more institutions and encourage institutions to nominate and share their achievements during the period under consideration. The jury recognises that for the next year and the years to follow, we shall revisit our approach, assumptions and parameters to cover other constituents of the sector including fintechs and other intermediary organisations.

As in the past, for the summit and awards, we have prepared a knowledge report.

Each of the subjects discussed in the report occupies the senior management attention and time and the summit has been structured with sessions devoted to deliberations and gaining more insights in interesting industry practices. ESG and Sustainability for the financial institutions will be largely influenced by their asset books, there will be increasing presence of digital solutions backed up by artificial intelligence and analytics to gather more insight into consumer behaviour and financial needs and open banking structure which has to be efficient and take cognizance of fraud risk.

In conclusion, I would like to thank ASSOCHAM team members, the members of the jury and my team members – Harsh Mirpuri and Sujana Hari, to bring the summit and the awards to a reality and trusting APAS with the responsibility of knowledge and evaluation partner.

I wish the faculty and the participants a thoroughly engaging event. Do kindly share your feedback to ASSOCHAM.

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India's Digital Financial Inclusion Journey

Since 2014, India has embarked on one of the most ambitious financial inclusion initiatives ever seen anywhere in the world, bringing over 330 million people into the formal financial sector.

The expansion in digital financial inclusion in India has been driven by significant innovation in both the public and private sectors. One of the key drivers has been government policy that explicitly prioritizes access to the banking system as a tool for poverty reduction and inclusive growth. Under the Government of India's Pradhan Mantri Jan-Dhan Yojana (PMJDY) scheme, bank accounts have been opened for the majority of Indian citizens and these accounts have become the default channel for delivery of government payments, such as through the Direct Benefit Transfer (DBT) system.

To achieve such rapid scale in account opening, the government has taken a big bet on technology. Growing internet coverage and smartphone penetration means that the future of banking is expected to be digital. By linking bank accounts to biometric identification (through the Aadhaar scheme) and to mobile numbers, the aim is to leapfrog more traditional models of financial access. Through licensing new tiers of financial institutions, government has pushed a differentiated banking model in which companies like Mobile Network Operators (MNOs) and FinTechs can provide banking services under a Payment Bank license, and microfinance institutions (MFIs) are encouraged to leverage technology to align with the market and as an incentive for their growth into Small Finance Banks. The growth of digital payments received a particular one-off boost due to the government's sudden demonetization policy in November 2016.

Between 2014 and 2017, the proportion of the adult Indian population with an account at a financial institution increased from 52.8% to 79.8%. Over the course of three years, this represents over three hundred million people brought into the formal financial sector.

This period of growth was due in part to an extraordinary political push by the Modi government, elected to power in May 2014, to use financial inclusion (and in particular digitally driven financial inclusion) as a key lever to promote economic and social development. The PMJDY, a drive to provide all Indians with a bank account, was the cornerstone of this policy agenda. At the same time, the financial inclusion push intersected with two other major policies of the Modi government: Digital India (driven by the rapid expansion in mobile phone and internet coverage) and Aadhaar (the provision of a unique digital ID for every citizen). The troika of PMJDY, Aadhaar and Mobile, summarizing the drive to digitally led financial inclusion, was called the J-A-M trinity.

The government's initiatives in this space have been supported and accelerated by an active private sector ranging from large commercial banks to international technology companies and FinTech startups, and by a development sector keen to support innovation to promote poverty reduction and inclusive growth in India.

While state-owned enterprises (such as State Bank of India, which opened a third of PMJDY accounts) continue to play a key role in the direct provision of banking services across India, the past four years have been characterized by a shift in the overall role of government in the financial inclusion agenda. In a technology-led model, the government has also prioritized the creation of enabling infrastructure, such as digital identification and payments technology, on which the private sector can build. The ultimate example of this has been Unified Payment Interface (UPI), which has grown from nothing to overtake debit cards and pre-paid wallets as the primary form of digital payments. UPI was created and is managed by the National Payments Council of India (NPCI), an initiative of the Reserve Bank of India (RBI) and the banking sector.

Despite massive growth in account opening, there is evidence that India's digital finance push is having limited impact due to account dormancy and low levels of usage. 48% of people with an account at a financial institution made no deposits or withdrawals from that account over the past year. Account dormancy is higher among populations with lower access to technology, such as poorer and rural populations. Major challenges remain around the viability of agent networks, financial literacy, the design of appropriate products for India's diverse population, and the stickiness of demand for cash as a means of payment and jewellery and livestock as savings tools.

The role of digital payments in expanding financial inclusion

There are a number of important findings that will help the digital finance space to grow in a more inclusive way. These include:

1. **The human touch point remains critical –** even as technology enables rapid scaling of business models, the need for trust and understanding of how to use these services will continue to require interaction with a human being at the last mile.

2. **Digital finance is closely linked with aspiration –** in both urban and rural environments, the desire to try new digital products and continue to use them is closely linked with aspirational characteristics like wanting to grow a business or participate in the broader national digital economy.

3. **Product design is important and underrated –** a number of models appear to have struggled because financial services do not meet the differentiated needs of Indian populations. Too often products have been designed for the needs of wealthier, urban, Hindi and English-speaking populations, effectively excluding large swathes of the market opportunity.

4. **A lot of people still really like cash –** much of the movement towards digitization is based on an assumption that it provides an improvement on cash-based payments. This can overlook the complexities around why some people use cash and the difficulty of changing behaviour.

5. **More exploration is required around the linkages between digital payments and financial inclusion –** while great progress has been made in the access to financial services, the relatively low levels of usage hint at a disconnect between what is assumed to be the impact of digital financial services and the reality on the ground.

Government initiatives since 2014

The Government aims to link bank accounts to biometric identification (through Aadhar) and to mobile numbers in order to leapfrog more traditional methods of financial access. Through licensing new tiers of financial institutions, government has pushed a differentiated banking model in which companies like Mobile Network Operators (MNOs) and fintechs can provide banking services under a Payment Bank license, and microfinance institutions (MFIs) are encouraged to leverage technology to align with the market and as an incentive for their growth into Small Finance Banks. While state-owned enterprises (such as State Bank of India, which opened a third of PMJDY accounts) continue to play a key role in the direct provision of banking services across India, a major reinforcing agent has been Government push in the financial inclusion agenda. In a technology-led model, the government has also prioritized the creation of enabling infrastructure, such as digital identification and payments technology, on which the private sector can build.

In the process, the Government has introduced enabling infrastructure for financial inclusion, including Aadhar and Aadhar based identification and KYC measure, Domestic alternative to Visa and MasterCard – RuPay, UPI, etc. These features have been described in detail as follows:

Aadhaar and the India Stack

The second pillar of the government's J-A-M trinity is Aadhaar, the national ID scheme that has provided the vast bulk of the Indian population with a unique biometric-linked 12-digit identification number that can be used as proof of identity.

The growth of Aadhar has been closely linked with PMJDY, as Aadhar number became an important identification agent for audience with minimal identification documentation required for account

opening. Between 2016-17 and 2017-18, the number of e-KYC verifications through Aadhaar increased from 48 million to 138 million. As of August 2018, more than 83% operative PMJDY accounts (except states of Assam, Meghalaya and Jammu and Kashmir) are Aadhaar seeded, indicating the role Aadhar has played in allowing digitally enabled financial services to rapidly achieve scale.

Aadhar has been credited in bringing down the customer acquisition cost from around INR 100 per customer to less than INR 10, implying a strong business case for serving lower-income and remote customers and opened up potential for more commercial entities to enter these markets. Aadhaar laid the foundation for a wider government initiative to lay foundational infrastructure upon which the private sector to push forward on the digital financial inclusion mission. According to one development sector expert, we are coming to the end of a phase of government-led financial inclusion and moving into a phase of private sector-led financial inclusion in which government's role shifts from direct delivery to infrastructure provision. The linkage of a person's mobile phone number with their Aadhaar number and their bank account completes the J-A-M trinity and provides the foundational digital infrastructure not just for identification and e-KYC but for a broader array of personalized digital services and use cases. The India Stack, an initiative of iSPIRT21, has brought these use cases together by providing application programming interface (APIs) that allow customers to store means of identity (e.g., Aadhaar) and consent (e.g., e-signature) in a digital locker, opening up the opportunity for financial service providers to deliver services digitally, remotely and at minimal cost riding on these established digital rails. This technology stack, which significantly reduces the costs of customer acquisition and servicing, forms the basis for a range of services launched by both public and private sectors.

Unified Payments Interface (UPI)

The Unified Payments Interface (UPI), launched by National Payments Council of India (NPCI) in April 2016, has been a major factor in the push for digital payments in India since 2014. The platform provides low-cost, large scale payments interoperability, allowing users to easily make payments directly from their bank accounts using only a Virtual Payment Address (VPA) linked to the recipient's bank account and phone number. Since UPI began to gain traction towards the end of 2017, it has experienced hockey stick growth – in the year from September 2017, average month-on-month growth in transaction volumes was 33%. In September 2018 UPI overtook debit cards and pre-paid instruments in terms of the monthly volume of transactions passing through the platform. Between January 2018 and January 2019, the volume of transactions increased by 450%.

According to experts, as transaction volumes began to grow rapidly towards the end of 2017, users started to use UPI for smaller quantum of transactions and more of retail usage. Through 2018, the average UPI transaction size has plateaued at around INR 1500 a similar level to debit cards, while the total value of all transactions has climbed significantly. This may imply that UPI is becoming the preferred digital transaction method even for relatively small payments, as people substitute away from debit cards and other payment types. Key factors indicating this could be ease of transaction and increasing mobile internet penetration.

RuPay

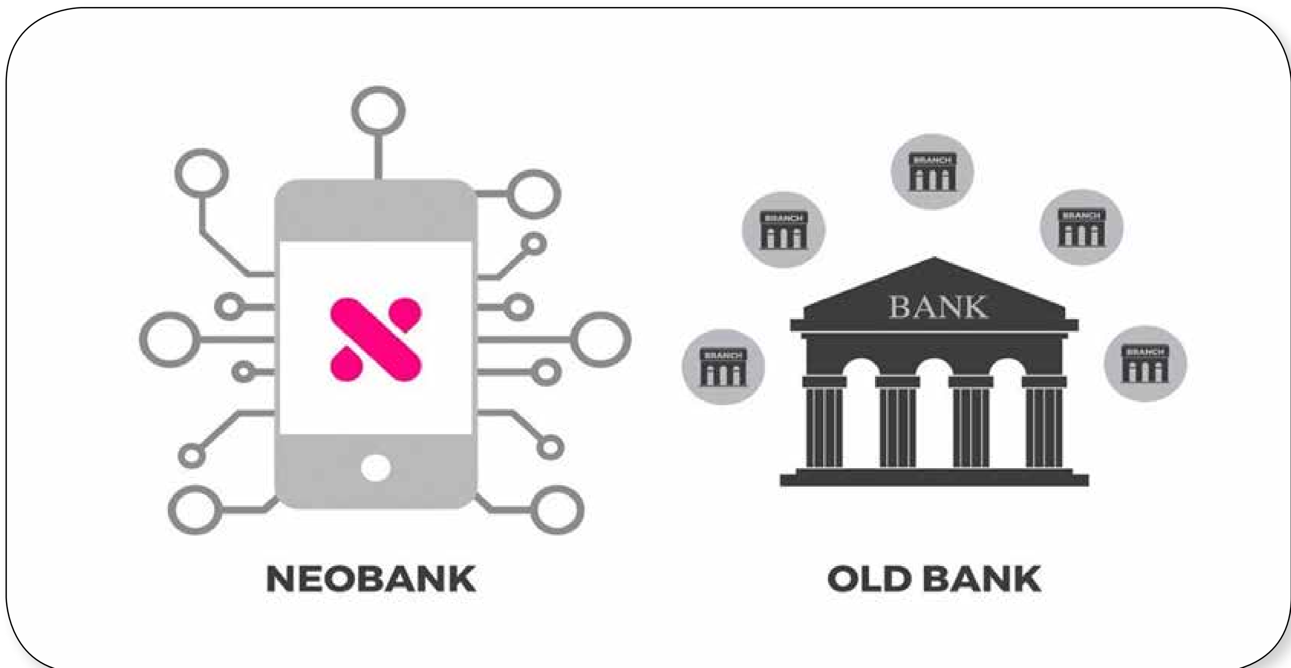
In order to facilitate usage of newly opened PMJDY bank accounts, customers were issued with RuPay debit cards to allow for ATM withdrawals and POS (point of sale) payments. RuPay was previously launched by NPCI in 2012 as a domestic alternative to Visa and MasterCard as an open loop, interoperable, all-purpose payment system. Of the 330 million people with PMJDY scheme bank accounts, 79% have also been issued with a RuPay card. This represents 260 million people provided – likely for the first time – access to a tool for accessing and spending their money without needing to handle cash. However, there is limited evidence of RuPay successfully driving usage of PMJDY accounts. A study by MicroSave found that 53% of customers had not received their RuPay card and that many RuPay cards were lying unused and unproductive at bank branches or Bank Mitra (banking agent) locations. This was mainly due to the difficulty of travelling to a branch to collect a card and staff capacity in rural branches. Where cards were received by customers, problems often ensued of not receiving PINs or insufficient knowledge of how to activate and use the cards. According to Global Findex data, although debit card ownership in India increased from 22% in 2014 to 33% in 2017, the proportion of people who had used a debit card to make a purchase in the past year increased only 1%, from 11% to 12%.

Account Dormancy

One widely reported challenge of PMJDY has been the issue of account dormancy and zero-balance accounts. The government stopped reporting the official levels of zero-balance accounts at the end of 2016 (when the figure stood at 24.1%). One study, tracking deposits and withdrawals from banks accounts over six months from account opening found that 81% of customers did not make a deposit and only 7% made two or more deposit transactions. The proportion of users making more than one inward or outward remittance per month was less than 1%. However, experts found that usage grew with familiarity over time, a finding supported by a longer panel survey that found that over time, PMJDY account holders were more likely to use their accounts and increase cash balances. Government DBT payments explained part but not all of this usage. The study found that the previously unbanked population learn by doing and increased usage of accounts for transactions, liquidity management, and increasingly, balance accumulation. As of end November 2018, the average balance in a PMJDY account was INR 2525 (USD 36 – as of December 2018, INR 70 = USD 1). Thus, it implied that the growth rate of usage of financial services did not grow at a rate as during 2014-17 period. According to Global Findex data, the proportion of the adult population who made a digital payment in 2017 was 20%, up from 16% in 2014. Borrowing from a financial institution increased from 6% to 7%.

However, the proportion of those with an account at a financial institution who had made no deposits nor withdrawals in 2017 increased from 42% to 48%. Indicating that, despite the progress made since 2014, half of those with access to a bank account are not using the account at all. Industry experts provide a range of reasons for why so many accounts remain dormant. The weakness of last mile infrastructure appears to be one major reason. Cash-in-cash-out (CICO) agents are not sufficiently widespread or located where they would need to be to facilitate regular transactions.

While many issues on the supply side have been overcome through the PMJDY initiative, less attention has been paid to the demand side, around financial literacy and building understanding and trust in the system. Behavioural change is complex and takes time. There is often a strong status quo bias towards cash hence a lack of interest in other financial mediums (and where people do have excess cash to save, it is common for it to be invested in jewellery or livestock, not put in a savings account). One further suggestion is that in some cases – particularly for the poorest populations – the value proposition of banking is absent as incomes may be too low or because the informal mechanisms they are used to remain preferable. There are many reasons that people do not use their bank accounts even if they are available and have access, including, but not limited to: their level of financial literacy; cultural reasons; not having enough money to save; or not having yet made a permanent behaviour shift. However, the assumption that poor people want a bank account has not been empirically tested.



Neobanks and the Next Banking Revolution

The business of banking is changing rapidly. Products and services rendered and built on disruptive technologies are increasingly being placed in the hands of end customers, and the behaviours of banks are changing in terms of customer convenience, transparency, pricing and customer service. As customers' behaviours and expectations change, so do the business and operational models.

Every part of the banking value chain – from what consumers can avail and expect in terms of banking services – can now be accessed by a non-banking service provider through its technological prowess and agile and lean business models. Under these models, retail and small and medium enterprises (SME) banking services are primarily delivered through the internet or other forms of electronic channels instead of physical branches. These non-banking service providers are called neobanks and they are challenging the present status of traditional banks, by offering lower cost models and hyper-distinctive customer-centric service and experiences. Unlike their traditional counterparts, neobanks aren't constrained by legacy systems, tightly integrated value chains, complex administrative structures and lofty regulatory requirements. Though neobanks don't have their own bank licences in India yet, they use partners to offer bank-licensed services.

Convenience of opening and operating accounts, seamless payments, transfer and remittance solutions and alternative methods for assessing creditworthiness are some of the features that are attractive to micro and small companies and underbanked or unbanked customers such as freelancers and gig economy employees. Neobanks have provided these segments access to financial services and products, which were either scarcely available or came with heavy fees and stringent agreements.

Digital banks vs neobanks

A digital bank and a neobank aren't quite the same, even though they appear to be based on the mobile-first approach and emphasis on digital operating models. While the terms are sometimes used mutually, digital banks are often the online-only subsidiary of an established and regulated player in the banking sector. A neobank, on the other hand, exists solely online — without any physical branches and independently or in partnership with traditional banks. This enables them to navigate and comply with the regulatory environment.

A private sector bank in India has partnered with a Fintech start-up – a neobank – to transform the employee benefits ecosystem. This neobank provides an integrated solution, comprising a multi-pocket card, a mobile app and a digital account with multiple payments wallets. Under this partnership, the private sector bank and neobank have rolled out a benefits card, which makes it easier for organisations to give employee benefits and for employees to claim them. The solution leverages state-of-the-art in-mobile technologies and has been built on the India Stack principles, including e-KYC by Unique Identification Authority of India (UIDAI) and Unified Payments Interface (UPI), launched by the National Payment Council of India (NPCI) in 2016.

Neobanks: Fertile ground for opportunities

The global neobank market was worth USD 18.6 billion in 2018 and is expected to accelerate at a compounded annual growth rate (CAGR) of around 46.5% between 2019 and 2026, generating around USD 394.6 billion by 2026.

The substantial growth potential for neobanks is driven by their low-cost model for end consumers with no or very low monthly fees on banking services such as minimum balance maintenance, deposits and withdrawals. Adoption by millennials, micro, small and medium enterprises (MSMEs), and those having sporadic incomes and earnings, embracement of innovative technologies and rising consumerism are some of the catalysts for the success for neobanks. The high adoption rates and successful business models of neobanks have piqued the interest of investors, venture capitalists and corporates, who contributed USD 586.7 million of the total funding of USD 3.49 billion received by FinTechs globally in March 2018.

In 2018, the business sector accounted for majority of the global market revenue of neobanks, due to growing acceptance of digital payments in both multinational companies and organisations in their nascent stages. MSMEs received services such as accounting, budgeting, taxation, analytics from neobanks at fractional costs. Such services were earlier accessible only to larger establishments, owing to the costs involved.

Neobanking opportunities in India

Between, 2017 and 2018, India's mobile banking users increased by 13% and 92% in value and volume terms, respectively. But as per the Global Findex Database of 2017, 80% of India's population

remains severely underbanked, which reflects the untapped potential in the country for mobile-based neobanking services.

Neobanking in India has scope for significant growth as MSMEs in the country can avail their services on a large scale. MSMEs are numbered at 36.2 million (2017) and account for 95% of the country's total industrial units, but have been either out or under-served by traditional banks' operational ambit, depriving them of formal banking and credit needs. The focus on digital economy and adoption of mobile banking, coupled with the underserved banking, financial and credit needs of both MSMEs and retail segments, present substantial market opportunities for neobanks in India.

At present, there are four main neobanks in India, which have received sizeable funding from investors. In addition, there are global banks, which view India as an engine of growth. Recently, one of Singapore's largest banks launched its services in India, including savings accounts, fixed accounts, payments solutions, transfers and investment management. The services offered by the bank are completely digital, without any presence of physical branches.

Advantages and shortcomings of neobanks

Opportunities and advantages

- Low cost structure: no monthly fees and no withdrawal costs
- Higher rates on savings and fixed deposits than traditional banks
- Simple and engaging mobile experience
- Near real time services for account opening, payments, balance checking, opening and redeeming time deposits, etc.
- Intuitive budgeting, investing and money tracking tools
- Free debit cards with large ATM networks of partner and associate banks with no fees
- 24*7 support – advanced chatbots
- High security features such as locking and freezing any time through app
- Personalised offers and discounts depending on income, expense and spending habits
- Most neobanks provide international payments at interbank rates through various banking and payments partners
- One platform for linking multiple accounts, apps, services on neobank platform

Challenges and shortfalls

- Narrow range of product offerings, so car loans, home mortgages or business services are not available
- The main setback of neobanks is that they can not offer in branch service, which some people prefer when dealing with large loans, such as a mortgage

- Operational inexperience vis-à-vis traditional banks
- Regulatory and compliance – subject to the same set of supervisory requirements applicable to conventional banks

Advantages of neobanks over traditional banks for MSMEs

1. **Customer experience:** Neobanks do not offer novel banking services. Their services are similar to those of traditional banks, but with a hyper-enhanced and personalised customer experience. Neobanks have significantly leaner business models and superior technologies at their disposal, compared to traditional banks, providing ease and efficacy in services, such as seamless account creation, round-the-clock customer service supported by chatbots, near real-time cross-border payments, and artificial intelligence (AI) and machine learning (ML)-enabled automated accounting, budgeting and treasury services.
2. **Automated services:** Apart from providing primary banking services, neobanks offer automated and near real-time accounting and reconciliation services for bookkeeping, balance sheets, profit and loss statements and taxation services such as GST-compliant invoicing, tax payments record keeping and reconciliation, on mobile platforms for affordable costs.
3. **Transparency:** Neobanks are transparent and strive to provide real-time notifications and explanations of any charges and penalties incurred by the customer.
4. **Easy-to-use APIs:** Most neobanks provide easy-to-deploy and operate APIs to integrate banking into the accounting and payment infrastructure.
5. **Deep insights:** Most neobanks provide dashboard solutions with highly enhanced interfaces and easy to understand and valuable insights for services such as payments, payables and receivables, and bank statements. It is beneficial for businesses with significant expenditure and appropriate number of employees, to be provided with such insights, reduce expenditure and boost productivity and revenue.

In India, a neobank is catering its services and solutions for SMEs and playing a leading role in aiding small businesses in managing their finances conveniently and comprehensively. The neobank provides a platform that helps such businesses send and receive payments, automate their accounting and reconciliation, generate and track compliance of invoices with direct and indirect tax laws, and access third-party banking and business applications from its platform, allowing multiple businesses to simultaneously manage all their banking needs under a single platform.

Regulatory considerations for neobanks in India

In India, virtual banking licences are still not granted, though there are foreign national banks offering digital-only products through their Indian subsidiaries. The Reserve Bank of India (RBI) remains stern in prioritising banks' physical presence, and lately reinforced the requirement for digital banking service providers to have some physical presence.

The significance of brick-and-mortar bank branches is to serve customers and redress their disputes and grievances in person. In its 2014 Guidelines for Licensing of Payments Banks, the RBI had highlighted that it does not see payment banks becoming '"virtual" or branchless banks.

Presently, neobanks in India are addressing the regulatory predicament by outsourcing their banking responsibilities to those with licences, creating strategic partnerships with traditional banks and providing amplified services on behalf of existing ones. This model is already being used worldwide by some of the biggest names in neobanking.

As part of their business strategy and to overcome regulatory hindrances, neobanks partner with traditional banks and offer business and consumer banking services. For the end customer, financial and banking services are offered by the neobank, but from a regulatory perspective, monetary transactions are managed by their partner banks.

Road ahead

Attributes and offerings like accessibility, cost-effective multiple banking and financial functionalities under one umbrella, and personalisation are some of the driving factors for neobanks globally. Secondly, FinTechs are building niche solutions focusing on blue-collar workers and the underserved needs of thin-file MSMEs, which is the way forward.

Neobanking can work as an extension of measures undertaken to solve the challenges of financial inclusion and bundling banking services with other financial services — for example, services like opening of bank accounts for immigrants, facilitated through new onboarding procedures not based on traditional documentation of identification. With narrow targets initially, neobanks could expand by adding more functionalities and services over time.

Although digital and neobanks are gathering momentum, most are yet to show sustained profitability. Nevertheless, they have great potential to be disruptors in banking and financial services, and the key towards becoming profitable entities would be to convince traditional banks to invest in new-age technology and re-engineer processes to provide seamless and swift customer experiences.

With competition mounting among traditional banks, new-age FinTechs, technology firms and non-banking entrants, it is yet to be seen whether the market is deep enough for neobanks to grow sustainably and equitably. How neobanks manage vital impediments in terms of regulation and compliance, data and cyber security, seamless API integration and expansion of products and services will be the fundamental determinants of their success.

Digital Lending

A modern, growing and robust economy rests and grows on the pillars of financial inclusion, which entails providing access to financial services and products to all individuals and businesses across the social spectrum at affordable costs, in a timely manner and tailored to their needs, from reliable and responsible providers. Further, use of advanced technologies and initiatives by traditional banking sector players and FinTechs is also gradually resulting in availability of financial products and services to the bottom of the pyramid segment, who have otherwise been largely devoid of basic bank accounts, credit and other financial services.

By increasing the participation of low-income groups and credit-starved micro and small business segments within the formal financial services sector, the financial wealth of these customer segments is safeguarded through savings and investments. On the other hand, access to credit enables individuals and business to purchase more, and small and medium businesses to grow, thus creating jobs, reducing inequality and facilitating economic growth.

The aversion of traditional lenders to service apparently risky low income but underserved segments has motivated new-age digital lenders to quickly fill the void by leveraging cutting-edge technology and alternative credit assessment models and reach out to a wide customer base. With technological advances and a conducive policy environment, digital lending as a service has caught the attention of consumers and investors alike.

The digital lending market is spiking in India. With numerous benefits over the traditional lending process, people and businesses are opting for loans digitally. Moreover, an increasing number of banks

offering loans using legacy systems are switching to digital lending. It is safe to say that the future looks promising for digital lending.

Traditional lending, while still going strong, has many downsides when compared to digital lending. Credit seekers have to go through a long, tedious process to get their credit sanctioned. FinTech lenders have capitalized upon the needs and pain points of the consumers across the lending value chain for uncomplicated on-boarding/ KYC processes, prompt decision making and instant disbursals in a seamless, automated and personalized experience. Digital lending has significant advantages over traditional lending, with the potential to address prevalent credit-related challenges in India. One of the best advantages of digital lending is faster approval of credit. Credit evaluations and loan disbursals on digital platforms have visibly quicker turnaround times than traditional loans – particularly for small-ticket credits and advances, which are most common among new-to-credit borrowers. Some of the factors why the disbursal turnaround time is significantly lower in digital lending are replacement of manual form filing by digital data captures, automated evaluations leveraging on technologies like advanced analytics, artificial intelligence (AI) and machine learning (ML) and no or little in-person visits. FinTech lenders use cashflow-based data and other surrogate data from sources such as telecom, utility and social media, combined with psychometric analysis to evaluate ability and willingness to pay.

Another key advantage associated with digital lending models is the operating cost efficacy. Traditional lending models, usually, have high overhead costs, surfacing from deeply entrenched manual processes. FinTech lending models, conversely, do not require physical branch networks, are asset-light and have technology-enabled operating and business models which require minimal human intervention, thus reducing manual operating costs. This model allows FinTech lenders to keep fixed costs nominal and aggregate a multitude of low-value loans, which enables them to serve low-ticket credit individuals in semi-urban and rural areas and MSMEs.

Lending model, in every part of the world, is evolving rapidly in the last few years. Initially, it was led by FinTech companies, however, traditional banks and Non-banking financial companies (NBFCs) soon followed it. This on-going growth is being driven by several factors, some of those factors are: 1. Consumer behavior which demands everything online and in a quick time, 2. Technological innovations led by penetration of smartphones and reduced cost of internet, 3. Regulatory environment which is getting favorable with digital lending and 4. Innovations in the lending models.

In such a context, every lending company has been trying to realize such an opportunity, and financial institutions are taking steps to acquire maximum share of the digital lending market. Some of the steps taken by financial institutions are as follows:

- **Simplified on-boarding of customers:** In this digital era, customers want an end-to-end frictionless experience and seamless on-boarding and most of the companies are focusing on the same.

- **Tech platform:** Companies are developing their own technology platform on which customers can be provided smooth digital lending journey.

- **Alliances and Partnerships:** Some of the companies are developing in-house technologies, however some of the companies are partnering with FinTech companies or platforms for customer acquisition and lending purpose.

- **Cultural transformation:** Some of the current roles are getting redundant due to technology advancement and therefore, training is being provided to employees to equip them with the necessary skillsets.

Innovative Lending Models

The continued growth in digital lending has been driven by innovative lending models adopted by FinTechs, big data companies, financial aggregators, etc. A few examples of models are as below:

- **Point of Sale transaction-based lending:** Using data from POS machine, some companies have built a proprietary technology platform to offer unsecured loans to merchants.

- **Bank-FinTech partnership models:** FinTechs are partnering with banks to target specific segments such as MSMEs. They also partner with data aggregators and marketplaces in each segment, that provide transaction data to assess the risk profile of borrowers. Some FinTechs operate on the hybrid model (partnership as well as independent financing).

- **Invoice discounting exchanges:** Few FinTechs are disrupting the MSME lending marketplace by helping businesses achieve their short-term working capital needs by discounting their unpaid invoices to a network of buyers and investors. After raising the invoice, the SME lists the invoice on their platforms, at a certain discount; on successful payment of the invoice, the full amount gets credited to the investors directly.

- **Marketplaces:** Marketplaces are focused on meeting the financial needs of consumers by providing consumers with the choice of the financial institutions. In addition to this, marketplaces are also focused on digitizing the entire supply chain in order to provide the consumers a seamless end to end digital experience.

- **Bank-led digital models:** While several banks have launched pure digital savings account acquisition journeys, a few banks are leveraging these digital platforms to sell loan products as well.

- **Captive models:** Another trend which is emerging is that of non-financial players such as e-commerce and cab tech companies launching lending solutions to their captive customer base in partnership with banks and NBFCs.

- **Peer to Peer (P2P) lending:** Several FinTechs have emerged in this space. P2P model aims to meet the demand of borrowers through supply from HNIs as well as the one who have excess cash and looking to deploy it in an alternative asset class.

Major Growth Drivers

According to the report published by Allied Market Research, the global digital lending platform market garnered USD 5.58 billion in 2019, and is expected to generate USD 20.31 billion by 2027, manifesting a CAGR of 16.7% from 2020 to 2027. Digital lending across sectors in India is estimated to be around INR 2.7 trillion as of March 2019. As per Industry FinTech report, India's market for digital lending is poised to grow from USD 110 billion in 2019 to USD 350 billion in 2023. This will increase the share of digital lending in India's overall lending market from 23% in 2018 to 48% by 2023, making digital lending a sector with the highest penetration by digital channels in the country. The joint report from ICICI Bank and CRISIL estimates that the digital lending sector would account for 16% of retail loans in the next 5 years, a 10% increase from the current share of 6%. Digital loans forecast for FY24 is pegged at INR 15 trillion with banks dominating the markets, accounting for 77% of the total number of digital loans. Over the past few years, there has been a spurt in digital lending, resulting in some noteworthy investments in automation, online applications and borrower portals to keep up with radical changes in digital disruption and addition of new digital tools to track and optimize customer acquisition. Digital footprint, which refers to traceable digital activity, acts as a catalyst for digital influence in the Indian banking sector, as institutions can now access consumable data to feed in credit scoring models. More than 80% of all Indian banking customers use digital banking services for their day-to-day activities. The following can be said to be the major drivers for growth of FinTech and digital lending:

- Strategic partnerships and collaborations between traditional financial institutions and new-age FinTechs
- Easy market entry and targeted loan offerings due to availability of large sets of customer data, which can give collective and individual insights
- Better margins than other FinTech business models, such as payments and other financial services
- Changing consumer behavior and expectations shaped by purchase/transaction experiences offered by e-marketplaces like food delivery, e-commerce and travel portals
- MSMEs play a vital role in our economy, as roughly 65 million MSMEs in India employ nearly 80 million people. These MSMEs account for 95% of the country's manufacturing output. Despite this, the MSME sector, to a great extent, has remained credit-deficient and underserved by traditional FIs. Market potential of MSMEs in India:
    - Credit demand will see a CAGR of 6% by 2023
    - Unmet credit gap of approximately USD 1 trillion is to be tapped by 2023
    - According to one of the industry reports, almost 50% of Indian MSMEs have adopted digital tools for business processes and payments, and online sales (digital in accounting, payments, sales).

Thus, with a modernized approach towards lending for MSMEs by driving government-focused initiatives and leveraging digital technology, FinTech lenders and financial institutions can support deeper financial penetration for this segment.

- Affordable alternative lending practices can help FinTech leaders explore the huge untapped market for loans and bring in more inclusion; there is a need to increase availability of small-ticket size products – to lift people out of poverty.

Application of Data and Analytics

The last few years have seen an explosion in the availability of digital data in India. More than 120 crores Indians are enrolled in "Aadhar" and have a digital as well as biometric footprint. Digitization of various databases and records has resulted in multifold increase in data of individuals and corporates. Demonetization provided a momentum for digitization of payments, thereby making transaction data available online. This was enhanced by the implementation of GSTN which made invoices and trade data digital.

Big data will grow bigger as more consumers come online and transactions and consumer service move online. This will enable lenders to take better informed lending decisions, offer personalized and customized solutions to consumers and drive higher consumer engagement.

Retail consumers' digital footprint

While lenders seek access to consumer data to drive their digital initiatives, the vision of 'Digital India' is supported by the government through variety of initiatives, e.g., TReDS as a platform for enabling online invoice discounting, GSTN as an entity providing the technology infrastructure to enable GST implementation, GeM as a marketplace taking government procurement online, etc. Another key step announced by the regulator is the launch of a Public Credit Registry (PCR). Such a registry will augment the existing bureau databases and immensely help in collections and resolutions. These initiatives, combined with other initiatives on implementing UPI, Aadhar, etc. are taking significant strides in making India digital.

Digital Lending Process

The following is a description of the general digital lending process which is being followed by most of the FinTech companies:

1. **Customer Acquisition:** The first step in the digital lending process is customer acquisition. Digital lenders may approach potential customers either through direct or indirect channels. Direct digital modes of acquisition/marketing that lenders use include short message service (SMS), and social media advertising. Lenders may also acquire customers by maintaining a partnership with a 'data-rich' entity such as a mobile network operator or e-commerce marketplace and leverage the customer segment information that they already possess. There is also the alternative of indirect acquisition of customer data, which requires lenders to purchase access to customer data basis a contract.

   The lead generation is being mainly done through the following methods:

   - **Brick and mortar branch:** The lenders rely on their physical infrastructure, including branch offices, loan officers or relationship managers to source borrowers. The relationship managers assist the customers in the onboarding process.
   - **Channel partners:** Lenders also rely on partnerships with e-commerce platforms, aggregators or marketplaces (such as Amazon, Flipkart etc.), mobile wallet companies, participants in the supply chain (such as machine manufacturers, Fast-moving Consumer Goods (FMCG) distributors) etc. to source borrowers.
   - **Direct Selling Agents (DSA):** Authorized DSAs function as referral agents for the lender and find potential borrowers for the lender to service.
   - **Referrals from current borrowers:** Lenders provide several benefits for successful referral from existing borrowers.

   In the customer onboarding process, identity verification of the prospective customer is enabled through either the relationship managers/credit/sales team that sources them, or by employing third-party service providers for doing KYC.

2. **Appraisal and Analytics:** Digital lenders use both traditional and alternative sources of data. The former usually include financial statements, business plans and credit bureau scores, while the

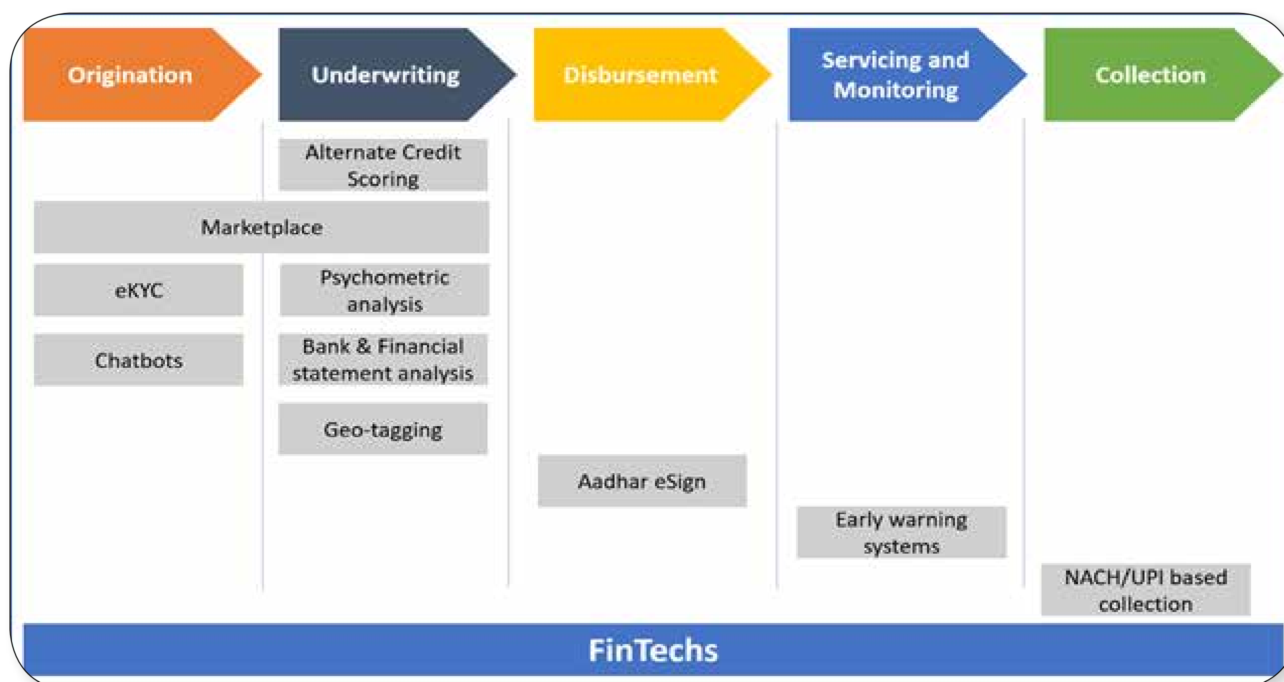
latter comprise bank statements and cash flow analysis, call data records, digital transactions (such as invoices, transaction data from point-of-sale machines etc.), and data from social media. Alternate data was indicated to be used for customers who have a limited credit history or digital records that can be used to evaluate credit risk. Verification of data is done through several methods such as personal interviews with the borrower, physical verification of the business, referential validation through buyers/ suppliers and so on. The lenders usually have their own proprietary algorithms and risk models to assess the creditworthiness of customers, based on the information collected. The lender might also partner with other third-party vendors for specific purposes, such as with API aggregators, verification agencies, valuation agencies, fraud control units etc.

3. **Loan Sanction:** Based on the results of the creditworthiness assessment, the lender decides on the loan amount to be offered, the tenure of repayment, as well as the interest rate to be charged. The borrower is charged a processing fee if the offer is accepted.
4. **Disbursement:** Cashless channels [such as real-time gross settlement (RTGS) and National Electronic Fund Transfer (NEFT)] seem to be the preferred mode of disbursement to customers. The disbursement of funds is usually to the bank account of the customer.
5. **Collection:** Digital lenders tend to leverage the data that they have, along with their algorithmic capabilities to anticipate and design an optimum collection process. Repayment is usually through automatic clearing house (ACH) payment or post-dated cheques. Other repayment methods include cash, Unified Payments Interface (UPI), digital wallets, etc. The collections process usually consists of three steps:
   a. Initially, a reminder for repayment is sent through an SMS, WhatsApp message, or by a call center representative
   b. In case there is a delay in repayment, then the customer is approached by the relationship manager
   c. The third point of contact is the collections team, which might be in-house or a third party.
6. **Customer Engagement:** The major points of customer engagement are the relationship managers in the branch offices, and the customer service team. The lenders also operate a customer care number, and an email for grievance redressal.

Risks in Digital Lending

The transition to digital lending brings out new risks for consumers and ongoing risks may manifest themselves in new ways. Digital lenders will want to prevent or mitigate such risks as they design their products and consumer interfaces. A few salient risks, with suggestions for addressing them, are discussed below:

- **Appropriate product design and delivery:** Digital lending can be easy and fast, and borrowers are susceptible to "push" marketing and fraud. Lenders are advised to give customers time to reconsider borrowing decisions, e.g. "cooling off periods". Careful customer segmentation may



Use of technology applications in each step of digital lending

reduce the drive towards aggressive marketing. Clear communication with borrowers can help them differentiate fraudsters from legitimate lenders.

- **Prevention of over indebtedness:** Where possible, lenders engaged in refining new credit algorithms should consider not penalizing or reporting early defaulters to credit bureaus for small infractions. When offering small, short-term loans, lenders can protect customers from debt traps by mandating a "resting" period with no outstanding loans every few cycles. Algorithms should consider repayment capacity.

- **Transparency:** It is very important, though often especially challenging, for lenders to present prices, terms, and conditions clearly on digital interfaces. However, well-designed interfaces can increase uptake. Small digital surveys offer simple ways to confirm customer understanding.

- **Fair and respectful treatment:** Algorithms are intended to avoid human biases, but biases can appear. Algorithms should be reviewed from time to time to see whether they introduce unwanted discrimination.

- **Data privacy:** Lenders are advised to seek consent from consumers for the use and sharing of their data. Given the security vulnerabilities lenders are also advised to perform thorough data security audits.

- **Complaint resolution:** Problem resolution systems need to be available to consumers, preferably including some ability to speak directly to a person. Lenders are advised to inform customers frequently about how to resolve problems.

Sustainable and ESG Financing

Climate risk and sustainable finance has caught the attention of regulators, national authorities and supra-national authorities across the world. The Intergovernmental Panel on Climate Change (IPCC) Report of August 2021 highlighted the changes being observed in the Earth's climate in every region across the whole climate system. The Report states that emissions of greenhouse gases from human activities are responsible for approximately 1.1°C warming since 1850-1900, and finds that, averaged over the next 20 years, global temperature is expected to reach or exceed 1.5°C warming. Subsequently, the recent Conference of the Parties (COP26) Summit held at Glasgow in November 2021 saw several countries committing to wide-ranging climate action. The recent IPCC Report and the COP26 Summit have, therefore, enhanced the focus on climate change.

In order to learn from and contribute to the global effort towards enhancing the role of the financial system to manage risks, and in the broader context of environmentally sustainable development, the Reserve Bank of India (RBI) joined the Central Banks and Supervisors Network for Greening the Financial System (NGFS) as a member in April 2021. Further, the RBI is also represented in the G20 Sustainable Finance Working Group, Financial Stability Board's Working Group on Climate Risk and Work Stream on Climate-related Disclosures, Task Force on Climate-related Financial Risks set up by the Basel Committee on Banking Supervision (BCBS) and the International Platform on Sustainable Finance.

In May 2021, the RBI set up a Sustainable Finance Group (SFG) within its Department of Regulation (DoR) to lead the efforts and regulatory initiatives in the area of climate risk and sustainable finance.

The SFG would be instrumental in suggesting strategies and evolving a regulatory framework, including appropriate disclosures, which could be prescribed for banks and other regulated entities (REs) to propagate sustainable practices and mitigate climate-related risks in the Indian context.

In order to assess the progress of the regulated entities in managing climate risk, the RBI is coming out with a consultative discussion paper (DP) covering aspects such as (i) governance (ii) strategy (iii) risk management, and (iv) disclosure. Based on feedback from stakeholders and leveraging on the work being done by the NGFS and international standard setting bodies like the BCBS, FSB, etc., RBI would propose appropriate guidelines in this regard.

The financial sector plays a key role in facilitating the massive reallocation of resources required for the economic transformation. Given the important role played by banks in intermediation and resource allocation across the economy, their strategic decisions would be a key factor in the transition to a sustainable economy. A primary role of the SFG would be to suggest strategies that could be adopted by REs to propagate sustainable practices, mitigate climate-related risks and develop guidelines for the integration of climate risk into their risk management framework. Accordingly, it was decided to conduct a survey among leading banks to understand the prevalent practices and initiatives taken by these banks in the area of climate risk and sustainable finance.

The objective of the survey was to assess the approach of these banks, their level of preparedness, etc., with respect to climate risk and sustainable finance. Leading central banks and supervisors in other jurisdictions have also conducted such surveys to fine-tune their regulatory and supervisory approach with respect to climate risk and sustainable finance. In line with these efforts, the SFG conducted a short and focused survey among leading scheduled commercial banks in India. The feedback from this exercise will help in shaping the regulatory and supervisory approach of the RBI to climate risk and sustainable finance.

The SFG in the DoR, RBI, carried out the survey in January 2022 to assess the status of climate risk and sustainable finance in leading scheduled commercial banks. **The responses indicate that although banks have begun taking steps in the area of climate risk and sustainable finance, there remains a need for concerted effort and further action in this regard.** The feedback from the survey will help in shaping the regulatory and supervisory approach of the RBI to climate risk and sustainable finance.

Key Observations from the Survey

Board-level engagement and responsibility: Board-level engagement on climate risk and sustainable finance is inadequate. In about a third of the banks that were surveyed, responsibility for overseeing initiatives related to climate risk and sustainability was yet to be assigned. Furthermore, only a few banks have included climate risk / sustainability / environmental, social and governance (ESG) related Key Performance Indicators (KPIs) in the performance evaluation of their top management.

Strategy: A majority of the banks did not have a separate business unit or vertical for sustainability and ESG-related initiatives. Only a few banks had a strategy for embedding ESG principles in their

business, scaling up their sustainable finance portfolio and incorporating climate change risks into their existing risk management framework.

Risk management: Almost all the surveyed banks recognized the urgency of the issue, and most of them considered climate-related financial risks to be a material threat to their business. Physical and transition risks were seen as the main sources of climate-related risks3. Some of the banks are not just considering climate and environment-related risks, rather they are also focusing on the social and governance aspects while evaluating credit proposals above a certain amount. A few banks are also attempting to quantify the amount of their loan and investment portfolio that is susceptible to such risks.

Transition to low-carbon exposure: Most of the surveyed banks have decided to gradually reduce their exposure to high-carbon emitting/polluting businesses in the coming years. A few banks have either mobilized new capital to scale up green lending and investment or set a target for incremental lending and investment for sustainable finance. Most banks have launched a few loan products to tap the opportunities from climate change. A few banks have also launched green deposits to scale up lending to environment-friendly businesses.

Climate-related financial disclosures: A majority of the banks have not aligned their climate-related financial disclosures with any internationally accepted framework.

Moving towards a low-carbon environment in banking operations: Most banks have either taken some measures or have plans to decrease the absolute carbon emissions arising from their operations and increase the proportion of renewable energy in their total sourced electricity. A few banks have either announced time-bound plans or plan to come up with a roadmap over the next 12 months to become carbon-neutral.

Capacity building and data gaps: Most banks are looking at capacity building to better understand the financial implications of climate risk. Further, most banks felt that the available data was insufficient for an appropriate assessment of climate-related financial risks and the processes and methodologies to measure and monitor climate-related financial risks were also not sufficiently developed.

Key Learnings and Suggestions

Governance: Banks need to put in place a mechanism at either the Board or top management level for overseeing and scaling up initiatives relating to climate risk and sustainability. They could consider including KPIs on climate risk, sustainability and ESG as a part of the performance evaluation of their top management.

Risk management: Banks need to fully grasp the physical, transition and liability risks associated with climate risk and also actively start managing them to make their loan and investment portfolios more resilient to such risks. Further, banks need to develop a strategy for managing climate risk and integrating it into their risk management framework.

Climate-related financial disclosures: Banks need to align their climate-related financial disclosures with an internationally accepted framework to improve the comparability and consistency of the disclosures with their counterparts globally.

Opportunities from transition to a green future: Banks could consider mobilizing new capital to scale up green lending and investment or set a target for incremental lending and investment for sustainable finance.

Human Resources (HR) and capacity building: Banks need to invest significantly in the capacity building of their staff on climate risk, ESG and sustainable finance. Further, banks will require dedicated resources in this area to successfully tap the opportunities arising from climate change, sustainable finance and the growing focus on ESG.

Moving towards a low-carbon environment in banking operations: Banks could come out with a strategy to reduce emissions from their own operations. In line with India's commitment at the COP26 Summit, banks may also consider working on a timeline to move towards net-zero emissions.

Green finance for MSMEs

India's micro, small and medium enterprises (MSMEs), like in most developing countries, are the cornerstone of economic development, with their leading role in providing large-scale employment and strengthening the complex supply chain of goods and services.

Approximately 6.5 crore MSMEs in India contribute close to 30 per cent of the GDP of the world's fifth-largest economy, employing around 11 crore people and with a share in its exports of nearly 40 per cent.

Given the sheer size and impact of the sector, active participation of MSMEs is critical to India achieving an inclusive, low-carbon economic transition, especially at a time when the Indian economy has unequivocally aligned itself to the global sustainable development agenda, led by the UN Sustainable Development Goals and the Paris Agreement.

To put things in perspective, given its size, the sector has a significant carbon footprint of its own. For example, studies reveal that there are over 200 energy-intensive manufacturing clusters in the country, consuming an estimated 50 million metric tonnes of oil annually. At the same time, however, India's MSME sector is also disproportionately more vulnerable to climate change-related risks, including both physical risks as well as transition risks, largely because of their limited capacity to respond adequately to them, relative to their larger peers.

Physical risks to the sector may include aspects such as damage to their physical infrastructure and personnel, and disruption in their upstream or downstream supply chains, while transition risks may include changes in regulations within India and export markets or shifts in consumer preferences and technology.

The capacity of MSMEs to adequately cope with such climate-related vulnerabilities will depend on addressing the barriers that currently exist. These barriers may be in the form of lack of finance, technology or market access, access to relevant information, insufficient knowledge about climate risks, weaker capability to evaluate the cost to benefit of adaptation and mitigation measurements, and inadequate supporting policies and regulations. Each of these gaps can potentially be an opportunity for green financing to address.

Supporting MSMEs transition into the green economy

Simply put, green financing is any investment, such as a bank loan, made towards 'green' sectors such as renewable energy or 'green' activities, such as purchasing environment-friendly goods and services.

There is a clear green transition visible across sectors globally as well as in India, with significant public and private investments flowing into it. For example, the power sector in the country is transitioning from thermal power to renewables, with ambitious targets taken at the country level, policy actions being taken at the national and State levels, and increasing credit inflow from the Indian Financial Institutions. MSMEs in the fossil fuel-based power sector value chain would need to shift their capabilities as well as their capacities to be able to transition successfully, which will require capital as well as access to market opportunities. Green financing can support such a transition.

At the same time, there is also an opportunity and pressing need to help MSMEs recognise how the green transition itself, such as through the adoption of greener technologies, can also strengthen their financial performance, lower operational risks and improve operational efficiency.

Anaemic financing flow is a well-recognised and well-entrenched issue for the MSME sector. Data suggests that only about 14 per cent of the loan accounts at scheduled commercial banks in India were of MSMEs, accounting for only 16 per cent of the overall credit flow outstanding, as of March 2021. A recent study (NIRDPR, 2021) showed that nine out of 10 MSMEs depend on informal sources (mostly unsecured loans) for their working capital and term loans. Even alarming is the fact that a significant portion of MSMEs in India still have no access to external finance and depend wholly on self-financing.

A mismatch between the higher risk profile of MSMEs and the conservative risk appetite of commercial banking has been a prominent reason for the less-than-ideal credit inflow into the sector. One of the viable solutions to address this gap and make MSMEs more bankable could be 'blended finance', or the use of public or philanthropic funds to share the risk of private sector lending.

While technology adoption is not readily associated as a focus for green financing, there is no denying that inadequate adoption of technology remains one of the top challenges for Indian MSMEs.

Modern technologies such as AI-based tooling and machinery, ERP planning, and inventory management have been shown to significantly enhance productivity, efficiency, and competitiveness; yet, evidence also suggests that MSME entrepreneurs, especially those in semi-urban and rural areas, may not

even be fully aware of the wide variety of pertinent technology and software solutions available to them. Green financing can be a viable channel to enable MSMEs to invest in new technologies and innovations.

Private green capital can also play a role in augmenting the government's efforts to incentivise the sector to upgrade their obsolete equipment and adopt advanced technologies and solutions, such as the Special Credit Linked Capital Subsidy Scheme for MSMEs in the services sector, which provides for 25 per cent subsidy for procurement of technologically advanced service equipment through institutional credit.

Green financing can also support closing the considerable skill deficit in the MSME sector. In many cases, there is a considerable gap between the requirements of the industry and the skilling its workforce receives. For example, a recent NSSO survey revealed that as many as 20 high-growth sectors, such as construction, hospitality, automobiles, healthcare and logistics, lacked adequate training facilities. This skill gap further weighs down due to the lack of awareness among entrepreneurs towards modern, digital solutions. While many government-led and private-led skill development and capacity-building programs exist, notable among them being the Pradhan Mantri Kaushal Vikas Yojana, there remains considerable scope for green financing to help fill the gap.

There has been significant growth in the availability of green financing globally and there is a deep interest among international green investors in the India growth story, which presents a significant opportunity for Indian MSMEs. India's regulators and financial institutions must work towards enabling MSMEs to tap green capital from both domestic and global sources.

As India's regulatory environment evolves further, much thought would go into expanding the scope of new or existing regulations to accommodate MSMEs' green transition. For example, the government may consider carving out portions of the proposed domestic green bond for MSMEs financing or expanding the ECGLS scheme to support climate-related investments as well as protect MSMEs from climate-related risks.

The possibilities for green financing to support Indian MSMEs' sustainable transition are endless, but it will only be through the concerted efforts of governments, financial institutions and the MSMEs themselves that we will be able to tap this opportunity to its fullest.

Fintechs in India

India is amongst the fastest growing Fintech markets in the world and there are 6,636 FinTech startups in India.

Indian FinTech industry's market size is USD 50 Bn in 2021 and is estimated at ~USD 150 Bn by 2025.

India's payment landscape over the last decade has developed into the most advanced payment system with regards to digital payments by volume (CAGR 50%) and value (CAGR 6%). The Fintech transaction value size is set to grow from USD 66 Bn in 2019 to USD 138 Bn in 2023, at a CAGR of 20%.

The Indian Fintech industry ecosystem sees a wide range of subsegments, including Payments, Lending, Wealth Technology (WealthTech), Personal Finance Management, Insurance Technology (InsurTech), Regulation Technology (RegTech), etc.

Indian fintech market has received USD 29 bn in funding across 2,084 deals to date (January 2017-July 2022), gaining 14% share of the global funding and ranked #2 on the deal volume.

The Fintech sector in India has seen a funding of USD 8.53 Bn (in 278 deals) in FY22.

As of July 2022, India has 23 Fintech companies, which have gained 'Unicorn Status' with a valuation of over USD 1 Bn.

As of July 2022, India's Unified Payments Interface (UPI) has seen participation of 338 banks and has

recorded 5.9 Bn monthly transactions worth over USD 130 Bn. UPI recorded over 6.28 bn transactions in July 2022, a new record since the service was launched in July 2016.

Industry scenario

The Fintech segment in India has seen an exponential rise in funding over the last few years, investments worth more than USD 8 bn have already been witnessed across various stages of investment in 2021.

FinTech is expected to be USD 1 tn in AUM and USD 200 bn in revenue by 2030; FinTech funding in India recorded a 3X jump in 2021.

While Payments and Alternative Finance segments constituted more than 90% of the sector's investment flows in 2015, there has been a major shift towards a more equitable distribution of investment across sectors since to include InsurTechs, WealthTechs, etc.

India has 23 Fintechs which have gained 'Unicorn Status'. 1/5 Startup Unicorns are from Fintech.

India recorded the largest absolute number of real-time transactions in the world; India's real-time transactions crossed 48 Bn, which is 6.5 times of the combined volume of the world's leading economies: U.S., Canada, U.K., France and Germany in 2021, resulting in cost savings of ~USD 12.6 Bn for Indian businesses and consumers in 2021.

The digital investment market is set to be worth USD 14.3 bn by 2025, growing from USD 6.4 bn in 2021 at a 5-year CAGR of 22.4%.

India's digital payments market is at an inflection point and is expected to more than triple from USD 3 tn today to USD 10 tn by 2026. As a result of this unprecedented growth, digital payments (non-cash) will constitute nearly 65% of all payments by 2026 i.e., 2 out of 3 transactions (by value) will be digital.

The Fintech revolution in India is the culmination of years of effort in laying the groundwork towards developing key enablers through important initiatives:

- **Jan Dhan Yojana:** The world's largest financial inclusion initiative, "Jan Dhan Yojna", has helped in new bank account enrolment of over 450 Mn beneficiaries for direct benefits transfer and accessibility to a host of financial services applications such as remittances, credit, insurance, and pensions enabling FinTech players to build technology products to penetrate the large consumer-base in India.
- **Financial Literacy:** Some of the recent initiatives towards improving financial literacy in India include setting up the National Centre for Financial Education and implementation of the Centre for Financial Literacy project by the RBI. These steps aim to promote financial education across India for all sections of the population.
- **E-RUPI:** e-RUPI is a person & purpose specific digital payments instrument to allow for contactless & cashless payment solutions and shall play an important role in making the Direct Benefits

Transfer more seamless & effective. The solution is being adopted for cashless payments for Covid-19 vaccination.

- **India Stack:** IndiaStack is a set of APIs that allows governments, businesses, startups and developers to utilise a unique digital Infrastructure to solve India's hard problems towards presence-less, paperless, and cashless service delivery. The India Stack has been the driving force behind the accelerated evolution of Fintechs. It is one of the most important digital initiatives undertaken globally, aimed at putting up a public digital infrastructure based on open APIs to promote public and private digital initiatives and has played a catalytic role in India's digital foundation and evolution.

Growth drivers

- **Volume of Funds:** High volume of funding from venture capital, private equity and institutional investors driving innovation in the sector
- **India stack:** Open API platforms, i.e., Aadhar, UPI, Bharat Bill Payments, GSTN
- **Technological Innovation:** Implementation of new business models driven by technologies such as Artificial Intelligence and Machine Learning
- **Increasing internet & smartphone penetration**

  India already has the 2nd highest number of smartphone users globally and is the 2nd largest Internet user market. ~1 Bn Internet Users by 2026. The number of households with internet connections with an increase by 46%, reaching 233 Mn households by 2026, compared to 160 Mn in 2021.

- **Favourable Demographics**

  68% of India's population is young and 55% of its population is in the age group of 20-59 (working population) in the year 2020 and is estimated to reach 56% of the total population by 2025. By 2030, India will add 140 Mn middle-income and 21 Mn high-income households which will drive the demand and growth of Indian FinTech space.

- **Financial Inclusion Initiatives**

  Financial inclusion programmes such as PMJDY, DAY-NRLM, Direct Benefit Transfer, Atal Pension Yojana among others have accelerated the digital revolution and brought more citizens, especially in rural areas, within the ambit of digital financial services.

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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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About APAS

Ashvin Parekh Advisory Services LLP (APAS) was founded in June 2013 and is headquartered in Mumbai, the finance capital of India. APAS is a leading financial advisory firm, providing a wide range of consulting services to a diversified client base, including financial conglomerates, business houses, banking companies, life, general and health insurers, financial institutions, regulators and the government.

Our focus is primarily on business development through advisory services in strategy, processes and people areas. In strategy areas, we focus on diversification, strategic alliances, mergers and acquisitions and business restructuring. We also offer services in the areas of transformation and value creation. In the operation strategy areas, we also render services in product and product design, intermediation and distribution areas, business risk management and governance aspects of the management.

In keeping with the services we offer, we have experts in business and transaction advisory areas. We have teams drawn from the industry to offer services to our clients in business and operation areas in the financial services space.

We have teams focusing on the new banking reforms including the formation of the new banking companies arising out of the new licenses. We offer operational support in the areas of financial inclusion, holding company structures and project management services. We also have focus on the new reforms in the areas of subsidiarisation of foreign banks. In addition, we also conduct high level diagnostic studies for public sector and private sector banks.

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