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The winds of change Trends shaping India's FinTech sector

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Naveen Surya Chairman, Fintech Convergence Council & Chairman Emeritus PCI

As per a recent CBINSIGHTS report the FinTech sector has produced largest number of Unicorns so far with numbers reaching to 162 followed by 139 in Internet Software and Services category of the total 800+ Unicorns. There are more than 10 Hectocorns (companies with 100 billion+ valuation) and a total of 32 Decacorns (10 billon + valuation) across the globe. The sector is moving towards adding at least 2 more Hectocorns in next few months.

The Indian FinTech industry has been bristling with activity over the past few years. Albeit it has gained additional momentum in 2021. We keep reading about new fundraising or big bang product launches almost every other day. While the pandemic may have impacted top line in the initial months, it has also provided a fillip to digitization and in turn rising adoption of FinTech products and solutions. India has produced the largest number of Unicorns in the FinTech sector in the last year taking the overall count to about 12 of the total 65+ unicorns in India almost like eCommerce Unicorn companies in India. With the growth in the sector it is all set to become the largest category to produce Unicorns as well as attracting foreign direct investments. of these Unicorns at least 2 companies are set to become Decacorns in the next 12 months.

The Indian FinTech market is a unique microcosm of entrepreneurs, incumbent institutions, BigTech firms and regulatory players all working together in some shape or form to contribute to its growth. We are witnessing that segments like WealthTech and InsurTech, which did not see much traction in the past decade are coming into the limelight with multiple big-name startups seeking various licenses from regulators. There are upstart segments like cryptocurrency and blockchain which are cautiously scaling while they await regulatory certainty. While segments like payments are still being disrupted, with no slowdown in either fundraising or revenue growth. A lot of entrepreneurs are also beckoning their FinTech startups towards maturity by applying for IPOs.

India also is uniquely positioned with continued growth and global leadership in FinTech with 1st generation entrepreneurs driving very high success in the sector, and most large domestic industry groups also active in the sector besides all the BigTechs. India probably is the only geography where many highly scaled players of all categories exist in the sector yet co-existing and growing rapidly and creating value. This is probably unique to India as testimony of potential growth and depth of the sector.

It is also interesting to note that while start-up funding eco-system for FinTechs has evolved and growing, there also has been very active M&A play and now multiple large Fintech entities planning listing in Indian stock markets, which is a very notable change over the last few years. This may also make India a very active listed market for FinTechs.

Big banks and technology companies are also eagerly partnering with FinTech startups or looking to launch their own digital offerings in financial services. While the government and regulators in the country are working on enabling regulations or launching public digital infrastructure to provide growth pipelines for the FinTech industry. Through this report we seek to bring out some of these success stories and share our vision for how the industry can scale to greater heights. We hope you find it a good read.

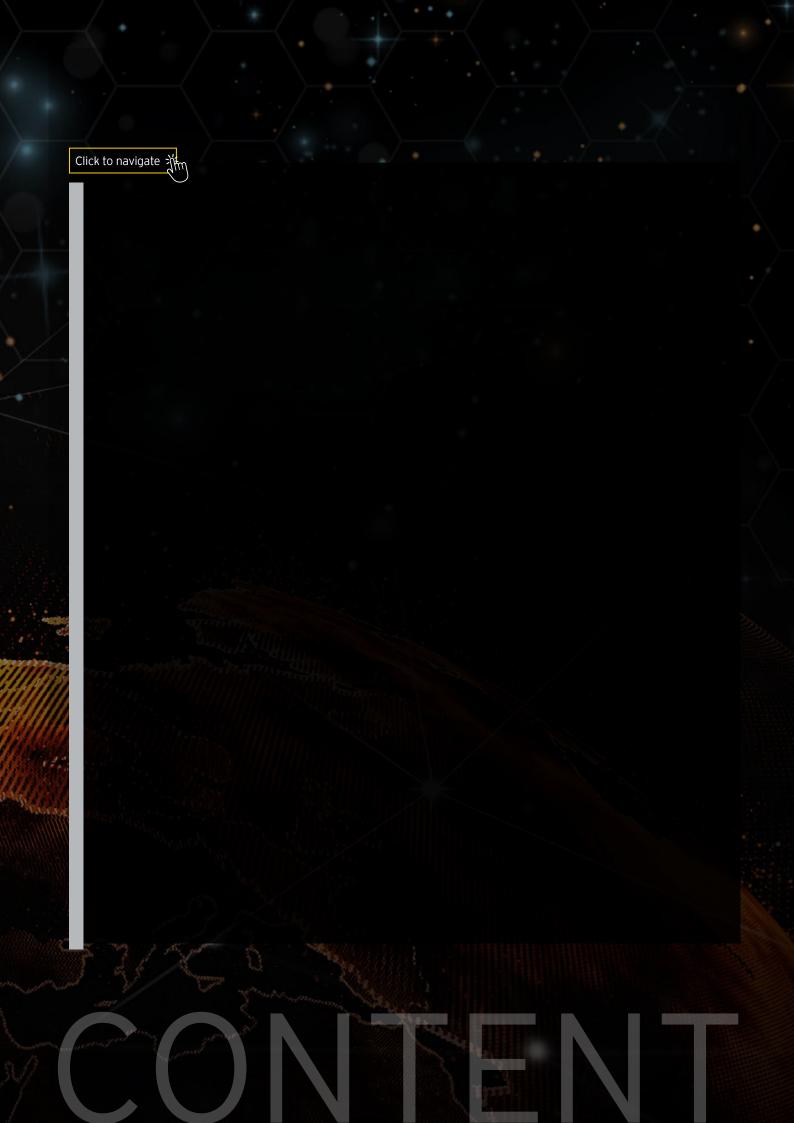


Nilesh Naker Financial Services Technology Partner EY India

The Financial Services industry has been disrupted by FinTech remarkably in the past decade. We are witnessing a transition of FinTech from being a flash in the pan to becoming mainstream. The winds of change in this industry are being driven by advancements in technologies like automation, data science, AI/ML, smartphones and telecommunication which are ushering in a new era in of FinTech players who are on one hand usurping business from traditional players while also collaborating with them to expand the market in other areas. On the other hand, the pandemic while being transitorily disruptive, has provided a fillip towards digitalization of financial services. Consumers are eager to adopt digital, contactless, and remote services.

The insights in this report are based on our experiences of looking closely at the industry over the past few years and working with incumbents as well as new players on their business and tech strategy. The report captures funding, business models and consumer trends across different FinTech segments to craft a holistic view of where we think the industry is headed. In the coming future we can expect technological advancements to accelerate the growth of FinTech even faster and transform the way products and services are manufactured, delivered, and consumed in the financial domain. We hope you find this report insightful.





Executive Summary

In the past decade the Financial Technology (FinTech) industry globally has moved on from being the new kid in the block to becoming the norm in financial services. The tailwinds showcase that lines between technology and business are ever-blurring, and startups as well as established financial institutions have realized the importance of technology innovation and are leveraging it to build novel products and solutions for their customers.

India has been one of the pioneers of this trend with 2000+ FinTech startups and more than 20 billion dollars' worth of reported investments. A large talent pool, favorable regulatory climate, growing customer base, access to funding and public digital infrastructure to ride on among other things have aided the rapid growth of startups in the industry. Despite a slowdown in economic activity due to the pandemic in 2020, the FinTech industry continued to showcase growth on various parameters and is poised to report accelerated growth in funding, users, and revenues in the coming year.

Perhaps the best example which demonstrates the growth of the FinTech industry is the ability of consumers to rely entirely on FinTech services to fulfill all their financial needs through digital, contactless and remote channels. This was not imaginable about a decade ago when most banking and financial services required at least a leg or two of physical / in person interfaces for fulfillment. As we look towards the future, we have identified ten trends that will continue to shape the industry in the near future. Payments and lending are seeing immense traction and may see multiple new age businesses and business models becoming mainstream. Insurance and wealth management are getting reimagined through digital and bite-sized models. MSMEs are a key area of focus, as the sector has been underserved by traditional financial companies and is ripe for digitization. API, open and embedding banking trends can see startups, BigTech companies and financial institutions come together to offer consumers more convenient and competitive suite of services. There is a race among corporate giants to develop India's first truly comprehensive financial services SuperApp. Lastly, industry players big and small are trying to figure out novel business models like BNPL (Buy Now Pay Later).

Each of these headwinds signal a paradigm shift in the way financial services and products are being manufactured, delivered to, and consumed by users in India. Adoption of new technology not just by building own IP, but through leveraging of partnerships with other FinTech ecosystem stakeholders has become an imperative for growth for all types of players. The Indian FinTech story has been unique where FinTechs, Financial Institutions, regulators and governments have come together to chart its journey. More such collaboration through technology and policy rails is needed to achieve greater highs and sustained growth.





FinTech landscape in India

TThe growth of FinTech (Financial Technology) has taken centerstage in the global financial services industry in the last decade. Enablers, such as exponentially growing computing power, widespread internet penetration, and increased internet speed and coverage, have allowed FinTech solutions and startups to penetrate the global markets deeply, widely and rapidly. In addition, increased demand for inclusive financial services, customer expectations, and the business need to reduce costs while providing faster, safer, and more reliable services underpin the rise and growth of FinTechs. Real-time payments, faster disbursal of loans, investment advisory, transparent insurance advisory and distribution, peerto-peer lending, and several other services that traditionally required human capital are now rapidly becoming a part of the digital-native FinTech landscape. Sleek and efficient offerings from FinTechs across value chains have challenged the status quo of the financial services industry for good. While the exact number of FinTech players in the world would be anybody's guess, one thing the industry would agree on unanimously is India's significant contribution in adding startup numbers, funding values, userbase, and volumes of transactions to the global FinTech landscape.

India is one of the largest FinTech markets globally

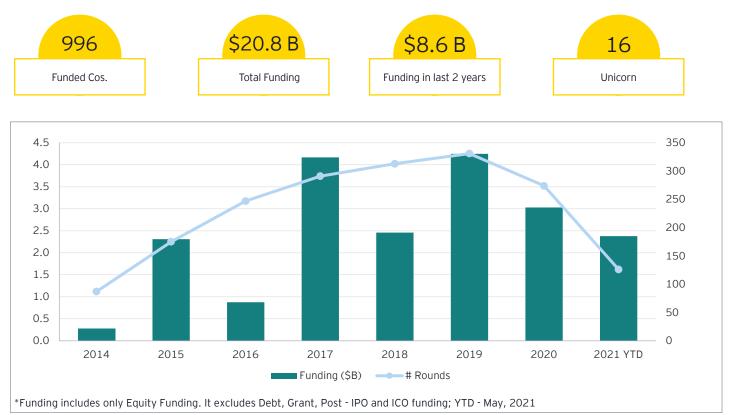
In line with global trends, India's FinTech ecosystem has seen tremendous growth over the last few years, making it one of the largest and fastest-growing FinTech markets. According to S&P Global Market Intelligence¹, despite the pandemic Asia-Pacific managed a steady inflow of investments. It saw a 33% decline in FinTech investments in 2020 to \$6.8 billion from \$7.3 billion in 2019. On those lines, the number of deals in 2020 declined by 18% to 427 transactions. Conversely, in 2019, total FinTech funding in the region had two major deals of JD Technology (\$1.9 billion) and One97 Communications (Paytm, \$1.0 billion). Barring these, the comparative decline in 2020 was a marginal 6%.

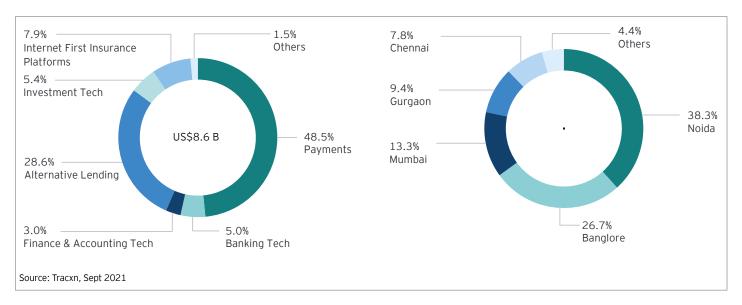
In the last quarter of 2020 (4Q20)¹, APAC FinTech deals volume and value bounced back to the highest-level for the year at \$3.14 billion across 113 deals (excluding Grab and GoJek), the highest quarterly funding activity for the year, pointing to a bright outlook for the fundraising environment in 2021. In 2020, India topped among Asia-Pacific (APAC) countries in FinTech investment1 121 deals amid COVID-19 led disruptions in the funding ecosystem. A large portion of the country's deal value came from PhonePe's \$788 million in aggregate fundraising over three transactions. Notably, investments into the FinTech landscape of India were almost double that of China.

According to the Tracxn database, the total volume of FinTech funding till June 2021 has been \$20.8 billion, with 36% of the funds raised in the last two years. 2020 saw a dip in funding by 26.7% to US\$ 3.0 billion. A similar trend was observed in the number of new FinTech startups as well that dipped by 20%. Payments remain the biggest funding segment (48% of all funded startups), followed by alternate lending (28%).

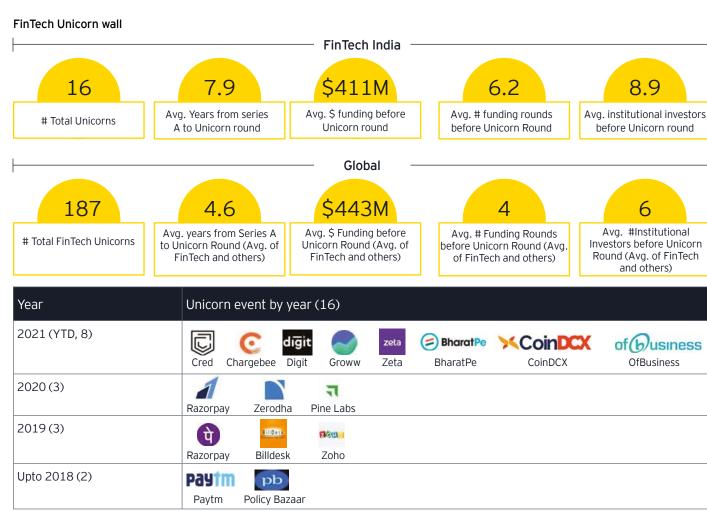


Key stats, funding trend, # of companies, and top business model for the Indian FinTech sector





India has produced 16 FinTech unicorns as of June 2021. A 2020 NASSCOM report² had predicted that India would have 50 tech unicorns by the end of 2021. By Jun 2021, India had already surpassed that number, and in this prestigious pool of startups, every fourth startup is a FinTech.



Source: Tracxn, Sept 2021

Soonicorn Club

	Com	ipany	
MobiKwik	S CoinSwitch (2017, Bangalore, \$41.5M)	Innoviti	Niyo
(2009, Gurgaon, \$249M)		(2008, Bangalore, \$41.8M)	(2015, Bangalore, \$49.4M)
KhataBook	Slice	Mswipe	Vivriti Capital
(2018, Bangalore, \$87.0M)	(2015, Bangalore, \$48.0M)	(2011, Mumbai, \$105M)	(2017, Chennai, \$108M)
Cleartax	Lendingkart	8402 Navi (2018, Bangalore, \$402M)	SMEcorner
(2011, Bangalore, \$65.4M)	(2014, Ahmedabad, \$231M)		(2014, Mumbai, \$45.1M)
(2015, Bangalore, \$110M)	RenewBuy (2014, Gurgaon, \$79.7M)	E FlexiLoans (2015, Mumbai, \$68.0M)	(2014, Gurgaon, \$90.0M)
Acko	ZestMoney	NG (2013, Mumbai, \$95.1M)	Auxilo
(2016, Mumbai, \$229M)	(2015, Bangalore, \$68.4M)		(2017, Mumbai, \$50.8M)
KreditBee	Turtlemint	Coverfox	AGS Transact Technology
(2018, Bangalore, \$204M)	(2015, Mumbai, \$130M)	(2013, Mumbai, \$55.1M)	(2002, Mumbai, \$82.9M)
MoneyTap	InCred	Capital Float	FSS
(2015, Bangalore, \$40.3M)	(2016, Mumbai, \$216M)	(2013, Bangalore, \$154M)	(1991, Chennai, \$127M)
Kissht	FamPay	Ezetap	Dhani Pay
(2015, Mumbai, \$42.9M)	(2019, Bangalore, \$47.8M)	(2011, Bangalore, \$56.1M)	(2010, Mumbai, \$26.8M)
Cashfree	oneScore	Perfios	Stashfin
(2015, Bangalore, \$42.0M)	(2019, Pune, \$39.7M)	(2007, Bangalore, \$60.8M)	(2016, Delhi, \$72.5M)
OkCredit	BankBazaar	Drip Capital	Fino Paytech
(2017, Bangalore, \$84.9M)	(2008, Chennai, \$117M)	(2014, Mumbai, \$45.1M)	(2006, Mumbai, \$165M)
Avail Finance	Oxigen	CCAvenue	Jai Kisan
(2017, Bangalore, \$37.8M)	(2004, Gurgaon, \$51.1M)	(2001, Mumbai, \$9.0M)	(2017, Mumbai, \$37.5M)
Finnov (2017, Gurgaon, \$145M)			

Apart from private funding the larger players in the ecosystem are also moving on to raising public rounds. Many IPOs in India are on the cards as a slew of mature FinTechs have filed or are planning to file for a public listing. This truly represents a coming of age moment for the industry which was fueled primarily through venture capital flows in the past decade. Now that the avenues for public participation in the growth of the FinTech industry are opening up, it might see more traction and sustainable growth moving forward. India is a unique market where customers do not like to pay for banking services, yet the opportunity to creatively find revenue streams is very alluring for FinTechs. This report analyses each segment in-depth to understand the areas of growth, opportunity, and challenges. Below is an indicative illustration of the wide and diversified FinTech landscape in India:

Figure 6: India FinTech Market Map

	PayTech		LendTech		Digital Banking		InsurTech		WealthTech
	Consumer		Consumer		Digital subsidiary of bank	s	Insurance Comparison		Expense Management
	TPAP		BNPL		Retail Neobanks		Platform		Robo Advisors
Pre	Paid Card / Wallet		Personal loan	U	SME Neobanks		Digital Insurers		Discount Brokers
	Bill Payment		Salary loan 🖁	ariso			Electronics Insurance	- 1	Mutual Fund Investment
Q	R Code payment	payments ances	Salary loan Brite Gold loan Auto loan Free Auto loan Free	Loan comparison			Employee Insurance		Platform
	ment Aggregator	aym	Auto Ioan						US Equities Investment
Pdy		sk på litta	Education loan	LOa					Research Platforms
	POS	II stack payme Remittances	P2P Lending						Alternative Investment Platform
	Business	РЧ	SME						White-label Robo Advisor
	Corporate card								
	B2B Payment		Corporate card Fixed term loans Trade Finance	-					
I	nvoice Payment		Trade Finance						
TechFin	Payment Gatewa Card networks API/ White-label solutions Payment Security		Collections Management Credit Bureau Alternate Credit Scoring Lending-as-a-Service LMS and LOS		Conversational Platforms Account Aggregators API Providers and Aggregators Banks with Open APIs Banking as a Service Core Banking	5	Claims Management Sales Platform Underwriting Risk Management Insurance Infra API Insurance Product Configurator Policy Admin System		White-label Robo Advisor Portfolio Mgmt Suite CapTable Management
					Finance FinTech				
E	Accounting nterprise SMB	Micro	Procure to Pay		Quote to Cash		Taxation		Reconciliation
					RegTech				
	KYC / Digital Onboarding		Fraud Detection		AML		Banking Compliance and I	Risk	Management solutions

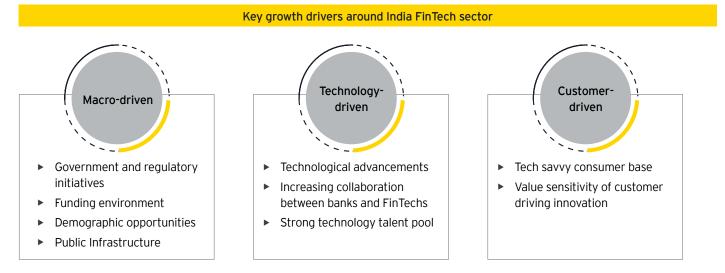
Source: EY Analysis

1 Key drivers

India is amongst the fastest growing FinTech markets in the world, where structural enablers to set up and incubate FinTech companies have come together robustly. In EY's 2019 study³, India ranked the second highest globally in FinTech adoption after China. As the FinTech ecosystem matures, the top growth

strategies include expanding into new markets, technology investments, improving operating efficiencies, and ecosystem partnerships. India's evolution as a progressive FinTech nation is driven by the following factors:

Figure 7: The Indian FinTech sector growth is driven by several factors



Macro-driven

The growth of the Indian FinTech market is supported by several macroeconomic factors such as India's booming economic growth with rising disposable income, large unbanked population, government and regulatory initiatives, expanding young adult population, improving internet access and smartphone penetration, and a fast-growing e-commerce marketplace. Some of the other macro factors include:

Government and regulatory initiatives

The government and regulators are one of the key catalysts for the growth of the FinTech sector in India. Few of the government programs that have played a key role in propping up FinTech are; Jan Dhan Yojana, Startup India, license for payments banks, Digital India program, recognition of P2P lenders as NBFCs, regulatory sandboxes by RBI, and IRDAI for FinTechs, and National Common Mobility Card (NCMC). The robust public digital infrastructure (Aadhar, UPI, account aggregation, GST, OCEN etc.) and related supportive regulatory environment has helped power India's FinTech innovations. Regulators (RBI, IRDAI, and SEBI) have undertaken numerous measures to ensure increased accountability and the uninterrupted availability of secure and affordable digital financial systems.

Funding environment

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For FinTech companies to grow, the availability of Funding through VC and PE firms is imperative. In 2020, India bagged over US\$2 billion across 121 FinTech deals. Payments and lending dominate the current funding volumes. In addition, Wealth and InsurTech players are rapidly evolving from the nascent stages to promising critical mass adoption that creates investment opportunities for investors.

Demographic opportunities

As of March 2021, there were 1,180⁴ million wireless subscribers in India, according to the Telecom Regulatory Authority of India (TRAI). It comprises 645 million urban and 535 million rural subscribers (TRAI, 2021). By 2030, India will add 140 million middle-income and 21 million high-income households, driving the demand and growth for the Indian FinTech space⁵⁶. Beyond this conventional target audience, India offers massive opportunities for FinTech players in in tier-II and tier-III towns. Notably, India ranked 2nd in EY's Global FinTech Adoption Index 2019 with an adoption rate of 87 percent.

Public Infrastructure

India is home to a variety of public digital infrastructure that aims to bring together various players and provide a launchpad for digital businesses. Among the first ones, we have Aadhaar which has enabled quick and hassle-free KYC processing. Then we have UPI which is a one-of-a-kind account to account real time payment mechanism in the world. There are many upcoming initiatives like the Account Aggregator framework which aims to make it easy for financial institutions to share customer information, and the OCEN (Open Credit Enablement Network) which aims to create an open lending marketplace for the country.

Each of these initiatives have opened various doors that accelerate go to market for FinTech startups and incumbents, leaving players with additional firepower to fuel their core product development.

Technology-driven

The overall financial services market is undergoing a major transformation leveraging new and cutting-edge technologies such as blockchain, AI, ML, and cloud infrastructures. Three key technology factors driving FinTechs' growth include the following:

Technological advancements

After smartphones, perhaps the biggest harbinger of the times to come is the swift adoption of AI and ML in the FinTech space. Services like payments, claims processing, and savings marketplaces are being migrated to AI-driven processes to improve efficiency. For example, in 2018, one of India's biggest payment FinTech players launched an AI cloud5, offering a suite of business-focused apps. Another example of the important role of AI is in the form of chatbots that played a crucial role in customer service amid lockdowns and closure of physical locations. In addition, other factors that are playing an important role in the transformation include:

- Biometric identity verification technologies, such as voice, face recognition, and iris scanning, give customers a sense of security
- Policy support and industry adoption of modern infrastructures and emerging technologies, such as e-KYC, video KYC, IoT, AI, digital signatures, account aggregation infrastructures
- Big Data and analytics adoption are enabling personalized products and services, and driving operational cost efficiencies that give rise to differentiated business models
- Adoption of Intelligent Robotic process Automation (IRPA) by industry players driving cost-efficiencies

2

3

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Increasing collaboration between banks and FinTechs

Collaboration between financial services players (primarily banks) and FinTech startups is the new norm. Banks and insurers are now joining forces with FinTech startups to tap underserved segments, upgrade their existing systems, and enable digital offerings to deliver a better experience for consumers. Similarly, by leveraging APIs, FinTechs have encouraged collaboration with multiple financial service providers and enabled them to deliver services through an open architecture. Now we see this relationship expanding to non-financial players as well.

A strong technology talent pool

India's strong STEM (Science, Technology, Engineering, and Mathematics) orientation, world-class technology and management institutes, and competitive human resources cost have helped create a strong tech talent pool that FinTechs can leverage. According to a UNESCO study⁶, India ranks among the top countries producing university graduates, and around 32% of all students in India pick STEM.

Customer-driven

The financial services industry has evolved from transaction-based services to customer-centric service offerings. FinTechs' ability to create tailored and niche-focused solutions from scratch provides them an edge in the industry. The financial services industry recognizes the combined business impact of digital transformation and customer experience focus, which explains why some of the oldest banking institutions in India and digital-native FinTech companies work alongside each other to offer the best digital customer experience. Some of the customer factors include:

Tech savvy consumer base

Smartphone and internet penetration in India has been burgeoning in the past decade. Combined with a large young millennial population has helped create a consumer base that is willing to adopt mobile-first products and services. Indian consumers have also leapfrogged products like cards and wire transfers which are prevalent in developed economies. For a very large percentage of Indians, their first banking experiences are in the smartphone era. This has helped FinTech adoption to a great extent as there is no legacy experience that needs changing. Onboarding new to banking customers is an easier task than getting customers to migrate from traditional servicing models.

Value sensitivity driving innovation

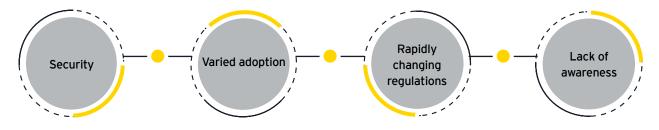
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Indian consumers are notoriously value conscious and expect banking services to be provided at no or low cost. Most FinTech companies have a cost advantage over incumbents. They leverage technology to seamlessly onboard, leading to lower customer acquisition, customer servicing, and distribution costs. For example, payment banks leverage technology to expand their customer base while limiting physical presence. The benefits of leaner operating models are passed on to customers in cashback, better interest rates, or other offers, which further creates customer advocacy.

2 Major challenges

Though the FinTech ecosystem has grown by leaps and bounds in the country, it has faced its share of hiccups and challenges. Some of the key issues and challenges the industry faces with respect to past and future growth is tabulated below.

Figure 7: Some of the major challenges in the Indian FinTech space include



Some of the major challenges include:

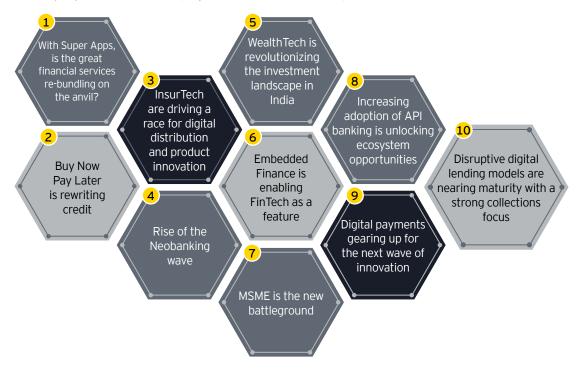
- Data security and privacy risk Data leaks, platform downtimes, and information theft has become quite rampant in the financial services space. Data is the backbone of FinTechs. Developing a strong mechanism to protect data is of paramount importance, and players will have to invest deeply in mechanisms to control this risk and comply with regulatory requirements towards data security.
- Varied adoption It's not easy for every type of business to adopt FinTech. It is especially complicated for an economy like that of India's which is dominated by MSMEs that largely sit on the fence of digital adoption.
- Rapidly changing regulations India needs to get to FinTech regulatory maturity fast. Regulatory compliance comes with a cost, and frequent changes do not help to offer

business confidence. A few regulations, such as regulations for investment exits, cryptocurrency, payment regulations, data, infrastructure security, and consumer protection, are still evolving. Conversely, we also recognize that FinTech is a dynamic industry, and real-time changes in the regulatory scenario are much needed to adjust with the dynamism. For regulators, it is imperative to find the right balance of making progressive changes while avoiding regulatory overload for the young industry.

Lack of financial literacy and awareness - More than 70% population⁷ of India lives in the villages, and the use of these FinTech platforms is largely concentrated in the urban segment. This sector needs to make its way to smaller cities and towns with and through awareness and financial literacy.

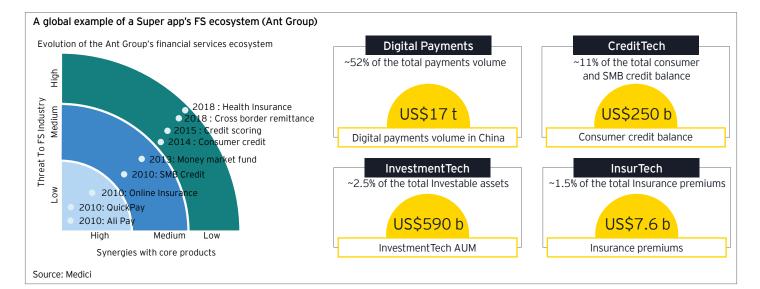


Key trends: winds of change that are shaping the sector FinTech, globally, has moved on from being a term used to describe just FinTech startups to a ubiquitous expression for technologybased innovation in financial services. We increasingly see more collaboration and innovation driven by incumbent banks, prominent technology players, and even regulatory organizations in the market. This is especially true for the Indian FS market, as is evident from a few key trends we have tracked. We have combined our secondary research and advisory capabilities with select industry veteran interactions to identify key trends that are shaping the Indian FinTech landscape:



With Super apps, is the great financial services re-bundling on the anvil?

Globally, the initial wave of FinTech startups' value proposition was focused on becoming the best of breed in one particular segment of financial services, be it lending, payments, wealth management or insurance. A few years ago, FinTechs were predicted to disrupt the financial services industry by unbundling traditional banking, insurance, and wealth management services. As a result, we saw pureplay payment companies, credit players, and wealth solution startups with great UI and UX propositions trying to become best-in-class. However, as FinTechs matured with a strong user base and product-market fit, they identified more opportunities to diversify revenue streams, giving rise to Super apps. The term 'Super app' was coined by Blackberry's founder Mike Lazaridis back in 2010. Super apps bring a diversified set of services under one umbrella that can facilitate multiple daily use-cases. While China has been a pioneer with WeChat, Baidu, Meituan, etc., South-East Asia (SEA) is catching up with super apps such as Grab, Gojek, ZaloPay, MoMo, and Fave, originating from different countries in SEA. Other economies have seen the rise of few Super Apps, such as Japan (LINE), South Korea (KakaoTalk), the Middle East (Careem), Bangladesh (Shohoz, Pathao), Russia (Yandex Go), Latin America (Rappi), Africa (Tingg) and USA (Amazon, Google, Whatsapp).



With increasing levels of digitization, greater affordability of smartphones, and a COVID-induced preference for digital services, super apps are finding greater acceptance across markets. The value of a super app resides in its convenience and user experience. For super apps, it is important to have a core offering within the high-frequency platform and engages customers with minimum friction.

It is worth noting that BigTech, such as Google, Amazon, and WhatsApp, have tweaked their offerings to provide tailored services in India (not offered in most other parts of the world). These players are slowly building the ecosystem of services that are ingredients to make a potential Super app. On the other hand, the FinTechs' FS re-bundling phenomenon is driven by investors' push for profitability or lucrative exits, access to supporting infrastructure technologies, and the opportunity to monetize the data and user base by cross-selling other financial products and services. For example, Paytm started as a payments player, and PolicyBazaar began as an insurance aggregator, and both later diversified into multiple other FS and non-FS areas. There is a long list of such players and some of these prominent examples are depicted in the following graphic:

FinTech players	Core service	Expanding in	new segment:	S			
Paytm		_	Investing	Equity broking and Insurance	VAS, Off-line merchant tie-ups	Gaming, travel, entertainment	Office merchant lending
Phonepe	Payments/ Wallets	E-commerce	(MF/Gold)	Insurance	Off-line merchant tie-ups	On-line merchant tie-ups	
MobiKwik		Consumer	Investing		Payment gateway		
Google Pay			(MF/Gold)	Merchant lending			
Pine Labs			Rewards and loyalty	Consumer financing (BNPL)	Platform for business bank (neobank)	Merchant lending	
MSwipe	POS, Payments Gateway	VAS for merchants	Pay-by-link and micro websites	Consumer financing (EMI)	Merchant lending		
Razorpay			Pay-by-link and ePOS	Digital platform for business (neobank)			
Yono		New customer acquisition	Pre-approved PL	Insurance	E-commerce		
Khatabook		Payments	Merchant lending				
Krazybee	Open banking/ Digital banking	BNPL	Co-lending platform				
LendingKart		Co-lending					
Capital Float		BNPL					
Zest Money							
Simpl		Loyalty program					
PolicyBazaar	InsurTech	Lending	Investing (MF/FDs)				
Zerodha	WealthTech	MF Investing	Loan against assets				
Smallcase	weattineell	Advisory platforms	Trading gateway				

Source: Credit Suisse: 100 Unicorns - India's changing corporate landscape

Paytm is also a good Indian example of FinTech's route to becoming a Super app. Paytm brought in FS product and services, including payment, Ioan, investment, and insurance on the same platform that also integrated e-commerce, VAS for merchants, and consumer internet services (such as gaming and entertainment) in one app.



Conversely, most of the global Super app examples have been non-FS consumer tech and e-commerce players embedding diversified financial product and service offerings to become a Super app. Not just international conglomerates and local startups, but Indian conglomerates are strategically making inroads to this opportunity. They are working on building their own Super app ecosystems by consolidating their various business opportunities under one umbrella. For example, Tata Digital and Flipkart are prominent non-FS names with a wide range of service offerings necessary in the Super app race.

One App for All Your Needs

Source: Paytm website

	Tata	Jio	Flipkart
FinTech		Jio Pay	PhonePe
Omni channel retail/ e-commerce		AJIO Reliance Reliance Junels Reliance Matters	Flipkart 🙀 🕅 Bewakoof 🔞 PhonePe
E-grocery	Siri big Quik basket	JioMart BETA	PhonePe Supermark Flipkart 🙀 Siri Con
Travel and hospitality	TAĴ VISLARA VIVANTA CINCER		PhonePe make W trip OYO
Telecom, Internet, DTH	TATA Sky		
	, other service offerings that mostly cu I, Logistics, OTT streaming platforms (

Source: Yourstory

Next steps

FinTech startups are casting a wider net through new product lines and expansion to new geographies, which translates into the re-bundling of financial services. Collaboration with other FinTech and financial services players or using APIs offerings are other ways to quickly test and build new offerings. It will be interesting to see if these start-ups would be able to build their own ecosystems to serve consumers or will mostly get consumed into larger conglomerate ecosystems, such as Tata or Amazon. However, it is essential to highlight that not all FinTech players are focused on re-bundling, nor is it suitable for every player because unfocused diversification is not always helpful. For FinTechs to compete, it is imperative to focus on becoming a single point for a consumer to get everything around financial services. FinTechs need to keep infrastructure modular and open for potential partner integrations such as, APIs and core cloud infrastructure. They also need to identify and engage with FS ecosystem partners beyond the top 3-4 key players that everyone is trying to partner with. Also, if aspirations are to compete with Ant Group-like players in the global arena that targets both B2C and B2B segments, Indian players need to draft a long-term product development strategy, while building for the world.

Interview with Rana Ashutosh Kumar Singh, DMD and CDO at SBI Yono

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Shri Rana Ashutosh Kumar Singh, Deputy Managing Director (Strategy) & Chief Digital Officer, State Bank of India, joined the Bank as a Probationary Officer. He has 30 years of experience with deep domain expertise, extensive knowledge and leadership experience in retail banking, credit, human resources and international banking and has served various positions at different geographical locations in the bank.

In his current role as the DMD (S) & CDtO, his repertoire of skills includes- digital transformation, digital and transaction banking solutions, Government business relationships, strategy and business development.

	There has been a push globally by many tech giants as
2	well as startups to create 'Super-Apps' as users have
	been trying to scale down the number of apps they use
	Do you think this trend is true for the Indian market as
	well?

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A super app is defined as essentially a single platform to serve a wide range of virtual product and services. It offers one app, one sign-in, one user experience for virtually any product or service a customer may want or need. In India, platforms like Reliance Jio, Flipkart-Phone Pe, Paytm, Tata Super app, YONO may be considered as the closest initiatives to building a potential super app but a true sophisticated super app like WeChat (in China) is yet to be unveiled in India. Our YONO platform has also been envisaged as a first of its kind super banking application which caters to the banking as well as lifestyle needs of our customers in a seamless omni-channel manner and has all the foundational elements of a super app i.e. a Digital Bank (for seamless and intuitive banking services), a Financial Superstore (for a range of financial solutions from Mutual funds to Investments and insurance products from Bank's JV partners) and an online marketplace (far fulfilment of lifestyle needs in collaboration with 100 + merchant partners). YONO also offers YONO Krishi for our farmers offering simplified credit (KGC ReView/Agri Gold Loans), advisory / market intelligence related services (Mitra) as well as market linkage through Online Market Place (Mandi).

On the consumer side as well as app developers, what are the main drivers behind this trend?

The main drivers behind the Super App trend are: All-in-one service portal: The super apps are made to use for daily purposes from planning your day to movie tickets, payments, cab booking, all third-party activities are under one roof. A majority of the population are using online services for their daily use now and when they find an application giving them all in one service with protecting their privacy, well, no other reason is needed for its growth.

Getting Mobile Experience: Earlier there was very limited space for downloading apps on mobile and having different apps for a different purpose was not in trend. So, one app proving all the services would gain success, which happen ed in the case of super apps.

Common Market: Market homogeneity allows firms to operate in several nations and provide unified services. As a result, when super apps were released, the need for the services they provided soon spread throughout the region, leading to growth in popularity of super apps.

Unbanked Population: In China, for example, there are a few spots where you can pay with a credit card, but all businesses accept payments through WeChat and Alipay. This emerges as another major reason for the growth of Super App.

Regulatory and Government support: Any government would prefer a method to connect with their vast population digitally. Well, super apps featuring multiple third-party's activities and services was one such way to do that. Once an app is recognized by regulators/ government, it automatically becomes popular and sees greater usage by the public.

- What are the main building blocks for a successful Super-Q App according to you? We have mainly seen payments + ecommerce, or messaging + payments as a starting step. What other types of services do you think should be part of a product portfolio to develop a Super-App?
 - The main building blocks for a successful Super App are clear identification of requirements, clarity of ideas as to the end objectives of the super app, a perfect conceptualization, a deep understanding of the end customer and their behavior, capability to integrate with multiple system through micro services, identification and selection of technology partners, and an agile development methodology for quick time to market. Developing ecosystems and platforms (in collaboration with FinTechs and Marketplace partners) based on Apples/micro services, data and developing analytics and Al capabilities to offer a variety of finance products and services in a seamless manner is the core of any Super

app. In addition, the key services which could be a part of the offerings of a Super App are health care services, insurance, consumer finance, account aggregator services, weather information, and smart controls like managing home and consumer electronics and travel.

All-encompassing Super-Apps so far have been seen successfully deployed in developing economies in general and China in particular. Why do you think this trend is not as prevalent in developed markets like EU or US?

It would be easy to categorize super apps as a China phenomenon, but the reality is that they are emerging in almost every market around the world and are coming from unconventional places. In South East Asia, for example, two super apps have emerged from the leading ride-share platforms, Go-Jek and Grab. Go-jek is a Super App for ordering food, commuting, digital payments, shopping, hyper-local delivery, and a dozen other products.

An evolution in consumer preferences is also driving the shift towards super apps in the West. Indeed, after nearly a decade of fragmentation and unbundling of services in their life's consumers are starting to revert towards rebounding.

Instead of having multiple apps for ordering food, ridesharing, and payment options, they want just one. Consumers may not be specifically demanding super apps, but they certainly want the convenience and simplicity that super apps can offer. Western markets like US and UK are also starting to move in a similar direction, albeit at a much slower pace by creating common infrastructure and offer them as a service to the super apps.



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What are some of the key challenges you foresee from a regulatory and technology standpoint for deployment of a Super App in India?

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The concept of a Super App is still an evolving one in India and regulatory landscape is yet to be fully firmed up:

From a banking institution's perspective, the key regulatory challenge is that, banks in India are still not allowed to offer some services which are not explicitly allowed as per the Banking Regulation Act.

For example, while we are permitted to offer an online

marketplace as a part of our banking platform to our customers, the same cannot be fully monetized as banks are not permitted to charge any affiliate or service fee from marketplace partners or merchants.

As regards technology, the major challenges include complex integration requirements in integrating a large number of services on a single platform especially as many banks have a legacy technology architecture and many of the new services and platforms use cloud intensive technologies.

In India, the availability of common infrastructure to build super app with minimum development/investment is also not available.

Q What is your strategy in this market? What type of users are you targeting and what services do you plan to offer them?

A The rise of super apps is yet one more indicator that the world of industry verticals is giving way to a world driven by consumer experiences.

In this environment, the value of a Super App will be measured by the value of their ecosystem/partnerships.

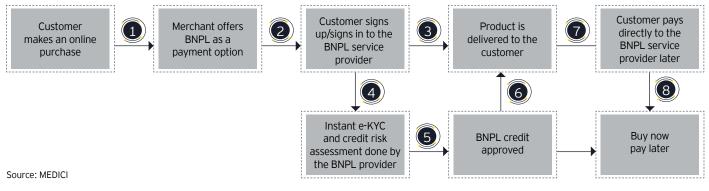
Our YONO platform has been based on our strategy of building a synergistic value ecosystem with a web of partnerships between our bank and non -banking players like merchant partners and Fintechs with an ultimate goal of delivering superior value to our customers. Our online marketplace (fulfilment of lifestyle needs of our customers) has collaboration with 100 + merchant partners.

We are also developing marketplace platforms for B2B and SME customers. Our proposed Bharatcraft portal will be a platform for multiple marketplaces to integrate and make their products available on this portal for SBI for individual customers.

Going forward, with evolving needs of our customers, we would be adding many more services and offerings on the YONO platform intended to enhance customer experience and convenience.

2 Buy Now Pay Later is rewriting credit

Buy now pay later (BNPL) is a short-term financing solution that allows customers to pay for their purchases at a future date, usually interest-free. BNPL offers frictionless credit during check-out as the key value proposition for consumers. Merchants are attracted to the value propositions of higher sales, improved cash flow, and reduced cart abandonment. Notably, BNPL sits on the cross-section of payments and lending product offerings because of the short-term and interest-free (for few weeks) payment-enabling characteristics.



There are primarily two models of BNPL that are dominant in the market, one is primarily driven by convenience and the other by enabling credit.

Two dominant models of BNPL				
Convenience Model	Credit Model			
► Smaller ticket size	 Larger ticket size 			
 15-day credit period 	 Credit period varies from 3, 4,6, 9, and 12-month EMIs 			
 Caters to low-risk customers, mostly Existing-to-credit 	 Caters to both Existing-to-Credit and New-To-Credit customers 			
 Merchant pays a percentage of transaction as fee to 	 Has two further sub-categories: 			
BNPL player	 Zero-interest EMIs: Merchant pays a percentage of transaction as 			
 Late fee charged to the consumer 	a fee to BNPL players			
	 With interest EMIs: Interest is charged to customer hence merchant pays no fees to BNPL players 			

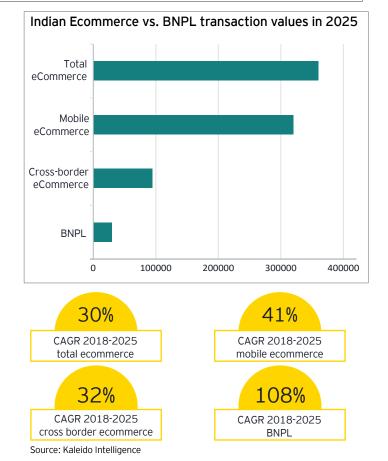
There are primarily two models of BNPL that are dominant in the market, one is primarily driven by convenience and the other by enabling credit.

According to Experian data, India's retail digital lending space is projected to reach \$350 billion by 2023. Digital lending players and new FinTech business models such as payday, SME lending, and unsecured retail and BNPL loans have a vital role to play in this growth. India's consumer credit market is projected to grow at a higher rate than many major global economies.

The Indian opportunity

The BNPL growth is a global phenomenon, but the India story presents an exceptional market opportunity. In the massive Indian population and middle-class context, the existing 60 million credit cards are not enough to address consumer credit demand. On the brighter side, the existing microloan concepts and rapidly growing FinTech adoption will make India the 2nd largest BNPL market globally by 2025.

According to Global Payments Report by Worldpay from FIS, BNPL is emerging as the fastest-growing e-commerce digital payment method in India, estimated to capture 9% of the total e-commerce market share by 2024.



There are primarily two models of BNPL that are dominant in the market, one is primarily driven by convenience and the other by enabling credit. According to Experian data, India's retail digital lending space is projected to reach \$350 billion by 2023. Digital lending players and new FinTech business models such as payday, SME lending, and unsecured retail and BNPL loans have a vital role to play in this growth.

Food aggregators

Startups such as Simple, LazyPay have come up with apps that less user buy anything, even food and pay for it later.

Food aggregators like Fassos and Swiggy offer this convenience in partnership with such startups.

Fassos has seen a jump of 40-50% in terms of number of transactions from the same user after partnership with Simple

e-Commerce

Cart abandonment rate on e-commerce portals in India is as high as 60-70%. Thus, e-commerce companies are giving option to their consumers to buy the product before they pay for it. For instance, Flipkart provides a credit service, 'Flipkart Pay Later' to its customers which grow >30% in 2019. The service opened up access to credit for 55 million Indians.

Car aggregators

In many ways, cab aggregators have more hold on a customer than a bank, because a consumer is more likely to use the cab service and that has high recall value. Using this as an advantage, companies like cta are entering the lending market.

Ola's buy now pay later service are used by almost 10% of its existing user based of which 90% use it multiple times Source: Experian

BNPL channels

BNPL is also recognized as embedded lending because of the financial component within a larger channel such as e-commerce platform, cab-aggregator (e.g., Uber), food aggregators (e.g., Swiggy), and offline stores. For example, a new workforce person looking to buy a mobile on an e-commerce platform can easily apply for a credit to pay the INR 25,000 bill. BNPL enabling partner for the e-commerce platform can check the credit score and offer an instant credit line to pay for the product.

What is driving BNPL growth

According to Experian estimates, before COVID-19, 22 million Indian consumers were seeking credit every month, and a whopping 70% of them dropped the applications mid-way due to complexities. This is where BNPL's frictionless credit experience makes a difference. COVID-19 has further fueled the possibilities because legacy lenders became risk-averse amid a weak and uncertain economy.

The high consumer credit demand, low credit card penetration, high e-commerce growth, transparency with costs and benefits, and frictionless payment experience presents unique opportunities for innovative BNPL offerings. BNPL's ability to serve segments of urban and semi-urban consumers with weak or no credit history/score (ineligible for structured personal loans), lack of financial documents, and low-ticket credit requirements will play a major role in volume growth in the coming years. BNPL players' ability to use India Stack



Offline stores

Pos lenders are increasingly conquering the offline lending spaces by replacing online lending experience. Companies like Kissht and LazyPay, after offering online POS lending entered into offline 'Scan Now Pay Later' credit services in 3500 offline stores.

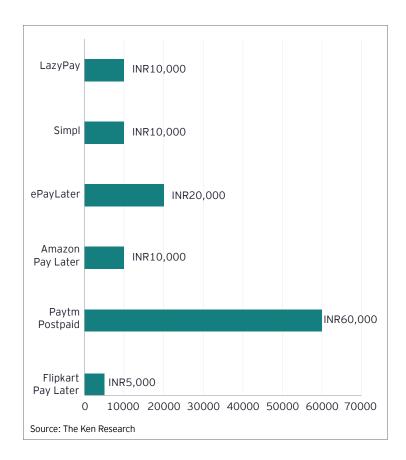
There was a visible increase of 30-50% in footfalls in Tier I and Tier II cities when the product was in pilot phase

P2P lending

Consumers, especially millennials are looking for quick disbursement of loan for short term requirement such as medical emergency, home renovation etc.

Fintech Firms such as Faircent and funding offers lending platforms to such consumers where mid-age salaried/self-employment, can lend money to earn attractive returns.

Overall P2P lending in India increased to INR 20-25 Crore (December 2018) fromINR 5-6 Crore (January 2018)



infrastructure makes customer onboarding cheaper and feasible. Like any lending product, the primary revenue source for BNPL is interest income and fees incurred in case of late payments. While the BNPL products may strategically avoid the word loan or credit, it is an IOU (I owe you - a document that acknowledges the existence of debt) in different packaging. Where it may differ from more traditional forms of credit is that the interest cost of that credit may, in some cases, be subsidized or even made zero via arrangements with the seller of goods and services. It is also possible to create revenue streams through merchant interchange fees.

Next steps

For BNPL players, access to historical credit and payments data to assess the risk of frauds or willful defaults is critical. For merchants, selecting the right BNPL solution partner with a reliable technology stack, adherence to data localization and consumer protection compliance regimes, and competitive merchant fees remain the primary challenge. For customers, they would prefer anything that is easy to offer a line of credit at zero interest fees, no hidden charges, and nominal late fees. On the flip side, the risk for consumers is to easily miss a small amount of payment due amid many BNPL transactions.

If BNPL payment defaults or delays impact the credit history, it can have severe consequences for young and new-to-credit customers. It becomes imperative for BNPL to send multiple reminders for payments to ascertain that the defaulter fits in the willful default category. Consider this hypothetical but plausible scenario: If the number of BNPL payment defaults are high combining with customers' common grievances against BNPL providers, such as small amount payment default impacting significantly on the credit scores without customers' knowledge, the consumer protection measures are most likely to affect the industry through increased regulatory oversight.

RBI allows the segment to flourish organically with minimum supervision, but It may come under closer watch in the future, depending on how the industry plays in the next few years. UK is an example of where BNPL is flourishing, and voices to increase regulatory oversight on BNPL are now adding decibels. It is important for all parties should anticipate and pre-empt the regulatory risks.

Players already offering other credit products under NBFC license or industry partnerships anyway come under the regulatory umbrella. Notably, India is strengthening its customer protection laws to regulate the rapidly expanding e-commerce market and offer consumers a sophisticated market. Merchants must abide by the new Consumer Protection Act to avoid compliance issues.

BNPL services are currently in a nascent stage in India; however, they should not be ignored by incumbents' card issuers and lenders, especially because so many large providers are entering the provider marketplace. These incumbents need to formulate pay later services to counter the threat of disintermediation by BNPL players.





Interview with Lizzie Chapman, ZestMoney





Lizzie Chapman is the CEO & Co-Founder of ZestMoney - India's largest and fastest growing Buy Now, Pay Later platform in India. ZestMoney has built a platform that can meaningfully improve the lives of more than 300 million households who currently have no access to credit cards or other formal financing options because of insufficient credit history. Lizzie Chapman is a leading figure in the fintech landscape of India. She was nominated by the Govt of India to the National Startup Council and advises the Government on measures to nature and boost innovation in the country.

She is recognized as among the Top 100 women in fintech globally by Fintech magazine.

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BNPL is one of the hottest topics in the FinTech world today, but there is a lot of confusion around what it actually means? Two narratives exist, one is of providing convenience, and the other is of providing credit. What's your definition of BNPL?

The beauty of BNPL is that it is CONVENIENCE powered
by CREDIT. All over the world, customers are choosing
payment products that enable them to "pay later" and
split the bill" using credit as the mechanism for enabling
this. India is no different and in fact, this has existed for
thousands of years in an informal sense here. Khata was
the original BNPL, and the entire consumer durables
industry uses "pay later" products like EMI to power sales
already. BNPL is just providing a new digital version of
this age-old need.

In India the need is even greater because (a) we have the most digital consumers who are adopting digital payments faster than anyone anywhere and (b) India continues to be one of the most financially underpenetrated credit markets in the world. Credit cards have only 25 million active customers and not everyone is eligible to get one. What about people with little or no credit history? Platforms like ZestMoney can approve them (with AL ML data models) and help them start that journey. Credit cards have historically had a physical distribution model - using DSA agents of kiosks or branches. This means they concentrate on larger cities. 70% of our customers come from outside the metro market.



BNPL has existed in India in some form, for example, in-store EMI payments offered by few players for many years. What is driving this sudden growth in BNPL?

Absolutely, the concept of paying in instalments is not Α new. For example, Bajaj has been driving Pay Later for 15 years now. The main innovation in the last couple of years has been the digitization of the offering by players like ZestMoney. We have made signing up even faster and smoother and for smaller ticket sizes and for a wider group of people (including those new to credit).

One reason companies like ZestMoney are growing is because the digital infrastructure to deliver these products has come about in the past few years. India now has the cheapest mobile network data in the world, as well as the most advanced payments infrastructure such as UPI. Combined with Aadhaar and India stack, it has never been easier to deliver financial services products in this market.

We can potentially expand the base to 300 million households with these solutions. Boom in online shopping and innovation in digital payments has further spurred demand for the services. The pandemic has also necessitated a need for an all-digital shopping experience including credit. We have seen applications go up by 5X on our platform.

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s your view on the current size of the BNPL unity in India, and how do you see it growing in the future

There is a massive potential for BNPL in India because it A covers huge categories like travel, e-commerce, fashion, large appliances, electric vehicles and EdTech courses. We are seeing strong growth for our product in physical stores too. We are present at 75,000 stores across the country including brands like Apple, Reliance Digital and Chroma.

A Bernstein report estimates that Pay Later solutions process ~\$15 billion worth of merchant payments today. This will reach ~\$100 billion GMV (Gross Merchandise Value) by 2025. Pure-play digital BNPL players like ZestMoney will contribute 25% of these purchases over the next 5 years.

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There is also a lot of discussion on whether the unit economics for BNPL actually works. What is your take on it?

Since BNPL is a digital product, the costs to distribute and operate programs are massively lower than traditional loan products. When technology is deployed, even smaller ticket size products can be made available.

The bulk of our revenue is generated from integrations with merchants across online and offline channels - we act as a payment partner to them and also an affiliate partner, bringing them new transactions and customers they pay us for that and NBFCs on the back end in order to fund the loans that customers take. This means we are effectively a three-sided marketplace with three sets of customers - the consumer side, the merchant side (where we are a payment solution to them) and then the lender side (where we are a software and acquisition partner).

ZestMoney is profitable at the transaction level - so yes the economics work!

There is a lot of concern that the easy availability of credit will promote imprudent financial behavior. How can we ensure that it does not happen?

We have the notion because credit cards have perpetuated the impression that credit is bad and deceiving. We strongly believe BNPL is a smarter way to plan finances. It lets one spread out cost, informs the exact amount of money one needs to pay, and has interest rates that range from 0-24%. Credit cards, on the other hand, could have interest rates as high as 48%. Customers are rewarded for timely repayments by a higher credit limit and more offers like no cost options.

We also provide credit counselling and engage with customers with relevant content on financial habits, helping them understand how to judiciously use their credit limit and plan their finances.

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There is confusion from a regulatory perspective as well on whether BNPL is a payments product or a credit product. How do you view this debate?

- It is guite clear that "pay later" is a credit payments Α product and all financial credit and all products are well regulated by the RBI. We do not see any grey area here. In other markets there are "unregulated" BNPL products, but India does not have that ambiguity in its credit regulations.
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Banks are launching their own BNPL products too. How do you see the BNPL landscape changing with their foray into space?

The opportunity is so massive that partnerships are the Α only way we will move ahead. We partner with over 25 banks! FinTechs have the technology edge that banks are working to build. From onboarding to repayment and collections it is an end to end digital process. The focused approach we have is huge and that is why banks love to partner with us. Also, banks have relatively restrictive underwriting criteria for consumer credit. By working with ZestMoney, they can expand their approval rate using our Al driven approach.

A number of banks reach out to us to know about how we seamlessly continued collections and handled the moratorium last year. There is a lot of collaboration that we will continue to explore.

3 InsurTech is driving a race for digital distribution and product innovation

With a 3.76% insurance penetration (insurance penetration is calculated as percentage of insurance premium to GDP), India ranks lowest among its key peer countries like Brazil, China, and Australia (Economic Survey 2020-21). However, from a growth perspective, the 1.3 billion population with a growing middle class, favorable regulatory policies, and significant economic activity present considerable potential for the Indian insurance market to grow. According to IRDAI annual report 2019-20²⁰, India's total real premium growth was 6.9%, vs. 2.9% of the world average. Life insurance players' share stood at ~75% of the total premium volume.

Recently, the Indian insurance sector has started focusing on new products and business models and technologyenabled efficient methods of insurance distribution. New forms of insurance are enabled by emerging technologies such as wearables, IoT-linked products, drones, and related favorable insurance regulatory guidelines. The market is witnessing traction in small premium bite-size insurance (e.g., Acko, Digit), microinsurance (e.g., PhonePe, Flipkart), and affordable group health insurance. This disruption is opening new opportunities for the InsurTech segment in India. Several insurance aggregators increase the ease of decision-making and streamline the buying process at the consumer end by comparing insurance provider data (pricing, features, and coverage areas) and easing the application experience.

India InsurTech landscape

According to Tracxn database India is home to about 325 InsurTech companies, among which two have attained unicorn status, i.e., PolicyBazaar and Digit Insurance. This Indian InsurTech landscape comprises of policy aggregators, digitalnative insurers, IoT insurance enablers, claims management, and infrastructure and Tech-Insur providers. By numbers of startups, aggregation and policy management has been the most active categories. However, we have also observed some exciting value propositions from Tech-Insur, claims management, and pureplay digital insurance companies.



As highlighted above, India's InsurTech sector has historically been dominated by aggregators, including PolicyBazaar, an insurance aggregator, RenewBuy, a health and motor insurance specialist, and Coverfox, an insurance broking firm. Since 2018, the general insurance segment has recorded strong growth.

There are four critical pillars of InsurTech growth in India:

Address the changing business environment, adapting to digital-savvy customers

The sales figure of PolicyBazaar, an online distributor, disclosed²¹ a jump of 40% in health insurance sales and a 20% jump in life insurance sales in February 2020. While this was a pre-COVID-19 trend, the numbers have seen another substantial jump of 24% in overall revenue after the COVID-19 waves. The trend is considered to continue due to social distancing measures and the general shift of customers to online self-service/ assisted purchases than physical meetings, leading insurers to re-draw their distribution strategy.

- Direct distribution channel: With an increase in the population of tech-savvy customers, the ready availability of online channel of advice and transaction capabilities is the need of the hour. Leading insurers like Religare are leveraging the direct distribution channel by enabling direct channels in different platforms like their website, mobile app, and even on third-party apps like WhatsApp.
- Assisted distribution: Assisted distribution combines machine learning, data analysis, and NLP with cognitive technology to create persuasive messaging, marketing, and advice that enables the seller to drive better engagement.
- Affinity-based distribution channel: The affinity channel focuses on distributing products to a tightly connected group of consumers with similar interests. The network model has become more digital and tech driven. Technology is playing a key role in how affinity-based models can be leveraged.

2 Focus on designing a product eco-system, not just a product

Changing customer behaviors demand insurers/ InsurTechs to offer insurance as an experience and holistic offerings to drive higher engagement across the customer lifecycle. InsurTechs are tapping into niche platforms and solutions and extending the capabilities to insurers. Thus, we see the emergence of an ecosystem created by InsurTechs between other businesses, insurers, and customers, creating a higher level of stickiness.

- Product eco-system moving into a one-stop-shop solution: A good example of a one-stop solution is PayTm that successfully created a platform through which customers can purchase and manage their insurance and make payments for utility and purchase travel tickets. The ecosystem contains a host of complimentary services that help customers manage their day-to-day activity, which in turn feeds insurance, thus making the entire process work like an experience.
- Value-added services: Many InsurTechs/ insurers have recently started exploring ancillary revenue by providing complementary services. This can include home maintenance/assistance services, roadside assistance, or medical advice that sells with respective insurance types.

3 Data as innovation driver across the value chain

The explosion of unstructured data from social media and the IoT has resulted in insurers/ InsurTechs acquire a huge amount of data. This data can be leveraged to drive innovation and insights across the value chain.

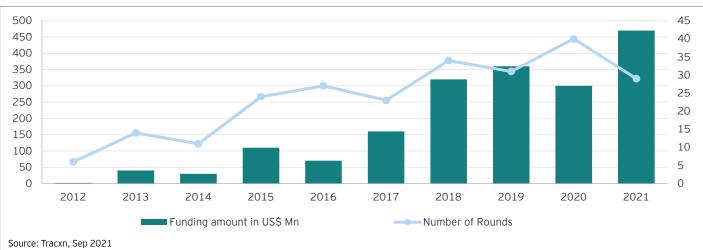
- Leveraging analytics to drive insights across the value chain: Personalization has become a critical capability in digital marketing. InsurTechs are leveraging data and analytics capabilities to drive innovation and excellence across the value chain, including marketing, acquisition, claims, etc. Players such as Mantra Labs have built Al-driven capabilities to maximize conversion across the sales funnel.
- Sharper pricing and underwriting models leveraging rich data sources: Cropln is an Indian player enabling assessment of crop insurance and has covered over 2 million farmers²² and over 6 million acres of farmland across 52 countries. It processes farm-related information by combining machine learning, satellite monitoring, and weather analytics to provide customized reports and information that insurance firms use. Another global player with a similar offering is Tarla, which has developed sophisticated risk assessment models that indicate the risk level of the underlying geography, helping assess climate risks and impact on agriculture output.

4 Tap the millennials by catering to specific, contextual, and trending needs

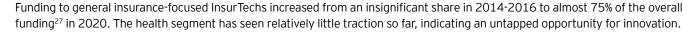
In India, millennials account for 34% (440 million) of the total population²³, of which 300 million are from rural areas. According to estimates, millennials in rural parts of the country could account for \$220 billion24 worth of annual spending, of which \$177 billion could be discretionary. These spending patterns are a result of the commoditization of internet connectivity and smartphones. The emergence of new-age professions like gig-work and social media influencers warrants a change in how the traditional insurance market assesses risk.

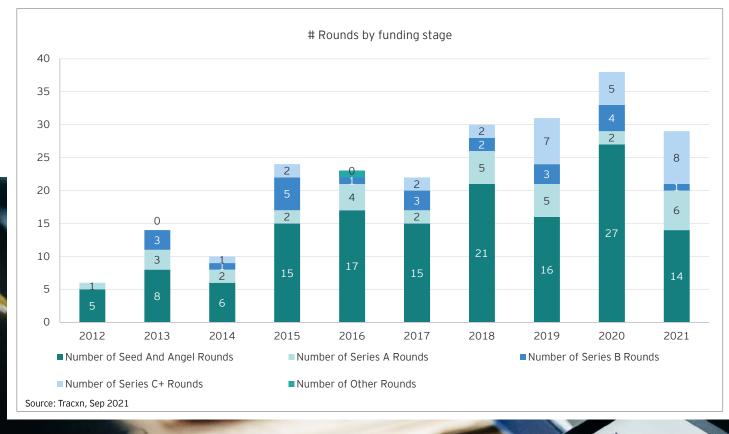
- Bite-sized insurance catering to a particular need or context: The bite-sized or small-ticket-sized products are amenable to digital delivery on platforms with substantial customer footfall. Globally, there are several players which have seen immense success in achieving scale through bite-sized products. These products are primarily distributed through ecosystem partners. In India, too, players such as Acko are pioneering innovative constructs. Acko²⁶ has tied up with more than 20 digital platforms across retail, travel, finance, point-to-point delivery, etc., to distribute bite-sized insurance. Another major player Digit Insurance offers home content insurance to target people living on rent who want to protect their belongings and not the house structure.
- Products that enable moving from protection to prevention: With the growing importance of holistic offerings, multiple players are adding a risk-prevention element to their offerings. InsurTechs provide holistic solutions to customers that help monitor and drive behavior towards lower risk. These include gym memberships, monitoring devices, and many such offerings. Beyond monitoring, these offerings also enable timely interventions that can impact the wellness of customers. Players are also using reward and incentive mechanisms to drive customers towards lower-risk behavior. Such behavior-based incentives are established through third-party services or devices such as fitness bands and telematics.

InsurTech funding trends



The total funding raised by InsurTech players in 2020 stood at \$301 million, registering a decline of ~16% vs. 2019 funding volume. In comparison, 2021 shows encouraging growth activity, with 30 Insurtech deals amounting to \$492 million till September 2021.





Regulatory landscape

On the regulatory front, some of the milestone regulatory events that have supported InsurTech growth include the following:

- In 2018, IRDAI published²⁸ findings are recommendations of a working group for InsurTechs that postulated InsurTechs' benefits in improving assessment in underwriting risks, fraud risk mitigation using AI and IoT, promoting better social behavior, and faster claim settlements.
- In 2019, the regulator launched insurance Sandbox that attracted InsurTechs and traditional insurers alike to innovate new products and distribution mechanisms.
- The Union Budget 2021-2022 announced in February 2021 proposed to enhance foreign direct investment (FDI) limits²⁹ in the insurance sector from 49% to 74%, a move intended at bringing insurance to a larger section of the Indian population. Earlier in 2015, the government had hiked the FDI cap in the sector from 26% to 49%.

Next steps

Digital distribution of small premium and the short-term commitment insurance product is poised to grow in coming years. However, complex insurance products still depend on assisted selling, and InsurTechs need to simplify complex products to make inroads in these categories.

It is important to note that the Indian insurance market, especially life insurance, is still driven by insurance advisors selling over 70% of insurance policies in India. InsurTechs should explore opportunities to enable these offline insurance advisors with better analytics and digital distribution tools and create hybrid distribution channels. InsurTechs need to leverage analytics to prioritize leads and allocate leads with customer's contextual information to the most suited sales team member.

Traditional insurance players need to strengthen their direct distribution and assisted channels in competing with emerging pureplay digital insurance players. They also need to work on simplifying their products to be able to reach their customers directly. The current level of complexity of insurance products and their documentation makes the buying journey difficult for customers.

The industry should tailor the products for gig-economy and new-age-profession customers that do not fit in classic salaried or entrepreneurial categories.

Incumbents can work on their API stacks to be open to developing ecosystem partnerships. The aim would be to leverage distribution partner networks, faster customer onboarding, and improving go-to-market time with new offerings.



Interview with Suvendu Prusty, Founder Director and Principal Officer at Riskcovry





Their vision is to 'enable insurance anywhere' by providing any company with the necessary technology infrastructure to distribute insurance, seamlessly and holistically. They foresee a world where insurance is just as ubiquitous as digital payments and are following the innovation brought out by way of payment gateways and processors and applying that to insurance distribution.

As an 'InsurTech infrastructure' platform for its distribution partners, they are on a journey to make insurance distribution as simple, fast, and efficient as possible.

They work with 50+ enterprise customers (from banks and brokers to retailers and digital companies) representing 10+ industries, for whom we currently enable 70+ products from 30+ insurance companies. They are the fastest growing start-up in India in the space of 'InsurTech infrastructure' with ~18% MoM growth in FY21 on premium generated.

They have gone through 3 rounds of funding thus far, the latest being a Series A of \$5.3 million which was announced earlier in March this year, bringing onboard top investors like Omidyar Network India, Bharat Innovation Fund, Better Capital among others.



Α

The Indian insurance industry is one of the fastest growing in the world with growth rates more than double compared to rest of the world. What according to you are the key drivers for this rapid growth?

From a macro-economical POV, insurance in India is severely under-penetrated at around ~4.1% relative to the global median of ~7.3%. For the second most populous and one of the fastest-growing economies in the world, this stat is quite unfortunate, but real, nevertheless.

That said, user awareness of insurance as a way to secure the lives, health, and assets of oneself and our near and dear ones is on the rise, especially on the back of the pandemic, where health insurance is cutting over from a need-based service to that of want-based. We are witnessing a fundamental user behavior shift towards health insurance, which is further cascading into users considering:

- life insurance much more than a tax saving wealth/ investment instrument, asset insurance as more than a mandated product (such as in the case of motor)
- "not applicable to me" categories (as in the case of business and home insurance) which are now intriguing "kind of makes sense" arguments
- "taken for granted" subsidized utility proposition (for example, crop insurance) into deeper "what exactly/ else does it cover" curiosity

Furthermore, with the consumerization of FinServ, Indians are discovering and purchasing financial products more digitally than ever in the past, and the Government's digital agenda push is adding further faster, cheaper, and better distribution of insurance products across the economic strata of our country.

All these fundamental factors, when lumped together, are giving the Indian insurance industry arguably unprecedented tailwinds. In an idiosyncratic way, growing awareness of insurance as a risk management instrument has been one of the real silver linings from the pandemic catastrophe that is likely here to stay.



The market is teeming with innovations in products as well as distribution. What are the innovations across these two that you are most excited about? What direction do you think these will take in the future?

A From an insurer perspective, we are excited about their ability to work with players like us with an API-first mindset, to enable the distribution of products with a digital-first capability. Specifically, distribution by way of embedded insurance products (for example, enabling a lender to embed a home insurance product on the back of a home loan disbursement, or a mobility provider enabling a trip insurance cover on the back of a ride) are some of the product design led capabilities that we are particularly excited about.

In addition to the above, investments by insurers into advanced data sciences capabilities are making their ability to underwrite products quickly with a higher degree of user personalization - not only at the time of policy purchase but also post purchase user experiences with policy management and claims.

The distribution side has pulled the manufacturer side to adapt quickly to changing user preferences. Distribution has gone from digital-too to digital-first and in many cases digital-only, largely accelerated by the pandemic where distribution w/ human-assisted models took a hit. This means that the distribution of push-based services like insurance is getting more efficient - both from a cost of distribution as well as TAT POV.

These factors are enabling more immersive, inclusive, connected, on-demand and personalized experiences for end-users of insurance, which looking back say 5 years from now, might seem like the hygiene evolution of the industry to bridge the trust gap between consumers, distributors/ intermediaries and underwriters alike.

Q

The microinsurance insurance sector is seeing a lot of action with many players trying to provide offerings for different customer segments. Can you help us understand how this product category works and what are the benefits to end customers?

At its very core, micro-insurance stands for being able to get bite-sized insurance to cover specific and/or finite risks. They are typically pre-underwritten which means that their risk coverage, policy period are finite which means the premium pricing is also typically low. Insurers can distribute such products more efficiently to broader base coverage without causing underwriting risk to their balance sheet given the ceiling on risk coverage and well-documented exclusions. At the same time, consumers can buy insurance products relevant for them conveniently, as against being constricted by "all or nothing" type products, which tend to be priced much higher.

Micro-insurance can fundamentally be characterized basis 3 underlying elements:

- coverage: only covers a specific risk or risk type as against a comprehensive (for example one may not need a comprehensive health insurance product but only for medical expenses as it relates to risk s/he is exposed to as an individual like COVID, cancer/other chronic ailments; a mobile screen protection cover that only covers for screens as against damage to the rest of the phone etc.)
- time: covers for a specific period as against the typical year-round coverage (for example one may need added protection to cover against mosquitoborne diseases like vector insurance typically during monsoon season only; getting personal accident or trip insurance for the duration of your cab ride only etc.)
- price: limited cover for certain events that optimize for volume-based premium pricing (for example one may not need expensive health insurance but a well-priced pre-underwritten product that covers the insured only under the cases of hospitalizing by paying a fixed benefit regardless of the overall hospitalization and medical charges).

How important has the digital experience been to attract and retain your clients and users?

Α

As an "InsurTech infrastructure" platform, we bridge the gap between the experience (distribution + consumption) and the under-writing layers of the insurance industry value chain, using technology. Essentially, we enable our enterprise customers on the distribution side of the value chain w/ an "insurance-in-a-box" value proposition to mask all the complexities of navigating the supply/ insurer side. Think what payment gateways did for digital merchants who wanted to accept payments online, we are enabling the same for our enterprise customers with a one-stop-shop approach, which is agnostic of underlying insurers, products and distribution channels, saving them the overhead of building tech, teams and processes with a full stack distribution experience.

With this, we tend to accelerate our customer's insurance distribution GTM timelines by 75% and save more than 50% of the operational expenses by partnering with a platform that delivers economies of scale.

All of this happens with a digital-first approach in the sense that we enable any insurance distribution use case with an API-first model which means by definition we are in the business of enabling digital experiences for our distribution partners.

Q

How has COVID impacted the industry overall and do you foresee any sustained effects in the long term?

A Though short term underwriting constraints and pressures, the pandemic has been a net accelerant for the insurance industry as it is paving the way for heightened user acceptance of insurance as a financial service and risk protection instrument, than any other time in our nation's history. We live in volatile times and the market has opened up to underwrite and cover many different types of risks, all of which are under-penetrated in India relative to global median standards.

As a derivative of the insurance industry, the pandemic has enabled a double tailwind in our business model (want for insurance products for end consumers + need to distribute them quickly and efficiently digitally by any enterprise).

We think that both these tailwinds are here to stay. Our performance last year where we grew the fastest in our space of InsurTech infrastructure in India (the gross written premium of non-life industry de-grew by 1% on an MoM basis, however we grew by 18% MoM) validates the new category that we have created and helping to further shape.



4 Rise of the Neobanking wave

Neobanks are new-age digital-only banking service provider players that are more nimble than traditional banking models. Globally, Neobanks started with the idea of using technology to unbundle the banking industry and, since then, have disrupted the value chain and ecosystem of the traditional banking system. Over the last few years, the number of Neobanking platforms, as well as the global investments in the sector, has risen consistently. Indian FinTech space has followed suit, and the number of Neobanking startups in the country is growing by months and attracting global investors to this market.

Globally, there are three Neobanking models:

- Neobanks that have full or restricted virtual banking licenses that regulate and enables them
- Digital-only direct offerings of traditional banks to counter emerging virtual banks and tap into digital adoption
- Neobanks that do not have virtual -banking or e-money license and operate in partnership with traditional banks in the country

Neobank landscape in India

In India, the current regulatory landscape allows only a partnership route for Neobanking startups. Notably, some banks such as ICICI, RBL, Equitas and IDFC first have built API stacks to capitalize on this partnership opportunity.

The incumbent and Neobank partnerships typically involve contractual aspects of revenue sharing, activity distribution, and customer ownership arrangement. A pitfall for new Neobanks is to find suitable banking partners beyond the 3-4 major banks that every player seems to approach. While Neobanks need to explore other suitable partnerships, other major Indian banks need to get their API stack in place to enable these partnerships.

The Neobanking players established in India or in the process of establishing can be grouped in two major categories based on their target segments:

- Targeting retail customers. These Indian Neobanks usually focus on:
 - Products for underserved or 'New to Banking'(NTB) segment
 - Providing better and differentiated experience to customers who are already banked
- Targeting MSME and gig-economy segments

Common themes of product offerings in underserved retail customer segments focus on financial inclusion and final literacy. These offerings typically attract blue-collar workers or millennials and Gen-Z segments, offering them personal finance management services, digitally rich retail banking that includes unique debit and credit card offerings, and insurance services.

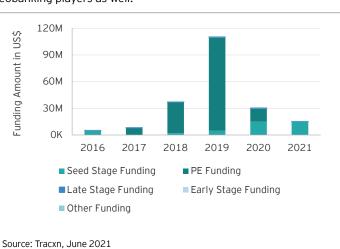
Standard offerings for MSME segments include features to collect recurring payments, book-keeping, tax, supply chain management, and credits. These MSME-focused players have the opportunity to use the cash flow data for alternative lending. For the higher revenue spectrum of the MSME category, these solutions target the small and medium-sized companies that are underserved in terms of credit or have poor customer experience.



Neobank funding trends

Neobank funding in the country has not picked much momentum yet, due to a limited number of players in this space. In 2019, ~\$223 million equity funding was raised, led by Open and Razorpay like prominent players. However, in 2020 the funding slipped back to the earlier level. A more favorable regulatory framework can enable Neobanking players to attract more investors towards the Indian Neobanking story. A recent announcement from UK-based Neobank Tide to invest £100 million³⁰ (~\$138 million) in the Indian market is an indication of the market's attractiveness for established foreign Neobanking players as well.





Neobanks' revenue model

Neobanks across the globe operate on the classical freemium strategy, where basic services are free of service charges, with optional upgrades for power users deriving fee-based income. For example, SME segment focused Neobank Open made their starter pack free of charge and added features/tools and lower transaction costs to attract customers for premium subscriptions.

For Indian Neobanks, the revenue sources are predominantly the same as traditional banking but in a revenue-sharing arrangement with their partner banks. Once the customer is onboard, opportunities for revenues arise from float income on the idle balances, earning commissions from loan referrals, gateway and card transaction commissions, FX charges, and extending add-on product range such as PFM products and annual (or one time) fees for visually attractive and online offer-rich debit cards. The revenue-sharing contracts may differ between Neobank and partner traditional banks, creating multiple possibilities for both parties to be in a win-win engagement.

Regulatory implications for Neobanks

Indian regulatory regime does not allow for the granting of virtual banking licenses. However, through its 2015 Master Circular on "Mobile Banking Transactions in India - Operative Guidelines for Banks," RBI has mandated the requirement for digital banking service providers to have some physical presence. As a result, Neobanks can provide banking-related services only through outsourcing their banking responsibilities to licensed banking institutions and non-banking financial companies.

On a positive note, RBI's recent proposal regarding full-KYC PPIs has a regulatory window to enable cash withdrawal (with a limit) for full-KYC PPIs of non-bank PPI issuers. Simply put, this will unlock the transfer of money from one wallet to another wallet, and Neobanks with a Full-KYC PPI license can issue cards and enable cash withdrawal, which would be a great value add to Neobanks' services. RBI's other recent moves that are taken positively by the industry include:

- Increasing the maximum balance limits for payment banks up from INR 100,000 to INR 200,000
- Allowing payment banks to convert to small finance banks (SFBs) and an on-tap SFB licensing regime that opens doors for large depositors and partnership opportunities with SME-focused FinTechs and Neobanks. Industry voices also suggest RBI to consider looking at fully digital SFB licenses
- Extending RTGS and NEFT money transfer facilities to nonbanks

Recent regulatory developments liberalizing the design and usage of PPI linked offerings, provides significant degrees of freedom to non-banks offering payments solutions. We now have developments allowing:

- Interoperability to full-KYC PPIs through authorized card networks, wallets, and UPI
- Increasing limit for full-KYC PPIs, in turn, supporting incremental use cases for P2M use cases
- Cash withdrawal from full-KYC PPIs, providing flexibility to customer for cash-withdrawal of personal loan disbursed on PPI wallet
- Access to central payment systems, in turn, reducing delay of execution of funds transfer
- These steps indicate a phased approach to create more regulatory room for new players.

Next steps:

Indian traditional banking players' need for technology upgrades is well acknowledged by the industry. However, increasing failures and crashes of systems in the last two years provide a decent argument that not all banks will easily undergo the digital transformation. It can be risky to focus entirely on improving in-house tech infrastructure and ignore the business opportunities presented by the growing Neobanking segment. With the API stack in place, partnering with digital-native Neobanking players can allow the banks to tap into underserved and new-to-banking customer segments.

On the regulatory front, the guidelines issued for differentiated banks such as payment banks and small finance banks, the RBI has an option to either publish guidelines for the licensing of digital banks or create regulatory windows that allow Neobanks to work on the periphery of licensed banking. There is room for licensing process to consider a phased approach enabling new players to operate on the periphery of banking and Neobanking.

Since there is no direct regulatory framework on Neobanks currently in the country, they may face operational difficulties regarding external dependency on their banking partner and onerous partnership obligations. An increase in the risk of sophisticated cybersecurity incidents and cybercrimes also poses safety and security challenges for Neobanks, and that needs to be managed from the start of the operations.

COVID-19 has provided a tailwind to digital adoption in banking services, and it is unlikely that the newly earned digital user base will roll back after the pandemic situation is completely resolved. The policy push for MSME growth and the massive new to banking young adult population that expects everything to be done in few clicks on mobile will provide the impetus for the Neobanking segment to grow in the coming years. We can anticipate some market consolidation in the coming years, and players who get the product-market fit, reach the critical mass with sound industry partnerships are likely to prosper in the long term.

Interview with Vinay Bagri, Co-Founder and CEO at Niyo





Vinay Bagri has over 22 years of experience in banking and has worked in leadership positions across sales, operations, and strategy in leading Indian and multinational banks such as Kotak Mahindra Bank and Standard Chartered Bank. He co-founded Niyo in 2015 along with his co-founder Virender Bisht.

At Niyo, they are focused on making banking simpler, smarter, and safer for our customers by simplifying finance with technology. They build innovative, best-in-class solutions in partnership with banks to make digital banking more accessible, attractive, and secure across different customer segments.



The neobanking market in India is starting to burgeon with multiple big bang launches happening in the past few months. Do you think the market is big enough to handle such a flurry of new entrants?



The whole idea of Neo Banking is to identify specific segments and offer them a differentiated banking experience. With a population of over 130 Crores, I believe there is a headroom for multiple fintech's in the space of Neo/digital banking.



Δ

We are mainly seeing two types of neobanking apps in the market: to target retail (millennial) customers and MSMEs. Which segment do you think has been underserved by traditional banking and has more potential for disruption and why?

	Niyo has been catering to various retail segments with a
<mark>۱</mark>	differentiated banking experience. In all the segments we
	operate viz. blue collared workers, international traveler,
	and millennials we were able to carve out our own niche
	with a great value proposition for the end user. I believe
	both the retail and MSME segments have opportunities
	where fintech's in partnership with the traditional banks
	can redefine banking.

Q What is the customer segment you are targeting? What are your offerings and what sets you apart from the competition?

We have multiple offerings and each targets a different segment of customers:

Α

C

- NiyoX: A co- branded digital savings and wealth account targeting young, aspirational millennial customers
- Niyo Bharat: A prepaid card for payroll / salary accounts targeting blue-collared workers
- Niyo Global Card: Zero Forex Mark up card for international travelers
- Niyo Money: a fully integrated wealth management tool available both as an independent app and in the NiyoX app

What sets us apart from competitors is a constant focus on keeping consumers at the center of everything. Our solutions resonate with our customers because we get to know them before building our products and continue to innovate based on their feedback and usage patterns.

see?)	How do you think regulations will shape up the neobanking landscape in India and what future do you see?
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RBI has constantly promoted innovation in the Financial
services sector, and this has helped fintechs like ours to
evolve. I see the future to be bright and sunny for digital
banking fintechs to work in tandem with traditional banks
and redefine banking by making it smarter, safer, and
simpler.

Q

How has COVID impacted neo-banking growth? Do you think it has been a net positive as more people are inclined to bank digitally?

A COVID catalyzed the digital transformation of various industries and FinTech's are amongst the many business models that flourished during the pandemic.

Traditionally, individuals have had to visit a bank branch for every banking process. The COVID-19 outbreak pushed them to look for models which minimized contact. Fintechs, in collaboration with banks, provided convenient solutions that successfully solved the practical problems of traditional banking in the wake of the virus. The adoption rate of digital banking fintechs during the pandemic proves that customers did embrace them with an open heart, and that there is great potential for all the players in this field.

5 WealthTech is revolutionizing the investment landscape in India

WealthTech is categorized as products and service oerings ranging from expense management apps, investment platforms, trading tools, digital financial advisory, financial research tools, and white label software solutions for investors. WealthTech players leverage advanced technologies such as AI, ML, and analytics to transform traditional investment and wealth management services. India has, over the years, witnessed a rise in working and affluent populations and, accordingly, has seen massive advancements in the WealthTech space.

Indian WealthTech landscape

According to RedSeer Consulting estimates³¹, the Indian WealthTech market size was \$20 billion in 2020. It is expected to reach \$63 billion by 2025, fueled by an increasing retail investor base (4 million investors in 2020). The retail investors base is expected to grow by 3x to reach about 12 million by FY25. The following factors would drive this growth:

- High awareness and usage of digital platforms across equity and mutual fund investments
- A rise in investors from 'Bharat' (tier-II cities and beyond) driving adoption of digital platforms
- Digital-savvy millennials with higher disposable incomes making investments via digital platforms
- Increasing disposable income and growth in the high net worth individual (HNI) population
- A wide range of WealthTech apps pushing digital investment habits among young investors
- Ease of investments through the digital channels that need no paperwork and quicker access to market and investment options, less fee/charges, and more transparency
- Supportive regulatory landscape

While WealthTech is still in infancy in India, there is huge growth potential in the market. Consider this: Out of 1.36 billion people in India, just 3.7% are investing³² in equities. In comparison to China that has 12.7% retail investor participation, this is significantly low. For India's retail investor base to grow, it is important that markets gain young investors' confidence through literacy and market transparency.

New investment modes and asset types

The availability of various modes and assets for investment is making the WealthTech ecosystem interesting. For example, Zerodha and Upstox like companies enable zero brokerage equity investments, while apps such as ETMoney enable easy discovery and purchase of various types of mutual funds. Hybrid-advisory platforms such as Arthayantra offer tailored portfolio analysis and advice for mutual fund investments; pureplay robo-advisory apps are providing automated portfolio suggestions. Together these apps create a wealth management ecosystem that can cater to investors at various levels of investment market understanding.

Some of the key WealthTech models include the following:

Personal finance management and expense tracking apps such as Bachat,Walnut, and Finly are creating engaging and easy to understand user interface that offers complete visibility and control over personal and business expenses. Some of these apps integrate automated investment features with rewards to encourage savings.

- Investment management platforms have disrupted lucrative broker business by facilitating easy and near-zero fees of investing. Apps such as Zerodha, Upstox, Groww, and ETMoney are rapidly gaining popularity for their transparent pricing, UPI payment integrations that aids quick addition and withdrawal of money.
- Robo-advisory platforms in India are nascent when compared to mature markets such as the US. These platforms provide tailored investment portfolio advice and the platform to execute investments. Hybrid roboadvisory platforms bring the human touch of personal finance managers with a tech-driven analysis and portfolio suggestion to serve less tech-savvy users. Robo-advisors can be further classified into three models:
 - Comprehensive wealth management solutions that also assess the portfolio needs based on existing debts and insurance coverage and advise mutual funds or equity investments. For example, Arthayantra
 - Equity-focused advisors mainly focus on equity portfolio analysis and suggestions. For example, Smallcase
 - Fund-focused advisory platforms that analyze the portfolio and suggest investments in different options from a particular asset management company. For example, Edelweiss GPS
- Thematic investment research platforms aid the macrolevel trends analysis and industry or product level research to create a basket of equities that are likely to gain from the trends. For example, Stoxbox and Smallcase
- White label solution providers are offering software and API packs that ease the process of embedding wealth solutions in any FinTech and non-fintech platform.



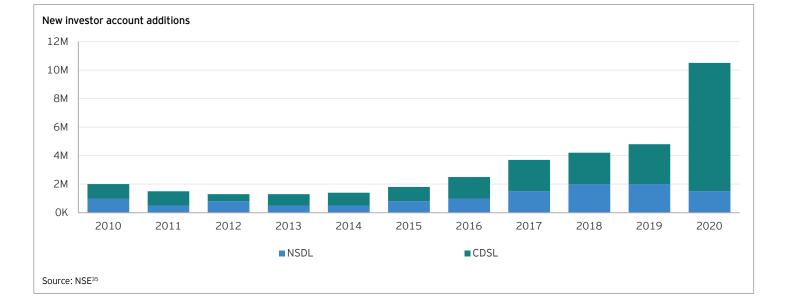
The competition in this FinTech segment is already rife with a long list of pureplay WealthTech. However, established nonwealth players such as Paytm, PhonePe, and MobiKwik are venturing into the wealth business, making it a hot spot of the FinTech landscape.

Revenue models

- Subscription fees are a common revenue stream for WealthTech players. Customers are usually open to paying a monthly or annual fee for sound portfolio advice and updates. For example, Arthayantra, Smallcase, and Upstox charge fees for services that can also be for a specific product or premium feature offered by the platform.
- Cross-selling commissions help platforms such as ET Money that primarily sell direct mutual funds and do not get a direct commission from mutual fund houses. These platforms cross-sell loans, insurance, other VAS (such as mutual fund marketing on their platform) to generate indirect revenues.
- Revenue sharing model is used by some of the B2B2C companies such as fisdom that partner with banking institutions and help them offer more products to customers.
- Brokerage charges are a common revenue stream for brokerage platforms such as Zerodha and Upstox that charge a fee for every intraday trade.

A surge in the investor base

In 2020, monthly SIP inflows to mutual funds recorded a decline. However, India registered ~250% YoY growth in the number of new retail investor accounts added on NSDL and CDSL, indicating a rapidly changing new investors' attitude towards capital markets. In the same period, the number of high net worth individuals in the country increased³⁴ by 5.9%, slightly higher than average growth in APAC. In 2020, a market crash followed by a quick recovery and steady market growth brought a surge of first-time millennial investors. A significant marketing push of cost-effective investment apps and a surge of amateur investors in the market is now attracting regulators' closer market supervision. This includes increasing financial literacy, focusing on transparency, refining requirements for brokers, and bringing fund managers' skin in the game by making it mandatory for them to put a percentage of their salaries in their own managed funds.



While the disposable income of tech-savvy young earners is growing, the market is witnessing historically low savings and FD interest rates. The fear of missing out on the bullish market and long-term financial security concerns will continue to pull the retail investor base size higher in the coming years.

Investors are also benefitting from a change in investment products that can deliver inflation-adjusted returns for wealth creation in the long term. While earlier generations relied on endowment plans, FDs, and physical gold as safe and suitable for their risk appetites, new investors are showing comfort with riskier equity investments, mutual funds, golds bonds, and even highly volatile cryptocurrencies.

Account aggregators, that act as an intermediary to collect and consolidate data from all Financial Information Providers that hold users' personal financial data like banks and share that with Financial Information Users like lending agencies or wealth management companies that provide financial services. After receiving the consent of a user, their financial data can be freely transferred within the ecosystem. With the help of account aggregators advisory platforms get all the necessary information about the clients' investments to optimize their portfolios and suggest the best approaches. In addition, investors are able to track all of their investments and trends at one place.

Investment in US equities

Thanks to FinTechs such as Stockal, Vested Finance and Winvesta Investors can reduce risk by diversifying their portfolios into US equities and get exposed to top international companies. These solutions operate under Liberalized Remittance Scheme (LRS) of RBI, under which investors can invest up to \$250,000 per year in international equities. This is a rapidly growing market, with an expectation of investments to double in the next one to two quarters. Currently, most of the players operating have a subscription-based model with some additional fees pertaining to international transactions.

Funding trends

WealthTech funding peaked in 2017 with \$818 million in 53 funding rounds. While funding rounds were decent in 2019, the overall funding volume for the segment has declined over the last three years. In terms of stage-wise funding rounds, in the peak year 2017, most of the money went to early-stage funding. Till June 2021, the WealthTech category had recorded 13 deals with a total of ~\$120 million in funding.



Regulatory implications for WealthTechs

The SEBI has undertaken various initiatives to ensure that WealthTech as a sector in India flourishes under regulatory watch. These initiatives include:

- Regulatory Sandbox for WealthTech firms to experiment on a pilot basis
- Allowing e-commerce entities to sell Mutual funds from their platforms
- Permitting investments into Mutual Funds through payment FinTechs, albeit with a cap on the investment amount
- Allowing FinTechs to apply for mutual fund licenses subject to having a net-worth of not less than INR100 crore, multiple FinTechs have shown interest and a few FinTech players such as Zerodha and NAVI have already obtained mutual fund license

These steps, coupled with various other initiatives undertaken by the Government, aim to ensure ease of doing business by the WealthTech firms within the regulatory framework while trying to reach the vastly penetrated Indian Wealth Management Market.

Next steps:

FinTech players such as Zerodha and Groww are reducing the friction for young investors, translating into a tremendous growth story for these players. A bullish run by the market attracted new investors, and this growth is expected to continue in the short term.

In the coming years, the growth in the WealthTech industry is likely to be propelled by the following factors:

- ► Tech-savvy millennials with increasing financial literacy
- Increasing personal wealth and incomes
- The high adoption rate of mobile and online channels
- Increased availability of financial information
- Predictable and hassle-free customer journey that builds customer satisfaction and confidence

The WealthTech outlook looks promising though it would also be a bit challenging owing data privacy concerns of investors and cyber-attack challenges associated with the digital space. Regulation will play a huge role here, and this would mean that there will be increased regulatory pressures. Robust in-app authentication and overall system infrastructure security will play a crucial role in keeping customer confidence and building loyalty.

The underlying wealth and capital markets infrastructure and ecosystem have witnessed immense growth with collaborations between transfer and reporting agencies such as consolidated account statements for mutual fund and equity Demat accounts. Customers and FinTechs would benefit from their data consolidation and reporting infrastructure.

The growth spurt of the new investor base is still concentrated to a few major cities, and true potential would unlock only when WealthTech players actively target tier-II cities and smaller towns with an intent to increasing investment literacy and business models that focus on users' financial wellbeing.

Incumbents would continue to experience cost pressures from increasing competition, low-interest rates, and the weight of increased regulation. To adjust to the changing landscape, these companies need to focus on efficiency and scalability by simplifying their technology architecture and automating processes.

Interview with Lalit Keshre, Co-Founder and CEO at Groww





Founded by Lalit Keshre, Harsh Jain, Neeraj Singh, and Ishan Bansal, Groww is the fastest-growing investment platform in India which offers a fun and easy way to invest in Stocks, Mutual funds, IPOs, ETFs, and Gold. Headquartered in Bangalore, Groww is backed by marquee investors including Sequoia India, Y Combinator, Ribbit Capital and Tiger Global. Over 15 million users across 900+ cities in India trust Groww for their investment needs.

Lalit Keshre is the co-founder and CEO of Groww. Lalit possesses more than 17 years of experience in building consumer-focused technology products. Before founding Groww, Lalit was in a senior role with the product management team at Flipkart. At Flipkart, Lalit launched and led Flipkart Quick to enable last-mile deliveries and helped launch Flipkart Marketplace. In 2011, Lalit had co-founded an online learning company called Eduflix. Lalit was an early team member at video technology company Ittiam Systems, serving clients like Google, Netflix, and Samsung. Lalit is an alumnus of IIT Bombay.

Q

Over the past year there has been unprecedented growth in new entrants to the equity markets in India, with the depositories recording an almost 50% growth in new accounts. What do you think are the main determinants for this growth, and will it sustain for the long term?



According to data by the regulatory body SEBI, active demat accounts rose by a record 10.7 million between April 2020 and January 2021. There are a variety of reasons that have caused this growth, but the most prominent of these are as follows.

- The pandemic has sensitized most Indians about their financial management and increasingly many more Indians are thinking about their financial growth
- With a large section of the population working from home, they had more time to learn about investing in equities and acquire the knowledge needed to build the confidence to invest
- Technology platforms like Groww have made the process of investing easier, faster, paperless, and transparent for the DIY (do-it-yourself) generation, which allowed millions of Indians to open a demat account within minutes. The Government's push for digitization, and initiatives such as aadhar and UPI has powered the infrastructure needed to bring about this change.

Q

What are some of the key challenges you face from a customer experience and behavior perspective?

Customers always look for a seamless and personalized Α experience and a prompt query redressal from any service provider. Keeping this in mind we have always followed a customer-first approach and hence have enabled a strong customer servicing team that has successfully handled all the queries from time to time. The app has been designed to enable a seamless user experience. All our initiatives are focused to ensure a frictionless user journey. We believe in simple and clean communication devoid of heavy jargon. Our UI/UX is very simple, catering to both novice and experienced investors. We focus a lot on providing good quality content to our users as well - content that is simple, easily consumable and simplifies investing to the most basic form. This coupled with our super prompt customer success capabilities, supporting our users throughout the journey - support extending post investing as well is what gives us the edge over others.

We started Groww with the objective of democratizing investing. Before starting Groww, we felt that equity investing was only accessible to a certain echelon of our society. It was mostly people with high disposable incomes in their late 30s or early 40s who were investing in equities directly. We wanted to change that and today two out of three active stock investors with Groww are under the age of 35, one in three is under the age of 25. 60% of our users are outside the top 4 metros and an overwhelming majority of them are first time investors. Having said that, India has a long way to go when it comes to investing in equities. In most of our interactions with customers, it is very clear that lack of knowledge of investing is the most significant roadblock that is keeping the majority of Indians away from equities. This is why as a platform we have undertaken a series of initiatives to educate investors about the nuances of investing in every format possible be it text or video, online or offline, on off the app or off the app - on email, social media, whatsapp, or telegram, every day we reach more than 10 million users through our financial literacy initiatives.



Most players in the segment focus heavily on investor education and literacy. Is this an area of focus for you as well? If so, what are some initiatives you have taken around it?

A Financial education content has been a critical focus for Groww since its inception. We have undertaken a series of investor awareness initiatives to spread financial literacy in the country. Some of these are as follows:

- A pan India investor awareness campaign called 'Ab India Karega Invest' in which we host India's top fund managers to answer investment-related questions and guide investors.
- A virtual event called Thrive where we host India's smartest minds to talk about money with thousands of investors in a single day.
- Our daily and weekly newsletter is read by close to 5 million readers every day. We have two flagship youtube channels - one dedicated to stocks, and another one to mutual funds with a base of more than 11 million subscribers.
- We have also started youtube channels in Tamil, Telugu, Kannada, and Malayalam to reach non-Hindi speaking users down south.
- On Instagram, and other social media channels we reach the younger generation and create content that is aimed to make investing engaging, exciting and fun.

Q

How has the pandemic impacted your business? Do you foresee any sustained after effects on the industry?

The pandemic caused tremendous financial hardship A to millions of Indians around the country, but it also brought investing at the centerstage of drawing room conversations. The pandemic helped in sensitizing many Indians that both saving and investing are critical habits one need to inculcate to safeguard themself and their family against a future crisis like this one. Be it work from home, or moving back to one's hometowns, the pandemic provided many Indians an opportunity to reassess the way they handled their money and influenced many to start saving and investing for the first time. The fall in the market after the lockdowns were imposed and the subsequent rise has also taught many of these first-time investors the importance of investing for the long term and the power of not panicking during such times.

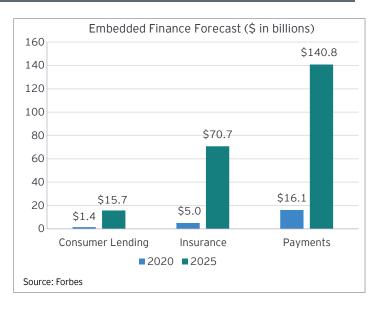
6 Embedded finance is enabling FinTech as a feature

Embedded finance, also termed embedded banking, is the seamless integration of financial services into a non-financial service platform. For example, customers can make cashless payments within a ride-hailing or food delivery app and book insurance while completing the purchase of a laptop on an e-commerce site. From the business point of view, embedded finance enables businesses in the MSME, B2C, and B2B segments to monetize their customer base for additional revenue streams, increase the customer Lifetime Value (LTV), and vertically scale³⁶ their product offering. It could become a massive market with an estimated \$200 billion global opportunity³⁷ by 2025.

Types of players

Targeted embedded finance solutions can include full-stack infrastructure solutions that allow other firms to easily embed banking, individual feature providers, banks' offering license or/and technology. These services can be payments, lending, insurance, or personal finance options. The opportunities for embedding finance are promising for India's digital and nonfinancial service industries because every tech company now could potentially become a FinTech or at least add a FinTech feature.

Banks have an opportunity here to embed their services such as KYC, cards, loans, compliance, current accounts, and others into non-banks brands. Insurance players are establishing partnerships with tech players to embed insurance offerings in the non-insurance businesses.



The embedded finance landscape has three types of players: The ecosystem builders (e.g. Swiggy), connectivity builders (e.g. Plaid), and infrastructure providers (e.g. NIUM) that embed FS capabilities into other companies.

Areas of opportunity for embedded finance include health and wellness, OTT and online gaming, education, agriculture, travel and transport, energy, construction, and real estate. Embedded Finance brings multiple parties together and enables them to play to their strengths.

	Digital platform	Embedded finance institution	Fintech company	End customers
Strengths	 Deep Understanding of Customer Trusted by Customers Present at Point of Demand 	 Expertise in Traditional Underwriting Licensed to Offer Financial Services 	 Expertise in Tech Expertise in Design Expertise in Delivering financial services Relationships with Multiple Financial Institutions 	
Value Added	 Brings Customers Markets Effectively to Customers Maintains Customer Relationship Cross-sells to Customers Innovates for its Customers Contributes Additional Data for Underwriting 	 Processing Applications Capital (where applicable) 	 Connect Financial Institution with Customer and Business Platform Provide the Tech Infrastructure Provide Value Added Services, such as UI Design, Customer Servicing via Tech 	
Benefits	 Increased Customer Acquisition Improved Customer Retention/Loyalty Alternative Revenue Stream 	 Improved Customer Acquisition Increased Repeat Customers Improved Collections (where applicable) Improved Margin on Financial Services 		 Improved User Experience Increased Access to Financial Services Cheaper Financial Services Receive Tailor Made Financial Services

Let's look at few examples of embedded finance in India:

- WhatsApp: WhatsApp Pay
- Amazon: Amazon Pay, general insurance products in partnership with Acko general insurance, lending in partnership with Capital float; Can also invest in gold.
- Swiggy: Digital wallet in partnership with ICICI and working business loans for street vendors in partnership with the PM SVANidhi scheme
- MakeMyTrip: partnership with ePayLater to offer loans

Amid this growth trend, compliance with data storage laws, privacy concerns, IT regulations, cybersecurity concerns, and early days for customers to use financial services from nonfinancial services companies remain the key challenges facing embedded finance players.

However, key drivers that will continue to fuel the growth for embedded finance in India include:

- Availability of high volume of transaction data that offers better targeting opportunities to cross-sell
- The increasing proliferation of cloud and adoption of APIs by financial services and FinTech companies
- Opportunity to create additional revenue streams
- Internet commerce companies keen on leveraging their existing customer base to add revenue streams by offering financial products that also enable it to increase the GMV

Since COVID-19, the digital adoption of financial services has accelerated across consumers, businesses, and financial services incumbents.

Next steps:

In the FinTech context, licensed B2C FinTech players have the opportunity to engage with non-banking players and offer financial services to consumers. The B2B FinTech players that can provide APIs (e.g., eKYC, authentication, data APIs, or payments APIs), white-label solutions, and value-added products that serve over the top of the core infrastructures are likely to create sustainable value propositions.

More significant potential for embedded finance will unlock with the growth of API-led banking-as-a-service (BaaS) offerings in the country. Embedded finance has the potential to create substantial changes in how banks operate. However, the possibilities and tech complexities make it challenging to understand the opportunity and why a bank should engage. A few of the notable drivers for banks would be the following:

- The distribution of financial products via external channels opens the door to new markets. E.g., DBS Bank is partnering with lifestyle brands to acquire customers in India, a market it did not previously serve.
- Banks may be able to charge fees for enabling permissioned data access or collect fees and transaction revenue share from partners
- Embedded finance offers an opportunity to attract new deposits through non-traditional channels at a lower cost
- If the bank builds up differentiated capabilities while seeking to support embedded finance (e.g., in fraud, identity verification, payments), it can offer those capabilities to other financial institutions, generating new streams of revenue

Banks need to chalk out their objectives for getting into embedded finance, differentiate, select the right platform partner, close the technology gap to be integration-ready with new-age consumer technology players as their embedding partners, and still ensure their regulatory compliance.



Interview with Nikhil Kumar, Co-Founder and Chief Evangelist at Setu



Q



Nikhil Kumar is the co-founder and leads all core products. Prior to Setu, Nikhil worked with iSPIRT Foundation alongside the Ministry of Finance, NPCI and TRAI to launch GST APIs, UPI APIs, and build a robust developer ecosystem to take UPI to 100 million users in just two years since launch. He later worked with NPCI and JusPay to conceptualize and build the Bharat Interface for Money (BHIM) app, which launched on Dec 30, 2016.

What is your definition of embedded finance? Also, what are some of the main use-cases you associate with it?

A Customers need to do four basic things with their money. Receive it, accrue value to it, make payments, and access it under emergency situations. In the earlier world, the customer had to visit a physical bank branch to complete these tasks. A large number of Indians still do. On the flipside, with higher adoption of smartphones, more users are conducting their core business online for the first time - via ecommerce platforms, digital merchant acceptance, salary management/tax management portals. There is inherently a need for financial products to serve users where they are already conducting their financial lives. Bank applications and websites are not enough and this is where embedded finance plays a role.

There are already a number of precedents in India of how embedded finance drives user convenience and adoption.

- 'Bill Payments' serve as a ready example of embedded payments.
- There are thousands of merchants in India who accept a high volume of recurring payments. Electricity, water, gas, DTH and recharge cause high traffic digital payments with lower ticket sizes, called 'Bharat BillPay System.'
- A network called BBPS empowers such merchants to accept users to make standard bill payments across 400+ apps and 1 million offline touch points.
- Setu's first product was to expand the categories of bill payments accepted on this network. Within 3 years we command a sizeable share of the incremental market by partnering with regulated biller aggregators called BOUs (e.g. banks).

Q What do you think are the main drivers for this trend? Is it borne out of just providing convenience to consumers or are there other factors at play as well?

- A Earlier, the cost of distribution dictated product design and which user segments to target. For example, branch operations dictated the profitability levels required to keep the branch selfsustained.
 - Embedded finance significantly reduces the cost of acquisition for a bank, even the cost of servicing an existing customer. From the banks' perspective, it is impossible to own, operate and build the marketplaces which drive commerce like Amazon or Flipkart.
 - Hence, embedded finance makes it viable to acquire and service a wider base of customers that may be outside the bank's original remit.
 - Customers' convenience also drives demand. For a small business, conducting business online is now easy. You can set up a virtual shop using multiple software tools, and fulfil customer orders across the country with a click of a button, and even get paid instantly because of advancements in digital payments processing and innovative credit. More such small businesses are likely to conduct business online.

What are the major challenges you had to overcome to integrate with traditional financial players, particularly from a technology and regulatory standpoint?

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A The main challenges we had to overcome were primarily around ensuring relevant stakeholders across institutions are aligned on the necessity of common open financial ecosystems where all participants gain more value. Legacy tech stacks and risk frameworks developed in previous decades have to be revamped for the new realities of how customers want to be serviced at the source of where they need a financial product. At Setu we are taking an active role in enabling these open ecosystems with our involvements in projects such Bharat Bill Pay System, Open Credit Enablement Network and Account Aggregator Ecosystem.

Q

What are some of the interesting embedded finance usecases you are working on or planning to launch and are most excited about?

- Fixed deposit APIs: Setu is building India's first aggregation solution for fixed deposits. Any customer facing fintech platform that wants to offer fixed deposits to their users can plug and play Setu's fixed deposit stack into their platform/ systems and provide deposits to be booked without going through the hassle of opening savings bank accounts. We are currently live with our first customer Google Spot allowing customers to book FDs with Equitas Bank.
 - Account Aggregator APIs: The Account Aggregator ecosystem is poised to open the UPI moment for data within the country. We are excited about partnering with multiple institutions and helping to evangelize the promise of multiple new product suites such as cash flow based lending that the Account Aggregator ecosystem can enable.

Q

Α

What changes would you like to see regulation wise to sustain this trend and help players like yourself offer a better and wider array of financial products?

- Techno-legal frameworks: Techno-legal frameworks assist in creating an infrastructure by building defined technology standards which encompass regulatory guidelines as part of the processes. This helps in providing an enhanced experience to the customer as there players providing the product/ service can adhere to the technical specifications laid down in the regulations. Creating such frameworks (like account aggregator/ peer to peer lending) can help in providing safe, secure and convenient products/services to the customer.
 - Interoperability: Regulations supporting interoperable products/ services. In order to reduce the pain point of the customer to have dependency on a single service provider and not able to move funds/ data amongst the system participants adds to limited use of the product/ services available in the financial ecosystem.
 - Regulations Review Authority based on sectors: We understand that the financial ecosystem is growing at a very fast pace and there exists multiple sub categories and respective regulations within sectors. For example, the banking sector has public/ private sector banks, small finance banks, payment and banks among others. Similarly, the payment sector has prepaid payment instruments, payment aggregators, white label ATMS, and TReDS. Frequent regulations review authority based on sectors like banking, NBFC, payments etc. will definitely add perspective from the respective industry segment in terms of what can be enhanced in the segment to overcome any challenges/ issues they are facing.

7 MSME is the new battleground

The Micro Small and Medium Enterprises (MSMEs) sector is a significant contributor to the country's socio-economic development. The sector currently contributes around 30% towards the Indian GDP through its domestic and international trade. The Indian government aims to increase this share to 40% in the coming years, thus making it a major growing sector.

India has approximately 6.3 crores⁴⁹ (63 million) MSMEs, and a large number of these tend to be informal, share limited public information, and are relatively less aware of the bank requirements. All of this results in higher information asymmetries, impeding bank lending to the sector. As per an RBI report, India's total commercial lending exposure stood at \$919.1 billion⁵⁰ as of June'20. MSME segment holds only onefourth (25.3%) of the total lending with \$232 billion of credit exposure. Furthermore, the estimated debt requirement for Indian MSMEs points to an immense credit gap of approximately \$219 billion⁵¹, exceeding the available supply of finance from the formal sector. Considering their small size and because they often do not have recognized collateral, banks and financial institutions are reluctant to lend to MSMEs. Thus, most MSMEs lack easy access to credit. And this is where FinTech can play a pivotal role in bridging the credit gap.

Additionally, MSMEs are increasingly looking to go digital. COVID-19, along with government push for digitalization (GST, e-Invoicing, Trade Receivables Discounting System, OCEN) has accelerated the trend for digital. This has resulted in many players creating a one-stop shop offering to serve all MSME needs. This approach will enable a provider to reap immense benefits as it will not only make the offering sticky but provide access to a treasure trove of data on the MSME which can be leveraged to cross-sell and up-sell financial and non-financial products.

	POS/QR	
Payments	Business payments	Razorpay FCashfree SifiPay
SME Neobank		ARazorpay Oopen tide
Lending	Internet First Working Capital Loans	of Gusiness PROGCAP
	Business Loan	ECAPITAL INCREC LENDINGKART KICON
	Term loan	FLEX LOANS
Accounting & Taxation	-	ShopKirənə Empowering Retailers Vyapar 📓 🕜 OkCredit
Insurance	-	O Plum Plum hova benefits
Invoice Management	-	FreshBooks ZOTIO Invoicely DinvoiceNinja

Lending: Although relatively nascent, NBFCs powered by FinTech are paving a hassle-free route to providing faster and tailored credit products for MSMEs. The use of new-age technologies and digital tools such as Artificial Intelligence (AI), machine learning (ML), and data analytics is helping this high-potential space to grow and drive greater financial inclusion across the country. Some of the key FinTechs in this space include LendingKart and Flexiloans. KredX and C2FO are focused on invoice discounting.

Accounting and taxation: There are around 12 million Kirana stores52 in the country, accounting for 90% of domestic retail and fast-moving consumer goods sales. More than 80% of India's retail stores are cash-intensive and still operate in the unorganized economy. It is noteworthy that almost 70% of Kirana shops53 in big cities and 37% in Tier-II towns show their willingness to use technology to manage their businesses. This presents an exciting opportunity area for payment, bookkeeping, and lending solution providers. There are some very focused aggregator platforms that integrate payments, accounting, tax, inventory, and supply chain management. For example, OKCredit and Khatabook provide a mobile-based khata (ledger book), which helps MSMEs track transactions easily and in real-time. Both applications feature a ledger system and reminders linked to upcoming payments.

The key value propositions for this growing adoption of accounting FinTechs include easy to maintain and real-time

access to the ledger, easy to share credit status and request payment, error-free, risk-free with no fear of losing physical copy, streamlined reports, and easier accounting for tax purposes.

Payments: FinTechs in this category are helping MSMEs process payments via electronic payments, including mobile payment platforms, credit card processing kiosks, point-of-sale systems, and other methods. mSwipe, Razorpay, Pine Labs, Ezetap, and BharatPe are some of the prominent FinTech players in this space.

Insurance: FinTechs in this category are providing merchants with business insurance solutions. For instance, SecureNow offers group health, workers' compensation, fire insurance, and officers liability insurance, among other products.

Other: Other merchant focused FinTechs include companies providing outsourced CFO services or contract management services. For example, Sirion Labs manages outsourced contracts and invoices for enterprises.

BigTech's growing interest

Apart from these payments, lending, accounting InsurTech players, BigTechs such as Amazon, Google, and Jio are also eyeing this segment, improving their last-mile reach. For example, Jio is piloting POS payments and supply chain systems for MSMEs as part of its omnichannel strategy. Facebook's \$5.7 billion investment in Jio is expected to bring India's small merchants and retail stores online. In 2020, Amazon hinted54 around investing \$1 billion to bring 10 million small and medium businesses online and provide services like e-commerce onboarding, cataloging, and warehousing. In March 2021, Amazon acquired retail tech startup Perpule in an all-cash deal to up its game in the Kirana-tech space. It will leverage Perpule's cloudbased point-of-sale (PoS) offering 'UltraPoS' and offer a new suite of technology products to Kirana partners while digitizing neighborhood stores.

Account Aggregator (AA) framework

With an aim to solve some of these issues, in 2016, RBI first announced the Account Aggregator (AA) framework that aims to enable customers to avail benefits like viewing statements in a single window. In September 2021, eight Indian banks announced that they are rolling out Account Aggregator to enable consumers to consolidate all their financial data in one place. (Participant banks are HDFC, Kotak, ICICI, Axis, SBI, IndusInd, IDFC and Federal.) Four of them rolled out AA on 2nd September 2021, while others indicated their intention to roll out the new system soon. The account aggregator framework will enable access to reliable financial data sets of a potential MSME borrower for FinTech lenders. Financial data currently resides with multiple regulated entities. It can be a painstaking process for a borrower to collect this data, aggregate it, and share it with banks and financial institutions as required to access credit. An account aggregator acts as the intermediary that manages and controls data flow and solves this specific problem. Data of a borrower linked to bank accounts can now, under the RBI account aggregator framework, be "pulled" from a financial information provider and "pushed" to a financial information user (in this case, the FinTech lender), all with customer consent. The FinTech lending platform will then analyze the aggregated data to determine the eligibility and credit products for the borrower.

Large banks also working on solving MSME problems

Government of India has been planning to launch Bharat Craft, an e-commerce portal, on the lines of Alibaba, for MSMEs to trade and fulfill requirements. Country's biggest state-run bank, State Bank of India has been executing this vision of the Government, to set up an e-commerce portal for marketing of products manufactured by MSMEs in the country. The portal would be jointly run by the bank and the Government. SBI has been working on rolling this out via their flagship SuperApp, Yono, and it has been equipped with significant data that would help run the business-to-business (B2B) portal Bharat Craft. Like SBI, some of the largest private sector banks are working on creating an MSME.

Way forward

Key focus areas to gain a competitive edge in this fiercely competed MSME market:

- Open API architecture is an absolute necessity, and banks need to embrace it to be API integration-ready
- Banks need to redefine their MSME proposition as an ecosystem play instead of a financial product focused offering
- Providers that can enable MSMEs to increase revenue and save cost by offering services beyond standard financial products are most likely to win in this market
- RBI's cashflow lending workflow proposes a pure digital lending value-chain stitching several market participants and leveraging many digital public infrastructure blocks from India Stack. Cashflow-based lending solutions (e.g., FredX, CashFlo) focus on these underserved customers and present a huge market potential. While FinTechs are quickly trying to grab this market, banks will need to revisit their scorecard methods in line with upcoming frameworks to use this alternative digital data.
- The high cost of lending for small value loans remains a pain point. In discussion, RBI-backed account aggregator service protocols can create opportunities for digital lenders and open new competitive playgrounds for banks. Traditional lenders will need to leverage this development.

MSMEs' expectations to achieve financial parity and assistance would be primarily focused on access to loans. However, it is important to gauge the huge market potential for other FS and business tools offerings for Indian MSMEs. The Government's active push for MSME sector growth and world-leading digital public infrastructure protocols for FinTechs will attract more players. These digital-native players have the option to tap the opportunity and specialize in one core feature or offer a bundle of services such as lending, insurance, accounting, filing their tax returns, risk assessment, and Al-based credit disbursement solutions. Continued innovations and reach to new MSMEs customers base will help gain valuable access to data providing exponential growth opportunities with additional revenue streams in the long term.

Interview with Harshil Mathur, CEO and Co-Founder at Razorpay





Harshil started Razorpay after discovering the dismal state of online payments in India. He graduated from IIT Roorkee in 2013 and started working at Schlumberger. With an idea to change the way online payments functioned in India, Harshil quit his full-time job and founded Razorpay with his Co-founder, Shashank Kumar in 2014 to simplify online payments.

Razorpay is one of the only two India-focused companies to be selected for the prestigious Y Combinator (YC) program. Along with 33 reputed investors, the company is also backed by GIC, Ribbit Capital, Sequoia Capital India, Tiger Global Management, Y Combinator, Matrix Partners and Mastercard with a funding of \$366.5 million from Series A, B, C, D and E rounds.



In the past few years, we are seeing a big surge in the digitization of MSMEs through various Government and private initiatives and entities. What do you think are the key factors driving this?

Α

Digital India has been the Government's marguee policy over the years. Financial inclusion through digital intervention is one of the primary goals within the movement as this disruption undertakes the critical task of bringing small and medium businesses as well as low income consumers within the fold of formal banking, ensuring protection of their wealth and giving a boost to the formal economy. India has close to 63 million MSMEs. These 63 million MSMEs contribute to 30% of India's GDP and currently have limited adoption of innovative digital tools and services available in the market. This limits not only their own growth but also a broader consumer inclination to use digital services for payments as well as their true potential and contribution owing to their operational inefficiencies. The Government as well as the private sector acknowledges the challenge and the underlying opportunity in promoting digitization and the broader impact it can have on the economy. In this year's budget speech, the Finance Minister announced an allocation of 1,500 crore to spur the adoption of digital payments across the country. The clear institutional intent in addition to the disruption brought about by UPI and thriving fintech innovation are going to be key drivers in setting India on a clear path to becoming a cashless economy.

Q

What are the main pain points of MSMEs in the country that are nudging them to adopt digital tools and join the formalized economy?

- India has witnessed a progressive acceptance and adoption of FinTech innovation in the last couple of years. But while the big payment players in the market were catering to large businesses, smaller businesses have been struggling to manage their payments and banking transactions and needed immediate attention.
 - One of the major challenges that Indian SMBs (Small & Medium Businesses) and Startups have is the lack of an intelligent and a fully integrated technology infrastructure, especially for their business banking requirements. With business models becoming increasingly complex with every passing day and shifting consumer demands, there was a gap for a comprehensive intuitive solution that would make consumer payments, banking for businesses and financial services - all accessible through one single platform.
 - In addition, the method in which business banking was being carried out in India was not the most efficient way to manage finances and money flow within an organization. With traditional banking, businesses were spending too much time on manual labor every month, dealing with buggy software and complex infra systems.
 - Also, businesses lacked a solution that gave actionable insights on trends and volumes around payouts and disbursals which could help business leaders of SMBs (Small Medium Businesses) make impactful business decisions.
 - One of the major challenges for SMBs (Small & Medium Businesses) and Startups was the lack of an intelligent technology infrastructure, especially for their business banking requirements. Businesses had sufficient solutions for their payment needs but not for banking.

Q

How are you trying to solve some of these particularly to address their financial needs?

One of the major challenges for SMEs and Startups was the lack of technology infrastructure, especially for B2B payment technologies. They needed a comprehensive converged payment and banking solution that can help manage the entire money movement (from acceptance to disbursals) within an organization. Having built solutions for payment acceptance, we always believed that for the next phase of growth in the fintech industry, payment players need to evolve beyond offering solutions for payment acceptance to managing the entire money flow (from acceptance to disbursements and everything in between). Hence, it was of supreme importance to recognize a market (SMEs & Startups) not being catered to, identify challenges, and provide a wholesome solution, at scale. This thought gave birth to the neo-banking platform, RazorpayX - a unique product line which redefined benchmarks in product innovation and customer support for the industry to follow. With RazorpayX (and Razorpay 2.0), the company now offers a single platform for businesses to manage the entire money flow within an organization.

Q The sector has been a keen area of focus for the Indian Government as well. With many policies, schemes and other steps taken by various Government entities to help foster the MSME industry. What more do you think various Government agencies do to help the sector?

A spreviously elaborated, while fintech disruption and payment innovation has grown leaps and bounds in India, adoption of digital payment options as well as a broader digital technology remains limited in India's SMBs. In light of the challenges faced by SMBs as well as the slow pace of adoption of digital tools and services, it is critical to note that the issue needs to be addressed head on via an active incentive and training driven multi-faceted approach. Lack of digital and physical infrastructure as well as a capability and trust deficit are key hindrances in boosting digital payments adoption in India.

Notably, the Government has been steadfast in its commitment to the Digital India Movement as well as in acknowledging the need for support for SMBs to adopt digital infra and payment. However, it is time for the Government to move from a progressive prescriptive approach to active incentivization and training.

- Incentivizing SMBs to adopt innovative digital solutions: The Government needs to ensure that MSMEs are incentivized via deficit reimbursement, infra setup costs as well as access to digital tools/ services at a State covered/reimbursable cost in order for them to adopt digital payments as well as other tools and services.
- Training and hand-holding SMBs: Despite the fact that a majority of Indians now have access to the Internet, many of them just use it for simple tasks like accessing social media or browsing. Because of a lack of digital literacy and training, the general public is less aware of how to use the Internet to help with daily trade. This causes two issues for MSMEs. First, without the assistance of a technological specialist, they struggle to combine their physical and digital activities. Second, because many Indians choose not to undertake digital transactions, a lack of awareness about digital payments decreases the potential client base. The need of the hour is for the Government to create a dedicated task force/agency to train and facilitate digital adoption by SMBs and consumers alike. The capacity building of consumers as well as businesses has to be State-led.
- Collaborating with the private sector: Institutional inclusion and collaboration with the private sector can play a key role in speeding up the digital adoption process as well as provide the expertise and support needed to understand the technical aspects of digital technology. Fintech companies like Razorpay with proven expertise in solving for SMB segment and their adoption issues, can be key partners of the Government to steer the Government's efforts in the right direction.
- Expanding the scope of Government intervention: While there is a much needed thrust by the Government towards digital payment adoption by businesses and consumers alike, it is time now for the Government to advocate and support the overall digitization of the entire financial life cycle of SMBs. With the launch of RazorpayX and Capital, Razorpay is striving to do just that. Creating a proactive regulatory as well as advocacy environment for such innovations as Neobanks (Retail as well as SMB centric) and other Fintech platforms, can revolutionize SMB digital adoption.

8 Increasing adoption of API banking is unlocking ecosystem opportunities

API banking is on the rise across the globe. While Europe leads this space due to its proactive regulatory push, the Indian landscape is adopting it to tap into commercial opportunities. API adoption enables banks and FinTech alike to innovate and facilitate solutions to meet customers' digital needs, offer new products and services, thus creating new revenue streams.

Multiple internal and external drivers are making it imperative for organizations to innovate and adopt this strategy. Some of the key drivers include the rising digital product demands, integration limitations of legacy systems, threats posed by FinTech adoption, large underserved customer segments, and cost-efficiency pressures due to shrinking traditional interestbased revenue streams.

New revenue streams

New revenue streams such as fees for value added service, white labelling of banking services, partnerships and API monetization

Customer delight

Offer customer delight through improved customer service and ability to deliver customized products to cope with increased customer demands

Market share

Increased market share enabled via strategic collaboration/partnership opportunities for traditional and FinTech players and cross selling opportunities

Data driven insights

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Enhanced client insights and data-driven capabilities resulting from greater connectivity between functions as well as with third parties

Efficiency gains

Attain efficiency gains and cost saves through anoptimized and improved tech architecture

6 Service offerings

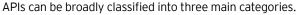
API partnerships enable banks and third party service providers to leverage their complementary strengths and provide a more comprehensive set of offerings across each other's channels

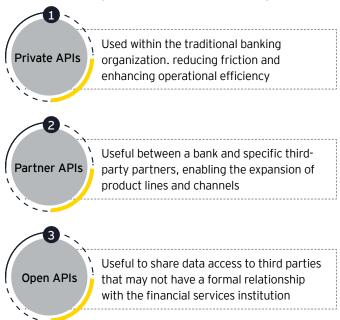
Increased benefits for FinTechs

FinTechs get access to an additional customer base under the commercial partnership with traditional players

Access for non-FS players

Unlocking new opportunities, revenue streams and customer base for non-FS players





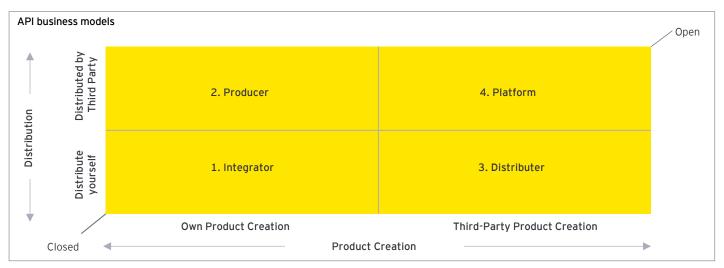
Globally, API banking has enabled early-adopters to launch a bevy of innovative use-cases across banking products and customer segments. In India, API banking is relatively in the nascent stage, however, we have seen some great success stories by the likes of ICICI Bank, Setu, Axis Bank and RBL Bank.

Adoption of API Banking over time has created opportunities for new and innovative business models such as:

- Integrator model is the traditional model where the offering to the customer is exclusively created and distributed by a single party.
- Producer model is where two parties can collaborate and work towards creation of a niche offering together, and the distribution is taken care of by one of the parties.
- The distributor model focuses on the distribution of thirdparty services to clients. It is usually a commission-based engagement between parties.
- Platform enablers focus on data sharing, data distribution, and quick and easy integrations by opening their infrastructure and APIs. This provides an opportunity of creating data monetization and API subscription or call volume-based Pay-as-you-go revenue streams.

We have now seen successful use cases of API Banking in India landscape with it even acting as the driving force of embedded finance.

- Cashfree, an Indian payments platform has launched APIs through which lenders will be able to leverage and incorporate into their disbursement value chain.
- Even the Gaming sector has been able to derive value with the likes of Mobile Premier League leveraging RazorpayX APIs and help their users with rewards and payments.
- E-commerce, of course, has benefitted the most from this trend, with the players now having the ability to provide a consistent and seamless customer experience for banking and payouts.



Keeping the benefits in mind, we now have FinTechs such as Open trying to take this a notch ahead, who have now offered developer sandbox, for developers to test out their APIs before deploying to production. Open's API offerings include virtual accounts and recurring billing via direct bank debit and bulk payouts. Open is working on APIs for creating and issuing business debit cards and expense cards, payment gateway, UPI, and extracting bank account information from other banks. Open focuses on SME customers who can enrich their user interfaces, CRM, and other backend systems with banking APIs integrations for ease of transactions and convince of cash flow management.

These examples indicate the potential of API-led bankingas-a-service model for incumbent banks. On the other side - FinTechs, FS, and non-FS players also benefit by acting as enablers of financial services where customers and commerce meet. For example, API can enable automotive players to enrich their customer interface with real-time financing options from several banks and bring superior customer experience.

The experience of digital banking has been boosted by Open-API like Aadhaar Enabled Payment System (AEPS), Unified Payments Interface (UPI), Mobile Wallets, along with traditional tools like banking cards, USSD, mobile banking, and POS terminals. FinTechs use API banking to retrieve account balances in real-time, processing transactions at high speed round the clock.

Between July 2020 and March 2021, investors funded at least eight startups involved in API development, looking to cash in on a relatively low-risk, asset-light segment of the digital banking food chain. Banking and payments-focused API startup Yap raised funds from venture capital investors earlier in March 2021.

Regulatory landscape

Unlike Europe, where regulatory policies played a role, India's Open banking and API growth story is fueled by industry players. However, regulatory is catching up and playing a slowly constructive role. The government-authorized Account Aggregator platform was launched recently that will enable account aggregators to extract, aggregate, and transfer financial data with customer consent securely. Currently, four Account Aggregators have operating license: CAMSFinserv, FinVu, OneMoney, and NESL Asset Data Limited. Eight major banks in the country-State Bank of India, ICICI Bank, Axis Bank, IDFC First Bank, Kotak Mahindra Bank, HDFC Bank, IndusInd Bank, and Federal Bank - have joined the account aggregator network.

Recently launched (2020) Open Credit Enablement Network (OCEN)56 aims to democratize the lending landscape through APIs as UPI did for payments. OCEN chalks out the framework of APIs for interaction between borrowers, lenders, loan service providers, and account aggregators. OCEN will work in tandem with the AA framework to enable anyone with an access to a marketplace to provide lending products to their customers.

Next steps:

For the ecosystem to reap significant benefits of API Banking, it is vital for more players to collaborate, and leverage their complementary strengths, thereby, enhancing the customer experience much better than they may do on their own. However, to keep integrations easier for developers, the quality of API documentation and following global standards is still an area that these players need to consider while issuing APIs.

For banks, it is essential to consider the following factors:

- Identify the right API management solution and governance model that allows them future scalability in the number of APIs and supports increasing API call volumes.
- Banks need to be conscious of audit accuracy when applying automation and cognitive solutions with APIs.
- Banks need to ensure a collaborative mindset and strategic effort to break functional silos, often a critical roadblock in swift digital transformation.
- Keeping pace with the changing regulatory and industry landscape around customer data, cybersecurity, and open banking frameworks.

In response to the API Banking trends, it is now important for banks to rethink the strategic role they would want to play in this ecosystem. They would need to decide whether they would like to proactively engage and fully embrace this trend, or selectively identify areas which they may want to target and monetize. Adoption of API banking could help institutions deliver rapidly, extend services beyond traditional banking offerings, and truly unlock opportunities for forward looking banking.

Interview with Deepak Sharma, Chief Digital Officer at Kotak Mahindra Bank Limited





Deepak Sharma heads Kotak Mahindra Bank's digital initiatives where he drives digital transformation, business model innovation and future ready initiatives of the bank. He is responsible for efficiency, productivity, customer experience and growth of the business through digital intervention across digital channels, lending, payments, investments, insurance, trade and forex, for the Retail, SME, Private Wealth and Institutional Banking segments. Deepak also leads Digital IT and Product Engineering, Innovation Lab, Design Studio, Fintech partnerships and the Start-up ecosystem participation for the bank.

Under his leadership, Kotak launched several innovative and global first products such as 811, Jifi, Hashtag Banking, KayMall, WhatsApp Banking and Kaypay, apart from new initiatives like API, Open and Connected Banking, Conversational Banking Bot 'Keya', BYOD Biometric Banking, Crossborder remittances on Blockchain, Artificial Intelligence(AI) and Robotic Process Automation. Deepak believes in constant innovation and focuses on building business models, which are customer centric, value accretive and disruptive.



What are the main banking segments and products where you are seeing an uptake of API banking solutions? What are the main drivers for it?

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Payments, Transaction Management, Consumer Assets were some of the key areas to take off initially, however now we are seeing many new use cases across products. It is primarily driven by demand from end -consumers, business users and ecosystem participants. COVID has only hastened the adoption of digital channels and payments. Aggregator portals solve the search and discovery problem for end-customers and once lending products are discovered, the seamless journey from the aggregator site adds to user experience.

Which other segments and products do you think can benefit through API banking models and where do you see more activity happening in the future?

- In the future, we would see data sharing through APIs in Α the Account Aggregator (AA) ecosystem. Seamless, endto-end low-ticket unsecured lending processed digitally through the OCEN framework. Embedded finance would play a critical role in distribution of financial products - savings, investments, lending, and insurance through APIs in partner ecosystems.
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What has been your strategy so far in terms of API adoption? How do you decide which segment to go for and why?

- Customer pain points and change in preference and Α engagement are the key factors to consider while identifying a segment to go after. Once we have a segment identified, we collaborate with an anchor partner to launch a minimum viable product with specific goals. On achieving the same, we scale the solution with multiple partners in the same segment. Our focus is on experimentation and faster rollout to achieve productmarket fit for the specific solution.
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What are some of the key challenges that you have encountered and overcome while trying to undertake this API journey?

Developer experience is a key component in API adoption. Good developer experience involves easy discoverability and quick on-boarding of APIs.

We have launched a developer portal which aids in easy discoverability and faster on-boarding. Security is a critical component as APIs are exposed to the external world.

API Manager Infrastructure brings in the security layer to control and monitor the usage of APIs.

What are the main regulatory and technology challenges do you face while building your API banking ecosystem both from the supply (banks, other FIs) and distribution (SMEs, TP vendors and FinTechs) sides?

A Key challenges which need to be addressed while building the API banking ecosystem are - security and risk, infrastructure resiliency and scalability and faster response to market needs.

Security and risk: We address the same through strong a due diligence process before onboarding partners. API manager tech stack offers better security. We have also built additional security layers behind the API manager to handle additional security requirements based on the nature of the API usage.

Infrastructure resiliency and scalability: Cloud and micro services architecture helps to address the same.

Agile and DevOps helps in faster development to handle changing market needs.

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What, according to you, does the future of API Banking hold for you and overall, India FS landscape in terms of unlocking value and ecosystem synergistic opportunities? What according to you are the key trends that are shaping up the digital lending industry right now?

API banking would become a key channel in addition to mobile banking and Internet banking channels. We see a bigger opportunity in the embedded finance space. Buy Now Pay Later (BNPL) is a key trend shaping up in the consumer lending space.

9 Digital payments gearing up for the next wave of innovation

Digital Payments in India has seen widespread adoption and grown significantly, especially over the past few years (~60% CAGR8 during FY16-FY20). Several key drivers that have contributed to this growth include the following:

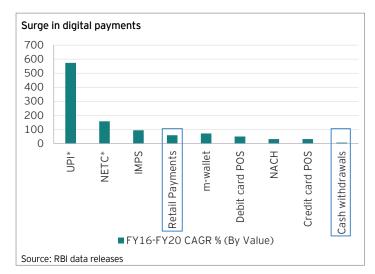
- Improved mobile and internet penetration
- Regulatory and government policy push towards financial inclusion
- Emergence of low-cost real-time payment methods
- Rising tech-savvy millennial population
- A vocal FinTech community that is driving the innovation agenda
- COVID-19 induced need for contactless means of payments

These drivers have translated into widespread adoption and growth of diverse payment methods and companies, including gateways, wallets, bill payment solutions, POS, P2P payments, and software and API solution players. In addition, two key events have also triggered the surge, firstly the demonetization move announced by the Government of India in 2016 and secondly, COVID-19, jolting people towards higher adoption of contactless payments.

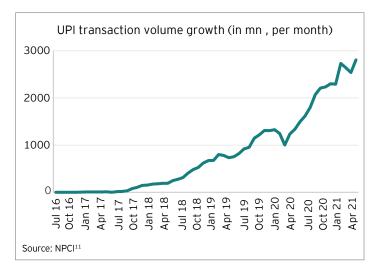
According to an EY-IVCA report⁹, digital payments in India are expected to grow over three-fold at 27% CAGR during the FY20-25 period from INR 2,153 trillion (~\$29 trillion) transactions in FY20 to INR 7,092 trillion (~\$95 trillion) in FY25. In fact, India was home to the highest number of real-time online transactions in 2020, ahead of China and the US.

Consider this: 25.5 billion¹⁰ real-time payment transactions were processed in the country, followed by 15.7 billion in China and 6 billion in South Korea. By 2025, digital payments in India would collectively account for 71.7 percent of overall payments volume, leaving cash and cheques at just 28.3 percent.

The graph below highlights the surge in different payment methods in the last four years, with UPI gaining exponential growth.

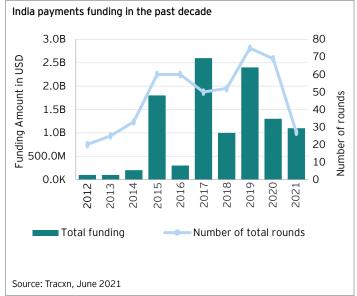


UPI is now the leading form of retail merchant payments (P2M disguised as P2P payment) by value and volume, comparable to credit cards and debit cards. Moreover, UPI's impact gets multiplied because it can be plugged in any consumer tech platform and make payment an added feature for a better user experience. On the other hand, prominent FinTechs, which started as payment players, are now diversifying revenue streams beyond payments.



Payments funding trends have bounced back after COVID

Digital payment FinTech have been the highest funded and pioneers of the FinTech revolution in India. According to Tracxn database, in 2020, payment startups attracted ~\$1.4 billion in equity funding, recording a decline of 41% vs. overall funding in 2019. However, in the first five months of 2021, the total disclosed funding number was encouraging. This year payment players have already raised \$1.15 billion. Pine Labs (\$285 million in series D), Zeta (\$250 million in Series C), and Cred (\$215 million in Series D) have been some of the biggest funding deals so far.



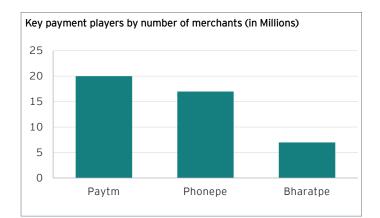
India payments FinTech landscape:

	Consumer		
TPAP / Wallet	PhonePe Pay amazon pay		
PrePaid Card	fampay <i>sode</i>	_	
Bill Payment			nitguru
QR Code payment	BharatPe		ss Jog remitguru
Payment aggregator		Full stack payments	Remittances
POS	Rine Labs missipe. Payswiff Worldline	Eull s	Remit SookMyForex
	Business		Boo
Corporate Card	Rest Sopen		
B2B Payment	PayMate		
Invoice Payment	nüpay hylobiz®		
Payment Gatewa	y Cashfree ARazorpay CAVENUe Leven		
Card networks			
API/ White-label solutions Zeta SETU M2P VSAFEXPAY			
Payment Security			

Mobile wallet adoption in India rose to a high of 46%12 in 2020, up from 40.6% in 2019 and 18.9% in 2018, respectively. Wallets will continue to play a crucial role in its growth with the continuous increase in both frequency and user base.

Exciting changes in the ecosystem driving on

The payments acceptance infrastructure (merchant POS terminals, QR, and mobile-based mPOS and softPOS) is on a steady growth path in the country. QR codes and UPI numbers have augmented the POS digital payments penetration that traditionally stumbled in smaller cities and towns. FinTech players such as Paytm, PhonePe, Google Pay, and Bharatpe have expanded the merchant acceptance market in the country by providing low to no cost POS and mobile POS solutions complemented by hitting the right chords in marketing campaigns and improving literacy in smaller towns through agents. A UPI based POS solution can entail just a printout and can enable and kirana store across the length and breadth of the country to accept digital payments.

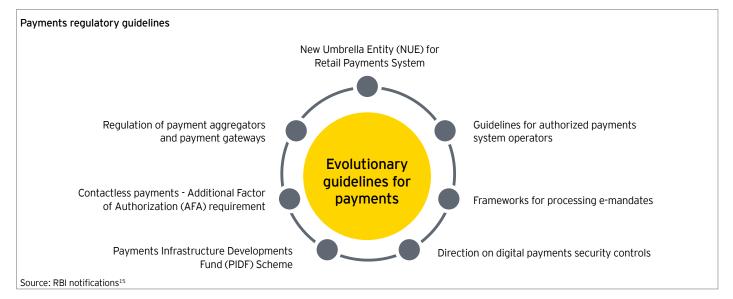


It is important to highlight that the next phase of payments growth in the country is likely to be driven by low-ticket payments and markets beyond the metros witnessing a surge in demand. However, major roadblocks facing the digital payments ecosystem continue to be cash versus the cost of digital transactions, lack of awareness of digital alternatives, and perceived risk of increased tax liabilities for merchants. Therefore, regulators, government, and payment players need a collaborative effort to overcome these hurdles. On the positive side, RBI's resolve to boost payments acceptance14 infra in Tier 3-Tier 6 centers (adding 1 million physical and 2 million digital payment acceptance devices every year) through Payments Infrastructure Development Fund (PIDF) Scheme is expected to add tailwinds to the digital payments growth in underserved segments.

Regulatory landscape has provided a fertile ground

The regulatory landscape for payments, led by RBI, welcomes and supports innovations and new business models. RBI's Payment System Vision 2021 report highlighted the four Cs for payments (Competition, Cost-effectiveness, Convenience, and Confidence), and we witnessed RBI working on those lines in the last two years. We see specific regulations in important areas such as payment gateways, payment aggregators and contactless payments to keep everyone in the ecosystem on their toes. RBI Payment System Vision 2021, published in 2019, is now coming to a close; it will be interesting to see what RBI does next. Expectations are that RBI will develop a new three to five-year vision document to shape the next phase of growth.

The regulator has also been keen on expanding the scope of retail payments in the country by bringing non-banks into its ambit as well. It recently released Master Directions on Prepaid Payment Instruments (PPIs) expanding them to include a larger variety of players and instruments. In particular the new guidelines allow entities to issue PPIs across two categories (small and full KYC), without the need to be backed by an issuing bank.





New tech adoption in payments on the rise

Payment apps' use of one or a combination of new technologies such as facial recognition (e.g., Google pay), fingerprint biometrics (e.g., Paytm, PhonePe), and voice/sound (e.g., ToneTag) to authenticate users and transactions are becoming the norm. These technologies are enabling secure yet faster and convenient payments systems. While RBI's guidelines around security systems ensure that companies meet or exceed the common standards, the new-age tech adoption ensures a competitive edge in the market. In the wake of increasing cyber risks, next few years, the government and regulators are likely to push for multifactor authentication, consumer data protection, infrastructure resilience, scalability of systems, and dispute resolution mechanisms. It is important to highlight that while agile FinTech players find it easy to partner with thirdparty tech vendors to integrate new technology, payment apps launched by banks would need to keep their technology stack open for such integrations and evaluate 'buy versus build' for their apps.

Next steps:

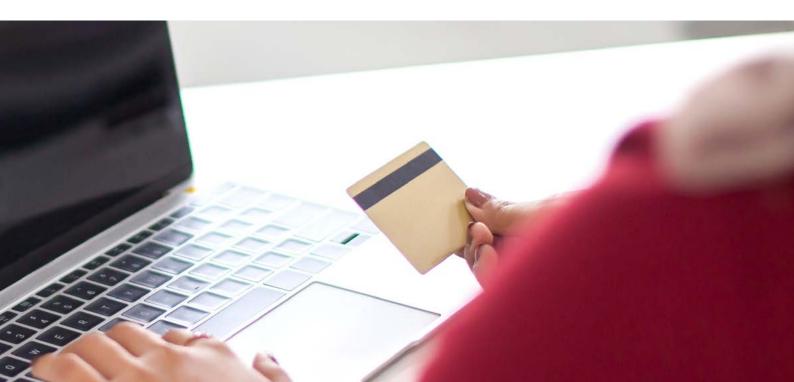
The growth in digital payments has strong implications for the banking sector. It is important to note that banks derive ~25% of total fee income from cards and payments-related businesses. With the rapid growth of 0 MDR on standard UPI P2M transactions, banks would slowly lose control of this lucrative non-interest income source. Banks need to identify alternative revenue streams within the emerging payments ecosystem and changing consumer behavior.

Consumers are increasingly expecting an invisible payments experience, and payments players must adopt technology to provide it.

Most of the payment players are in a phase of diversification from payments provider to offering varied services like e-commerce, wealth management, and even insurance. The vision to become a 'One-stop App' for customers will ensure continuous value addition and innovation.

All players in the industry must scale up their infrastructure to handle the booming volume of transactions. RBI's digital payment infra development fund is a good initiative in the space; it would be interesting to see how that is excited and who benefits from the INR 350 crore corpus dedicated for this acceptance infrastructure build drive.

NPCI, along with the regulator and government entities, has recently launched e-RUPI - a voucher based prepaid instrument on UPI. This exciting new instrument can be made purpose specific through limiting its usage at predefined merchants or service providers. While currently being utilized for COVID-19 vaccinations, it can get implemented for a variety of government schemes and direct benefit transfers as well.



Interview with Mahendra Nerurkar, VP and CEO at Amazon Pay India



amazon pay

Mahendra Nerurkar is the CEO & MD for Amazon Pay India. Amazon Pay's mission is to build the most trusted, convenient, and rewarding payment experience for customers and merchants. Through an array of innovative payment products such as wallet, UPI, gift cards, EMI, pay later, and co-branded credit card, Amazon Pay serves tens of millions of customers and merchants for their everyday payment needs.

Mahendra joined Amazon in 2009. Prior to heading Amazon Pay, he led product and general management roles across Fulfillment by Amazon, Junglee.com, and Amazon Home Services across India and North America. Before Amazon, Mahendra worked as a management consultant advising telecom, media and tech clients across North America and Europe.

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Payments is considered to be one of the most heavily contested businesses in India. Where do you primarily see value being generated and captured in the industry?

India has seen phenomenal growth in the space of payments over the past few years. Digital payments have increased from 1459.02 crore in FY 2017-18 to 4371.18 crore in FY 2020-21 due to sustained efforts towards digitalization . With this massive surge in payments, the space is also witnessing the mushrooming of innovation and companies entering the space. The primary value being generated in this space is by such innovation. Companies like ours are constantly discovering ways to heighten the consumer experience with value-added services apart from just being able to carry out transactions. This constant evolution in technology and at par acceptance of such innovation is what is capturing value in this industry.

With the arrival of UPI and other forms of digital payments, India has been at the forefront of innovation in this space. NPCI has been the bellwether organization leading this charge. What is on the horizon for the industry?

A The arrival of UPI and subsequent digital payments methods has revolutionized the way a customer looks at carrying out usual payment transactions. With rapid technological advancements, the payments industry may possibly expect the development of blockchain payments, payments initiated by voice, biometrics and social media accounts, cryptocurrencies, cloud-based payments, AI, ML, or IoT enabled payments. Payment systems will cease to exist as JUST payment methods. They will evolve more into payment solution providers. This will also lead to greater regulatory engagement and the need to have a risk proportionate regulatory framework that balances innovation, convenience and security will be of utmost importance.

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Can you give us a glimpse of what are the payments innovations you are working on?

Rather than go down a piecemeal approach, Amazon Pay was always devised to be a digital payments experience, encapsulating instruments such as UPI and wallets, as well as newer offerings such as our co-branded credit cards, insurance offerings, wealth management services.

We have innovated with our digital payments offerings, introducing cash loading to allow people to avoid the hassles of keeping the exact change (a time sink for the customer and the delivery agent) at the time of delivery. Any cash balance is transferred to the customers Amazon Pay balance account if the customer so desires, and this becomes a gateway and catalyst do digital purchases on Amazon and beyond. We have Amazon Pay UPI for those preferring to pay directly from their bank account; Amazon Pay Later for customers wanting the flexibility of paying next month at no interest, Amazon Pay ICICI credit card for customers who love a credit card with unlimited rewards and Smart Stores which enable customers to discover products at a merchant's offline store directly through the Amazon app, view rewards and EMI offers and complete safe contactless payments. We have a strong commitment towards digitizing SMBs and our feet-on-street teams visit local shops to enable them to accept safe, contact-free digital payments and grow their business.

Our idea with these payment options is not only to democratize financial services. We have built a large set of use cases for customers, catering to their day-to-day payment needs as well as experiences. We understand the developing demand for a convenient payment platform and hence are offering an array of financial services under a single app.

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What are your thoughts on the launch of eRUPI? We have seen the voucher platform on UPI being used for vaccinations so far. What other use-cases do you foresee the ecosystem utilizing it for?

The concept of eRUPI is, of course, revolutionary. It is Α ideally the first step that the payments ecosystem has taken towards creating more payment solution providers. Originally intended to be used only during vaccinations, eRUPI can really be used across any Government or public services which currently involve direct bank transfers (DBT). This includes but is not limited to, pension payments, MGNREGA payments, Government scholarship transfers, Jan Dhan account payments, etc. The Government has strict measures in place regarding the purpose for which the voucher may be used. The spectrum is too wide when it comes to last-mile service delivery. Alternatively, if the Government is open to expanding the usage of eRUPI in PPP projects, that would be even more beneficial.

Q In the Indian digital consumer market, most users are bombarded with a variety of payment options: multiple PGs, cards, UPI apps, wallets, AEPS, netbanking, and now instruments like BNPL. Do you think there is room for rationalization among these in the near future?

With each passing day, we are witnessing more technology enabled customization. If, in the future, there comes up a better payment solution than UPI apps, so be it. This is what drives this industry - constant evolution. We can expect to see more strategic partnerships, especially with FinTechs, to help improve service delivery. Recently, the Account Aggregator model adopted by leading banks is being seen as a step towards data interoperability and integrated platforms, while maintaining security checks. Time will only bring about more innovation and I do not see harm in providing a wider range of options to customers. India is at the cusp of a digital payments revolution and I believe that the future will lie not in piecemeal products but in devising more holistic payments solutions for the Indian market. Q

Has the pandemic brought about any change in your strategy or product portfolio?

A When Amazon Pay started its journey in India 5 years ago, we intended to convert more consumers into digital payments users, in a market where 85% of transactions were cash-fulfilled. The pandemic brought forth untold challenges and put people and economies under immense pressure, but we also recognized that customers and small businesses are increasingly embracing online and are relying on us to navigate and recover from the disruption. It brought about a structural shift that propels us faster towards the vision of a Digital India. Through the pandemic, we accelerated our journey to making all our processes contactless and fully digital.

We now have over 50 lakh small and medium businesses who use Amazon Pay constitute a diverse set of merchants and entrepreneurs. More than 25 lakh operate retail and shopping outlets such as kirana stores, about 10 lakh operate food and beverage outlets such as restaurants and small eateries, over 5 lakh offer services such as salons, close to 4 lakh offer health and medical care while the remaining comprise of vocations such as taxi drivers, auto drivers, plumbers and more. To ensure safety we have made our merchant experience fully digital enabling merchants to sign up for accepting Amazon Pay digitally and self-service. For ease and convenience, we have also launched the Amazon Pay for Business app to simplify accepting digital payments for SMBs. The app can be used by businesses across the country to register themselves, generate a unique QR code and start accepting digital payments within minutes.

Over 5 crore customers are now using Amazon Pay UPI for shopping, paying bills, paying at online merchants and sending money to their contacts. Customers are using the Amazon app to pay at 2 crore local shops by simply scanning any UPI QR code. In the last one year, over 75% of our customers using Amazon UPI have come from tier 2 and 3 cities, showing the growing reach of UPI.

We are also proud of the onboarding experience for the Amazon Pay ICICI Card and Amazon Pay Later which provides instant credit approval and are thrilled that over 40 lakh customers have signed up for these products. As digital payments races to catch up with a burgeoning market, Amazon will continue to stay focused on building out a high-quality service to tap this growth.

10 Disruptive digital lending models are nearing maturity with strong collections focus

India's digital lending market has grown tremendously in the past few years to serve the large financing gap across retail and MSME, particularly for thin file customers. Digital lenders leveraging alternate data, automation, and cost advantages have been able to make forays into these segments and have helped the underserved get access to credit.

Much of this growth has come about through new innovative lending models. The Indian digital lending landscape is replete with innovative FinTech products that cater to a particular subsegment of customers or provide a new method of distribution, underwriting, or servicing. These innovative models include but are not limited to:

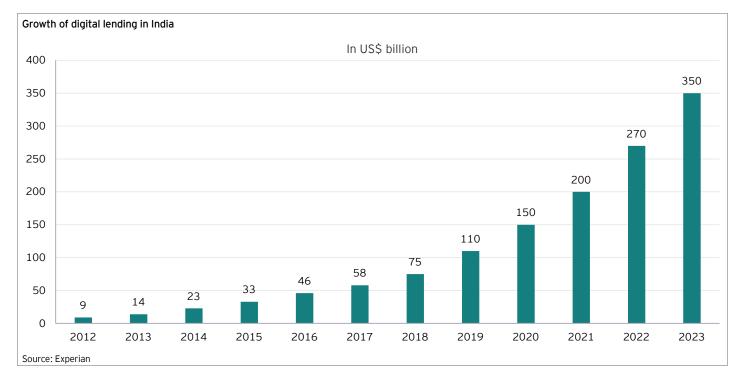
- EMI / POS lending: lending for purchases at the point of sale on online or offline merchants
- Payday lending or salary lending: loans given out to individuals based on income flow for short duration of time
- Receivables/WC financing: financing to help MSMEs tide over short term cash flow crunch
- BNPL (Buy Now Pay Later): online and offline purchase aggregation
- P2P lending: peer-to-peer loans enabling individuals to obtain loans directly from other individuals, cutting out the financial institution as the middleman

Each of these lending models have been enabled through the formalization of the economy through innovative tech which has yielded a treasure trove of payments, GST, and other data for underwriting. Also, new age lenders manage to reach customers digitally thus reducing their acquisition costs significantly.

These models are fast becoming mainstream with traditional banks and NBFCs also looking to either latch onto and co-lend with FinTech lenders or launch their own such businesses. These lending models are also being tuned to serve tier 2, 3, 4 towns and cities and rural regions of the country.

India's credit gap

According to Experian data¹⁶, India's retail digital lending space reached more than \$150 billion in size by 2020, and it is projected to reach \$350 billion by 2023.



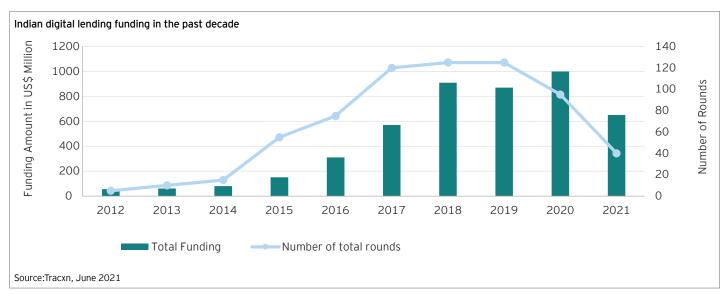
India's consumer financing gap stands at \$300 billion¹⁷, **and it is expected to grow 3X in the next three years.** The MSME financing gap stands at \$240 billion.

The list of challenges in traditional lending has not changed much in the last decade. Tier 2 and 3 cities and rural India are still home to money lenders and other operators who practice predatory lending practices. It is still inconvenient for a large population to get loans due to the absence of credit history (only 300 million¹⁸ Indians have a credit history). Thin-file customers struggle to get loans, and banks are still figuring out how to use alternative data to overcome the problem.

On the other hand, consumer expectations of convenience and competitive loan rates are increasingly pronounced with time and driven by lending price comparison and aggregation platforms. Thus, there has been a major surge in digital lending particularly towards new age models showcased above.

Funding trends in FinTech lending segment

In 2021, lending FinTech players' total funding has been promising (up to May 2021) and reached ~700 million. Key funding rounds included OfBusiness (series D, \$110 million), Finnov (series C, \$70 million), and KreditBee (series C, \$70 million), which provide supply chain financing, a lending marketplace and salary loans respectively. In terms of stage-wise funding, in 2020, nearly 2/3rd of total funding went to seed-stage rounds. In 2021, so far, the funding has been directed towards late-stage funding rounds.



Lending FinTech landscape

India is home to approximately 1,263 digital lending startups19, out of which over 147 (12% of the total 1,263) are backed by venture capital funding, according to Tracxn data. The universe of players has undergone a dramatic shift in the past few years with new age lenders being powered by data and AI enabling new models of small ticket loans to both retail and SME/MSME segments.

India digital lending landscape

	Consumer		
BNPL		Itra	
Personal loan	🗰 LoanTap Pay 💕 ∺ 🚥	MyMoneyMantr	6
Salary loan		MyMo	My LoanCare to
Gold loan	<i></i> rupeek indiagold [®]	e romeda	ison oan
Auto Ioan		Marketplace	Loan Comparison My Loa
Education loan		AP overe	oan Co
P2P Lending	FAI₹CENT ŵ Lendbox ^{ՁLendeni}	n 💊	Loa bank <mark>ba:zaarcom</mark>
	SME	paisabazaar	klba:
Corporate Card		aba	ban
Flxed term loans	CORNER DE FLEXILOANS NEOGROWTH	pais	
Trade finance		_	
Collections Manage			
Credit Bureau	TransUnion EQUIFAX		
Alternate Credit Sc			
Lending-as-a-Servio	Ce kuliza I FinBox		
LMS and LOS	rupeepewer Ofinflux taqualtech		

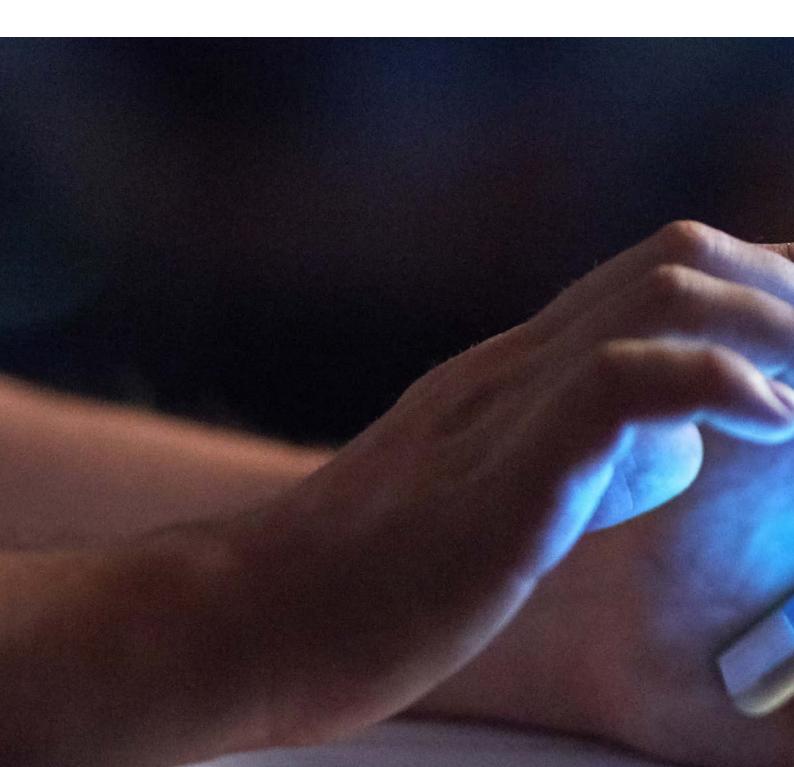
Impact of COVID-19 and growing focus on collections

With the oncoming of the pandemic, some of these models/ businesses have been under duress. Especially in models that rely on the informal economy segments. This has led to an increased focus on improving of collections practices and capabilities. There are specialized players utilizing data and digital tools to enhance collections processes across the industry.

Some key innovations in this space have been around collections management through a hybrid model involving traditional human field and call task management as well as digital collections campaigns. Innovative payment tools like UPI recurring debits and eNACH are being utilized to set up automated collections flows. Recently Paytm acquired Creditmate, a collections platform to strengthen its collection capabilities.

Growing the liability side

The liability side of the business for FinTech lenders is also a growing area of focus. FinTech lenders have typically started with either a small lending book of their own or through NBFC partnerships. As the lending book expands, they seek out larger funds at a lower cost from banks or other NBFCs. There are a plethora of co-lending and syndication models that have been experimented with. Many are also seeking banking licenses to get direct access to deposits or seek partnerships with large banks/NBFCs for a steady line of funds. The acquisition route to acquire a banking license is seeing traction with multiple new FinTech lenders seeking to buy out small banks in India.



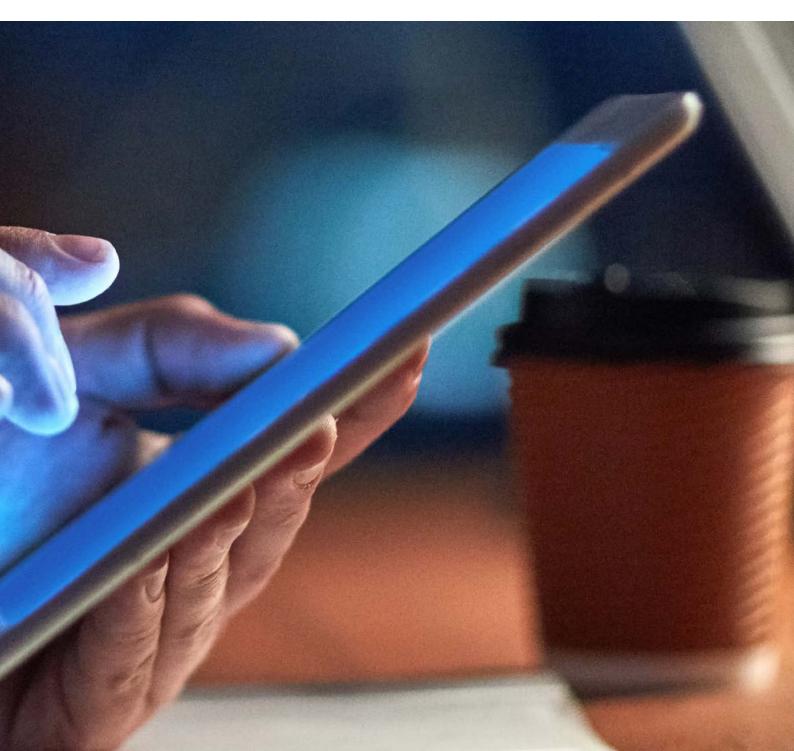
Digital lending as a feature

With ever reducing margins in payments and the perennial search for margin by neobanks many are looking towards adding revenues by offering lending products. With the launch of Account Aggregation and Open Credit Enablement Network (OCEN) simplifying the time and complexity of adding lending as a feature, this trend has picked up by among nonfinancial players as well, especially the ones that have access to a marketplace. For example, a traditional consumer good company may add a lending feature to its wholesaler/distributor mobile app to offer them access to working capital loans. On the other hand, a FoodTech player may offer a BNPL offering to its customers to reduce transaction friction and add a revenue stream.

Next steps

As business models are maturing and we realize the impact of the pandemic, some FinTech lenders might fall by the wayside or we may see consolidation in the market. However, those with a strong collection focus and access to steady sources of capital will thrive. The focus will remain on reducing delinquencies in the loan books, raising funds at lower costs, targeting/screening customers using technology to determine their creditworthiness effectively. FinTechs and eCommerce players with a substantial userbase will continue to offer products that help them monetize their user base.

Small-ticket personal loans or short-term credit - mostly in partnership with banks/NBFCs - are important monetization categories. FinTechs are still dealing in significantly small-ticket loans vs. banks' average ticket size for personal loans. We expect that the value and volume of FinTech loans to increase as their underwriting models achieve maturity with time and a more extensive data set.



Interview with Deepak Jain, Co-Founder and CEO at FlexiLoans





Deepak has over 15 years of experience across investment banking, management consulting and corporate finance and strategy roles. He raised over US\$10 billion across 35 deals across sectors with over 10 deals in the BFSI sector. He has strong relationships with top Indian corporates, private equity and capital market investors.

Deepak is part of Executive Committee of Digital Lenders Association of India (DLAI) and is Co-Chair for DLAI Events committee 2019-21, Charter Member and part of Fintech SIG for Tie Mumbai and has led Finance Initiatives for Indian School of Business, Alumni Association in the past.

Deepak is a qualified Chartered Accountant and holds a Post Graduate Diploma in Management Studies from Indian School of Business, Hyderabad with a specialisation in Strategy and Finance. He is a commerce graduate from the University of Mumbai.



What according to you are the key trends that are shaping up the digital lending industry right now?

Α

Embedded Finance: Over the last 5 years, a number of ecosystems have developed in India from e-commerce to payments. The Amazons and Swiggys of the world will grow phenomenally over the next 10 years and will present a multi-billion-dollar lending opportunity for technology led financiers. The BNPL (buy now pay later) is a classic form of embedded finance sweeping the world currently with its expanse.

Supply Chain finance as a product: A large portion of MSMEs' working capital is blocked in receivables and most of these MSMEs either do not have access to invoice financing or are not aware of this. New fintechs have emerged in the space and have made this product a seamless customer experience.

India Stack: We believe that the foundation laid by the Government in building the India stack and more recently OCEN will have a deep impact on digital lending.

Q We have seen burgeoning of different types of low ticket and unsecured forms of lending like POS, invoice financing, payroll based and now BNPL in the country. Which of these are you most excited about and why?

A Invoice financing/ BNPL is something that we are very bullish about. The market is very large at INR18 trillion (based on total invoices raised) and with India geared to become an export market, this will be an incremental addition to the pie. Fintechs will be able effectively service this demand with the help of technology in such a cost competitive market and a simple straight through journey without manual interventions.

BNPL for merchants is another attractive opportunity in the market. Currently only 20-30% of the 60 million MSMEs in the country are lendable. BNPL solves this problem by providing flexible document free loans to MSMEs and easy payment options to sellers.

- Q Can you tell us about some of your offerings for different business or retail segments in India and what sets you apart?
- A Working capital loans: EMI based loans up to 36 months
 - Line of credit/Drop line Credit facility: loans for irregular credit requirements up to 12 months
 - Merchant Cash Advance/POS loans: Loan against POS sales up to 18 months
 - Supply Chain Financing: Loans against invoices up to 90 days
 - Buy Now Pay Later for Merchants

FlexiLoans has a unique tech and data science led platform that aggregates the demand from ecommerce, payments, and other large ecosystems (merchants) and matches it with the supply from various financial entities via its co-lending stack (financial institutions). By simply plugging into our platform, merchants and FIs get access to various types of financial products/customer segments. Our diversification strategy across products and segments has enabled us to use different growth levers across cycles. Currently, FlexiLoans is India's largest embedded finance player and has partnerships with over 85% of the Indian ecosystem providing financing solutions to their MSME merchants - e-commerce ecosystem, pharmtech, foodtech, payments tech, accounting tech etc. FlexiLoans also is amongst the Top 3 digital MSME lenders on the organic acquisition getting over 100,000 applications on a monthly basis and over 1 million visits on its digital channels.

What are some ways in which you are leveraging technology to increase your reach or to reduce risk and NPAs?

Our credit models have evolved significantly over the past 5 years from rule based to data backed algorithmic models. The COVID-19 pandemic has accelerated its evolution and we are now able to price the risk appropriately in our portfolio.

Our in-house developed machine learning technologies can read hundreds of different uploaded documents in seconds and can provide a credit decision in less than 48 hours. We have a dedicated 'Deep Learning and Technology Applications' team to solve complex problems across image processing, scoring, digital extraction, credit analysis and financial analysis through AI / ML technologies. In fact, 96% of the documents uploaded by customers are classified and tagged by our in-house ML engine. The combination of our in-house developed technologies has enabled us to scale as well as risk price customers. ~50% of our portfolio is semi secured (backed by cash flow escrows). Q

With increasing digitization and the pandemic collections processes have had to be turned on their head and adapted for a contactless and remote world. What are some of the key innovations you are seeing in collections/ repayment processes and tools?

A Having control and visibility on cash flows is a great way to control flows. At FlexiLoans, we have control on cash flows of customers for ~ 50% of our ecosystem led lending and that is performing well.

For the remaining loans, they are primarily micro loans with a strong collection mechanism and tracking methods used at the underwriting stage (capturing multiple data points pre lending on stability and traceability) itself which helps at the collection stage.

We leverage diallers and multi modal communication with our customers and deploy multiple digital means of collections and litigation, that aid efficiency.

Lastly, litigation tools have helped us substantially.



The way forward

Growth of technology startups in general is seeing an unprecedented spike in the past few months, with FinTech being a key sector. India's booming FinTech industry is poised to welcome a hoard of new unicorns, soonicorns and smaller startups as well as traditional incumbents who are keen on innovating with them. While there will be differences in the paths each segment and stakeholders within the FinTech industry take as we have explored above, there are certain takeaways and implications that hold true for everyone:

1 Experience not	product
offerings are inv	to shift mindsets from being product-focused to focusing on consumer experience. Ensuring that financial visibly embedded into the customer experience/journeys such that it meets the actual need of the customer a star around which all innovation and partnership will have to be built.
Continuous inno	ovation
players. Financia	ovation must remain a key focus area, not just to expand penetration, but to avoid being usurped by new al products and services, and their distribution in particular is changing rapidly with a plethora of models nted with. To remain ahead of the curve startups as well as incumbents can set in motion a process of avation.
3 Swift collaborati	ion
i i i	n be the key to conquering FinTech markets. To enable swift and easy collaboration with other players in eholders need to invest in and create technology (API, SDKs, open source stacks) and policy (legal and ates) rails.
1	
4 Speed to marke	t
	le checks and balances of the financial world it is a hard task to be nimble and offer an evolving suite of Prvices tailored to customer preferences. Albeit this can be a key differentiator for winning in the FinTech
5 Eve on regulator	ry and government initiatives
,,	
like UPI. Many o stakeholders in	ech story particularly in payments has been uniquely driven by regulatory and government initiatives other such initiatives like AA and OCEN are in the works and can provide important stimulus for other the ecosystem to flourish. The pending data privacy bill will also act as an important lever to open up Tech startups to onboard and utilize customer data.

The Indian FinTech ecosystem is unique in the way that it is a playground for a variety of players. We have young FinTech startups leading the charge and traditional banks countering with improved digital offerings. We also have BigTech players entering the foray through payments and other products. There are also government and regulatory initiatives aplenty to help the ecosystem grow. It will be exciting to watch where the industry is headed and witness the outcome of each of types players.

About EY

In a world that's changing faster than ever, our purpose acts as our 'North Star' guiding our more than 300,000 people – providing the context and meaning for the work we do every day. We help digital pioneers fight data piracy; guide governments through cash-flow crises; unlock new medical treatments with data analytics; and pursue high quality audits to build trust in financial markets and business. In other words, working with entrepreneurs, companies, and entire countries to solve their most pressing challenges.

Through our four integrated service lines – Assurance, Consulting, Strategy and Transactions, and Tax – and our deep sector knowledge, we help our clients to capitalize on new opportunities and assess and manage risk to deliver responsible growth. Our high-performing, multidisciplinary teams help them fulfil regulatory requirements, keep investors informed and meet stakeholder needs.

FinTech innovation continues to transform the financial services sector. As it continues to become increasingly accessible and affordable, industry players must rethink their play in the market and think about building financial services for the digital world rather than delivering financial services digitally.

At EY, we work with financial institutions, start-ups, investors, governments, and regulators to help them rethink their role in the financial services ecosystem and execute their strategy. We are deeply embedded in FinTech ecosystems across the globe and offer cutting-edge services which are tailor-made to suit the client's requirements.

We believe a better working world is one where economic growth is sustainable and inclusive. We work continuously to improve the quality of all our services, investing in our people and innovation. And we're proud to work with others - from our clients to wider stakeholders - to use our knowledge, skills and experience to help fulfil our purpose and create positive change.

About Fintech Convergence Council (FCC)

About Fintech Convergence Council (FCC) FCC is formed under Internet and Mobile Association of India (IAMAI) and represents the FinTech industry and traditional companies in the BFSI space. The purpose of the council is to encourage collaboration, seek complementarities and build synergy between leading BFSI companies and the emerging FinTech start-ups. The council has worked towards interpreting the regulatory and legal framework, aggregating the concerns and feedback of the various players within the larger FinTech community, communicating it to regulators and lawmakers, and organizing events and gatherings for the industry participants to meet, share ideas and work together in the interest of creating a safer, more open and more collaborative operating environment through a transparent forum



About Payments Council of India (PCI)

Payments Council of India was formed under the aegis of IAMAI in the year 2013 catering to the needs of the digital payment industry. The Council was formed inter-alia for the purposes of representing the various regulated non-banking payment industry players, to address and help resolve various industry level issues and barriers which require discussion and action. The council works with all its members to promote payments industry growth and to support our national goal of 'Cash to Less Cash Society' and 'Growth of Financial Inclusion' which is also the Vision Shared by the RBI and Government of India. PCI works closely with the regulators i.e. Reserve Bank of India (RBI), Finance Ministry and any similar government, departments, bodies or Institution to make 'India a less cash society'.

About IAMAI (Internet and Mobile Association of India)

Internet and Mobile Association of India [IAMAI] is a young and vibrant association with ambitions of representing the entire gamut of digital businesses in India. It was established in 2004 by the leading online publishers, and in the last 16 years has come to effectively address the challenges facing the digital and online industry including mobile content and services, online publishing, mobile advertising, online advertising, e-commerce and mobile & digital payments among others.

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



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