



Fin Tech Banking – The Revolutionized Digital Banking

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ABSTRACT

India is one of the fastest developing countries in the world and the changes taking place are also very frequent in the financial environment of India. Where Fintech is and will play a major part of the financial world. Fintech is the need of an hour, where it will be completely digitalized in all respects. Today, Comparing India with other countries with respect to its digital growth results in a drastic positive change. This change is helping the nation's economy as well as augmentation of the individuals. Digital India being a flagship programme of the nation's Prime Minister Shri. Narendra Modi under the incorporation of Indian Central Government, Fintech plays and will play a very vital role and impact on the programme fulfilling the needs and requirements of the time. This will also empower the citizens which will lead to a better standard of living.

The main focus of this research paper is on the Fintech's role in Indian Banking, financial services and financial gateways. Also providing an insight on future banking in collaboration with Fintech.



Objective:

The objective of this research paper is to explain the changes taking place due to implementation and execution Fintech program in the entire Financial

world of India, and hence changing the scenario with respect to the traditional techniques of banking with that of new implication of FINTECH into banking and enhancing the technique of the conduct of banking in India and providing the services there of. In addition to this, an attempt is also made to understand the significance of digital India after implementation of Fintech in financial world.

Methodology

The paper is based on the secondary data and the information is retrieved from the internet via journals, research papers and expert opinions on the same subject matter.

INTRODUCTION

Fintech is the axiom within the world of digital banking which refers to the use of technology across all the financial services functions. It is the exchange of paper-based processes. Is a term used to refer to "financial technology". Fintech is entirely a new perception for almost all consumers and does not have a specific definition. The term is used to refer to the technological revolutions that relate to the concepts such as financial literacy and education, stock investment, cyber security, blockchain technology, retail banking, crypto-currencies like Bitcoin and Ripple, among other innovations.

One more vital concept of Financial inclusion also refers to Fintech solutions which provides more reasonable finance substitutions to deprived and low-income people who, like the unbanked/under banked, may or may not have little or no reach to mainstream financial services. India is one of the most developing nation among the world where Fintech is adopted to

operate in developing markets to streamline and ease the financial services.

Previously, Fintech was primarily used for back-office functions by leveraging software to help bank workforces handle accounts, execute transactions, maintain and record the customer databases, etc. Today, however, Fintech has transformed how banks operate. No longer relegated to the gloomy corners of back-offices, Fintech has taken centre stage by making itself indispensable to customer-facing processes. Every digital transaction, be it online shopping, foreign currency exchange, stock investments, or money transfers, is possible at our fingertips thanks to Fintech.

Major Factors deriving the Fintech revolution

Mobility has had an enormous role to play in the Fintech revolution. The perception of smartphones provided the consumers an easier way to interact with banks and gain real-time views into their bank accounts. Unavoidably, as mobile apps grew in sophistication, so did customer ultimatum for intuitive banking services. Today, digital transformation within banks united with flexibility has transformed the very nature of banking. Customers no longer have to struggle with long queues, wait time and postponement to conduct their day to day banking activities.



The smartphone revolution soon gave an emergence to another development – the explosion of online payment apps that integrate with bank accounts, allowing seamless online shopping, investments, transfers, and mobile-to-mobile payments. Finally, the rising number of online platforms and applications fuelled the need for faster, smarter and more robust security protocols to safeguard customer data. As cyber-attacks such as ransom ware, malware and phishing become increasingly sophisticated, mere login IDs and passwords are no longer strong enough to thwart intruders. Today, merchants as well as consumers need innovative security products that use AI, machine learning and advanced fraud analytics tools to protect their transactions, assets and data.

Implication of Fintech into banking- The disruption of financial services.

Here are some ways in which Fintech is changing the game for the financial services industry:

1. Chabot's for customer service – Chabot's are bits of software that use natural language processing and machine learning to uninterruptedly learn from human interactions. This is becoming a popular tool for banking industry to streamline customer-facing interactions such as handling queries or directing customers to relevant departments. Some Chabot's can even provide investment advice such as Erica, the Bank of America's Chabot. Robots, such as the one used by UBS, scan customer emails for trading instructions and execute these autonomously, reducing the time taken from 45 minutes to two minutes. The use of these Chabot's not only improves customer gratification and reduces costs but also frees agents in call centres to focus on value addition.

2. Machine learning and AI for fraud detection – Identifying fraudulent transactions is the main goal of anti-money laundering departments. For most banks, this involves a combination of software and people. Security software generates alerts on the possibility of a fraudulent transaction or a virus attack. Then, it is up to human investigators to determine whether the transaction or attack is a false positive or a real threat. With the increasing sophistication of attacks, this time-consuming process can cost banks millions of dollars, loss of data and customer confidence, and negative brand reputation. According to McKinsey, the adoption of data aggregation platforms, machine learning-driven statistical modelling and process automation can transform AML operations by infusing new efficiencies. More importantly, machine learning algorithms can leverage historical records to determine patterns and predict the possibility of fraud and attacks before they occur, reducing manual effort by nearly 50%.

3. Omni-channel banking and obsolescence of bank branches – As banking shifts from being a branch-specific activity to one that permeates all digital channels (mobile, social and online), the importance of having several brick-and-mortar bank offices decreases. In fact, studies show that the adoption of omni-channel banking is driving several banks to reduce the number and size in area of their branch offices. In the European Union alone, nearly 9100 bank branches were shut down by the end of

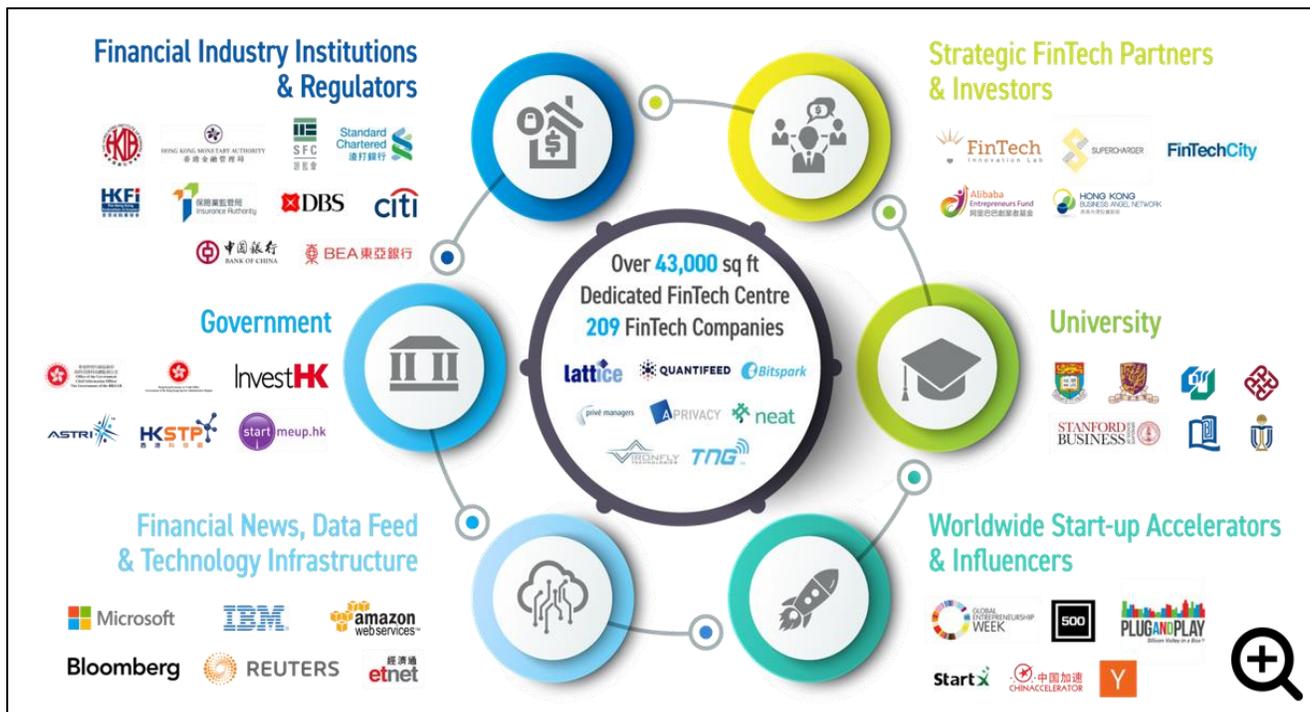
2016 owing to higher adoption of electronic payments and online/mobile banking.

4. Biometrics for stronger security – There is a lot of interest in finding ways to use biometrics such as vocal patterns, irises, thumbprints, facial recognition, etc., to add an extra layer of authentication for transactions. Biometrics promotes usability by enabling quick authentication, avoiding the frustration that comes with remembering multiple passwords. In fact, several banks are investing in biometrics-based authentication solutions that use the forward-facing camera to scan one’s iris or the in-built thumbprint scanners in smartphones to strengthen security.

5. Blockchain for digital transactions – Crypto currencies are taking the banking world by storm by providing users with faster and cheaper ways to transact. The distributed ledger system of blockchain

leverages stringent controls enabling smart contracts and auditable data. According to NASDAQ, the most notable application of blockchain will be in how it transforms payments for banks as well as customers by reducing the cost and time taken to transfer money. Additionally, by building inherent trust, blockchain provides the perfect trading platform for securities exchanges. It does this by ensuring transparency, thereby minimizing risk, human errors and transactional fees.

6. India Stack: Through the introduction of India Stack, the government has provided a world-class technological framework to entrepreneurs, innovators and corporations, allowing for the accelerated growth of Fintech ventures. The scenario somewhat resembles the policy support offered by the government to the telecom industry in the 90’s, with Fintech taking centre stage in many reform initiatives.



7. Startup India Program: The Start-up India program, launched by the central government, includes the simplification of regulatory processes, tax exemptions, patent reforms, mentorship opportunities and increased government funding.

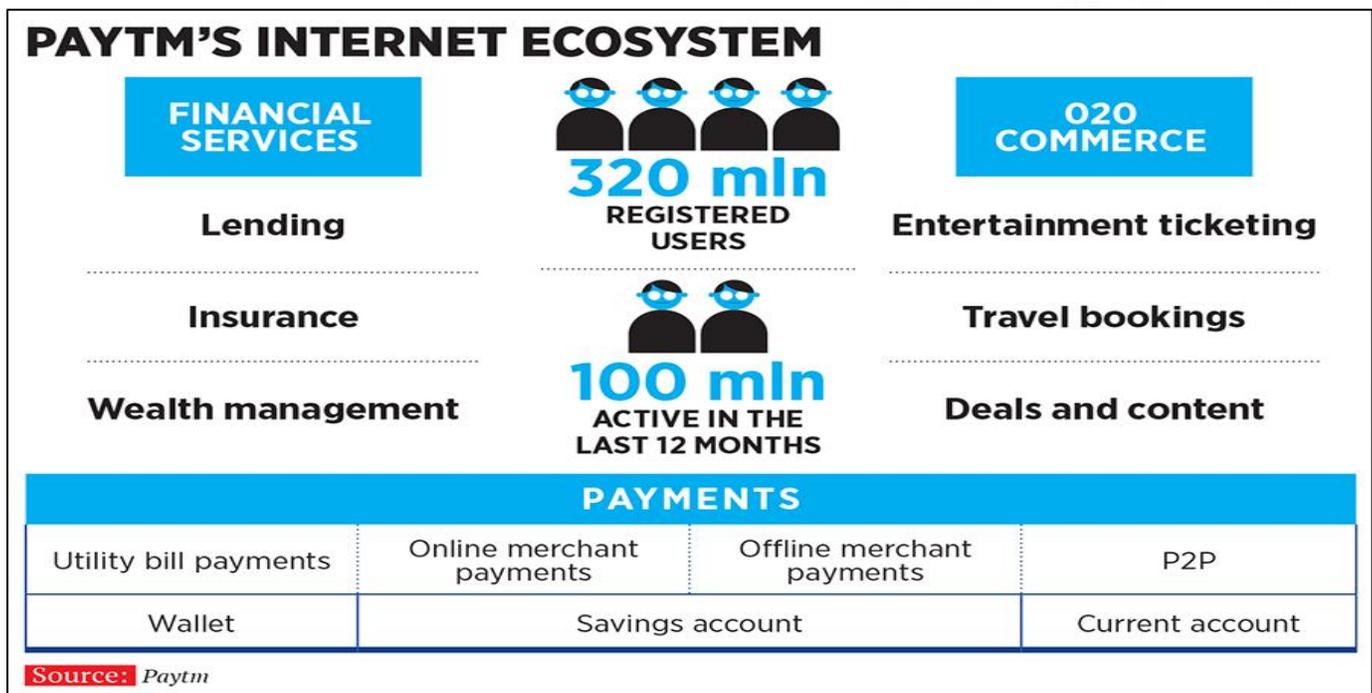
8. Jan Dhan Yojana: Financial inclusion in the country has grown significantly due to initiatives like the Pradhan Mantri Jan Dhan Yojana (PMJDY), regarded as the world’s biggest financial inclusion program, with an aim to facilitate the creation of bank

accounts for large underserved or unserved sections of India’s billion plus population.

9. National Payments Council of India Initiatives: The National Payments Council of India (NPCI), through the introduction of the Unified Payments Interface (UPI), has leveraged the growing presence of mobile phones as acquiring devices, substantially reducing the cost of infrastructure for Fintech ventures. With the smartphone user base expected to expand to about 500 million users by 2020, up from

about 150 million in 2016, the digital banking footprint is projected to grow faster than ever before. The NPCI has also introduced several innovative products, such as RuPay cards, which will allow for immediate money transfers and a more convenient experience for the customer. These initiatives provide a solid foundation for a digitally enabled financial sector in India, giving Fintech start-ups the opportunity to leverage these technologies and initiatives to be adopted into the mainstream banking experience in India.

10. Public Relations: Moreover, the government has also played a strong role in encouraging and educating consumers in the economy towards digitized monetary systems, providing a much need PR push towards digitisation. The industry is still suffering from regulatory uncertainties, particularly with respect to new business models enabled by Fintech applications such as P2P transactions, crowd funding and data security. More than 40% of industry incumbents and start-ups reported such regulatory uncertainties to be a major hurdle while working to implement innovative solutions.



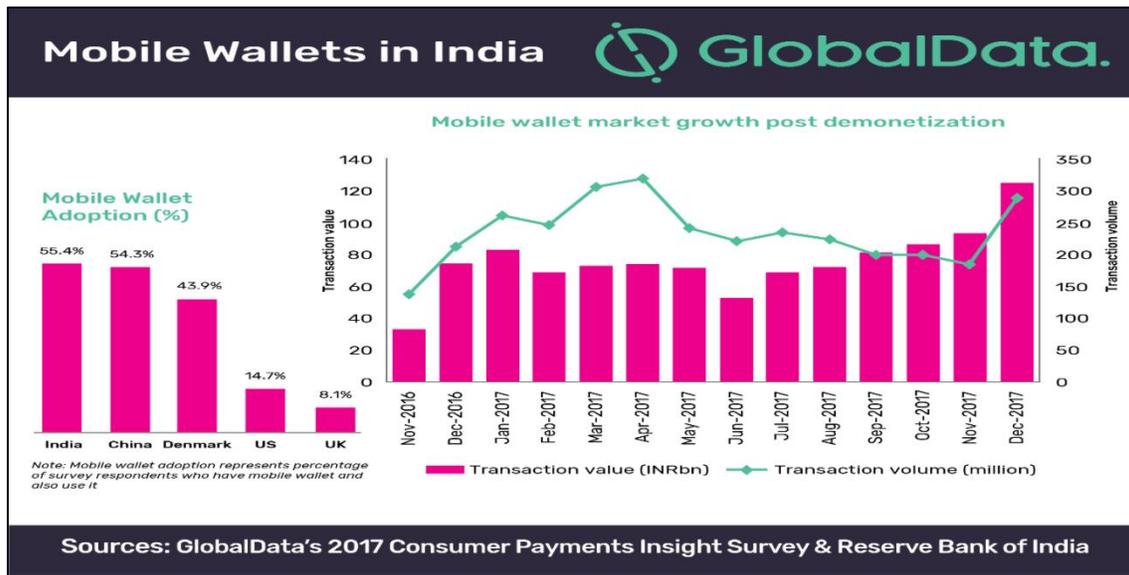
11. Funding Trends: The Fintech sector saw a decrease in global funding in 2016 due to increased global uncertainty, driven by lack of clarity surrounding Brexit and the US presidential election, among others. VC-backed global Fintech investment in 2016 was \$12.7 billion, which was down 13% from 2015's record high of \$14.6 billion. A breakdown by geographical region found that Fintech investment in Europe and the US was affected the most. VC-backed funding was down 25% YoY in Europe and 29% YoY in the US in 2016.

12. Aadhaar Adoption: The RBI recently has permitted Aadhaar based biometric authentication, which will consent for bank accounts to be opened through e-KYC at any Banking Correspondent (BC) location. This will allow financial services companies

to do e-KYC checks more frugally, thereby reducing transaction costs for customers.

Facts & Figures

The Fintech industry attracted over US\$13.1b in VC-backed investments in 2016, about five times more than investments four years earlier (see Figure 1). The growth of the industry has strengthened the common belief that Fintech will disrupt banking. But collaboration — not competition — will be the primary driver of disruption. A government push for financial inclusion, digitization and startup activity has led to the introduction of policy initiatives which provide a strong foundation to the Fintech sector in India.



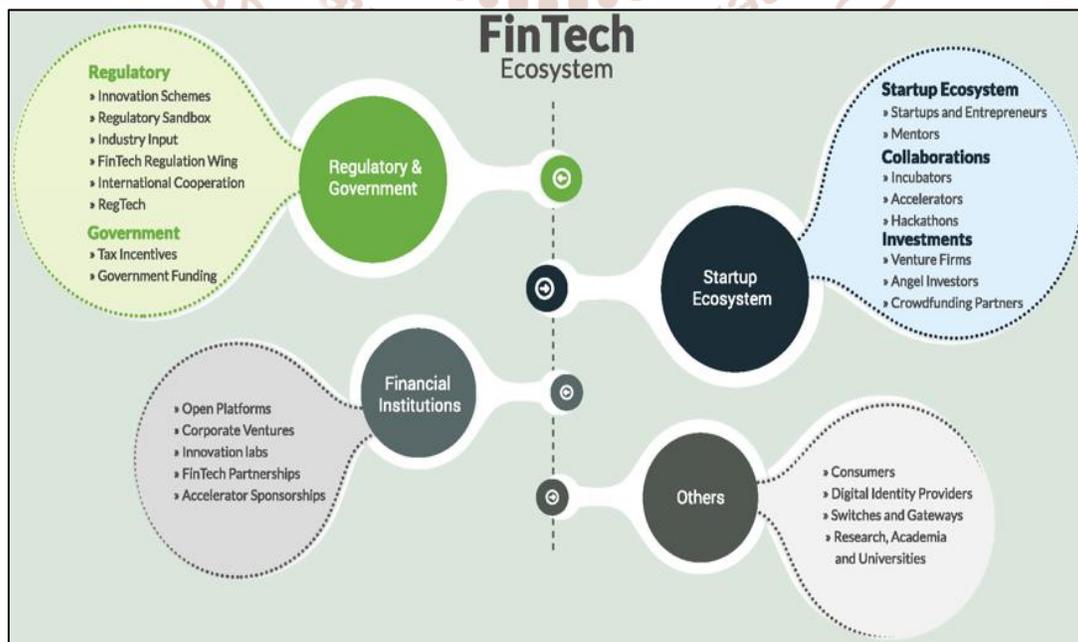
Current stake of Fintech in banking activities till 2017

Fintech Adoption Rates across 10 different country Markets –

Countries	Percentage
Average	33%
China	69%
India	52%
United Kingdom	42%
Brazil	40%
Australia	37%
Spain	37%
Mexico	36%
Germany	35%
South Africa	35%
United States	33%

Fintech adopted banking vs Traditional Banking

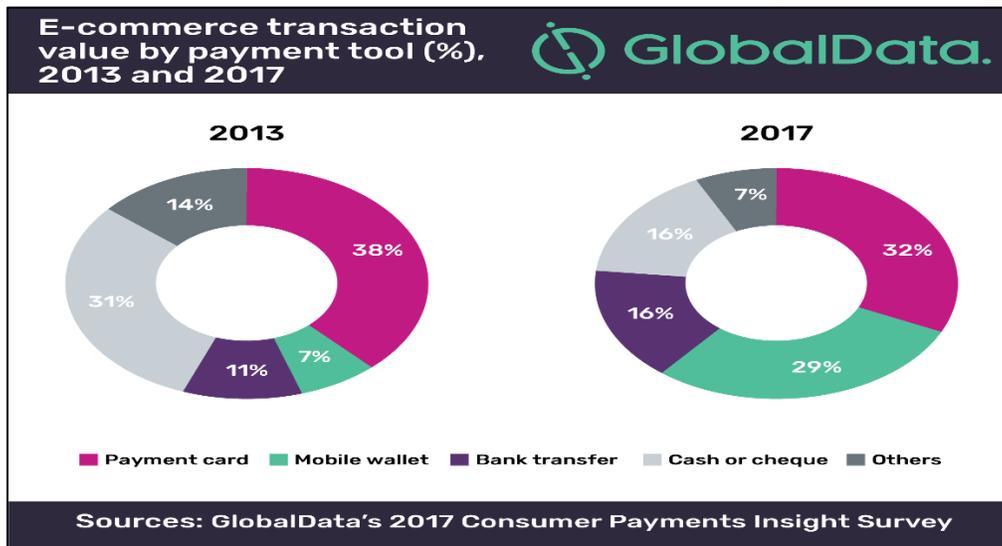
Banking at today's date become an Easy & On-The-Go activity. Gone are the days when banking use to be difficult task, an annoying activity, which in many cases required an entire day off for the usual transaction. Innovations with the collaborative Technologies (Internet and Mobile phone) has virtually empowered the banks to be at the customers place ant any place and at any point of time. Today we are able to bank from our smartphone 24X7 and accomplish most of our banking transaction in few seconds, where it was a challenging situations in 90's and early 2000's. The changing time is also changing the needs and wants of the individuals.



Is Fintech good for India?

As India is having most of the young generations in the current decade and the also be the same in few more, the changing and challenging minds of the young and enthusiastic generation is in the need of such amazing technologies as of FINTECH. And so the statistical report are showing that in the entire nation citizens are not only showing their interest but are also adopting the change without any hesitation. Where it is saving their costs and the time as well .Lower cost of providing services to under banked and

unbanked customers is a major opportunity for Fintech companies. In the backdrop of diverse demographics in terms of literacy, age and region in India, Fintech’s with focus on user experience can provide the impetus for financial inclusion. With a target of banking services reaching every person/household in India by 2020, Fintech’s have a great role in making government of India initiative possible.



The Government of India, in association with the core regulators such as SEBI and RBI are aggressively supporting the ambition of the Indian economy to become a cashless digital economy and emerge as a strong Fintech ecosystem via both funding and promotional initiatives. With such incentives and mandates, this robust business environment will be the most impactful levers in getting the Indian Fintech market up to speed and enable it to better address these roadblocks like the lack of authentic consumer facts on digital media and truncated technological and digital infrastructure.

In result to implementation and implication of Fintech in India has given and portrayed an amazing result in India been ranked as the Second Highest in Asia Pacific for Digital Payment Adoption. This also results in more than 40% of the respondents using Smart phones Wallet in India.

As start-ups emerge as enablers for the business of large financial institutions and seem to be in the

limelight, government bodies and other market players and participants have been stoutly serving their part to create an environment for the growth of innovation and technological advancement in the financial sector. Continued strong commitment from the government, the industry and the Fintech firms is critical to allow the Fintech revolution dig its roots deep in any financial system.



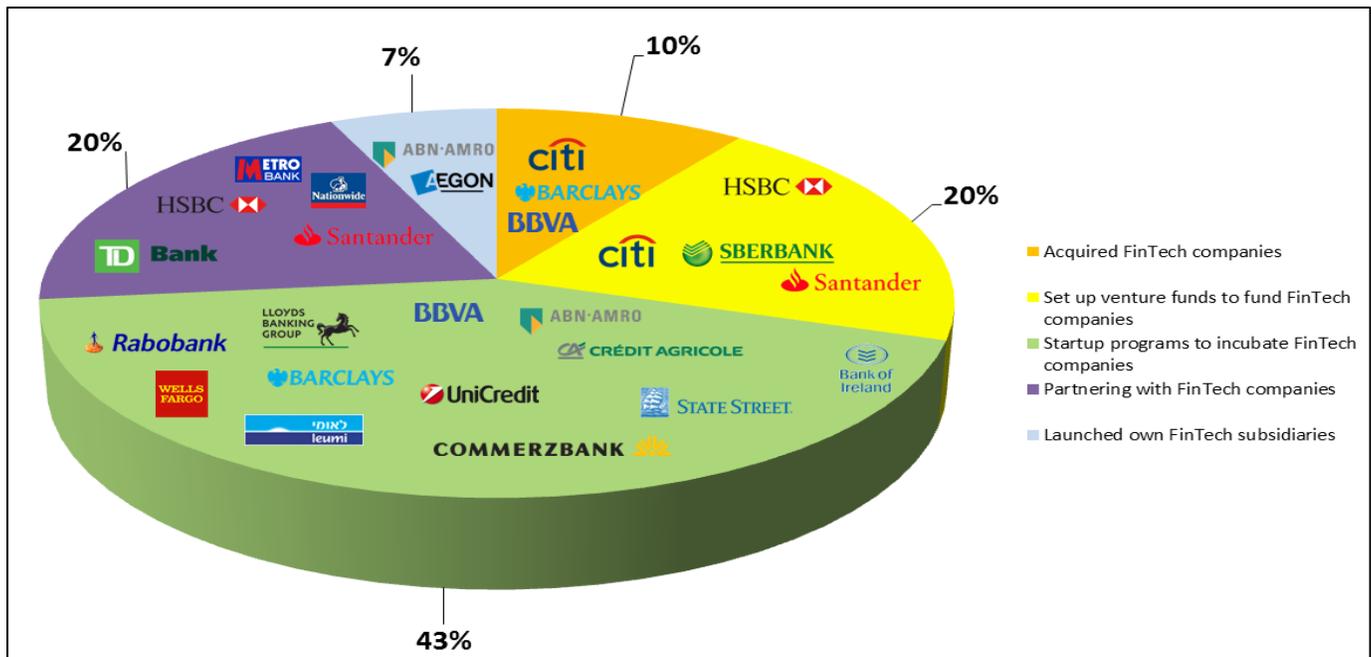


In most emerging markets such as India, strategies focused on collaboration, offering a sustainable change in the market are easy to implement. With the capability to collaborate, start-ups cross the gap from being a small, successful business to potentially scaling their solution for a very large customer base. With improvements in flexibility, accessibility and quality of such products and services, functionality and online experience becomes better, which in turn will lead to greater level of trust in traditional institutions. While digital finance firms have benefited from the governments pro-start up policies and flexible regulatory conditions imposed by the Reserve Bank of India (RBI), formal institutions possess an established infrastructure and legacy that is not easily replaceable. Fintechstart-ups need to encourage greater confidence among Indian consumers, already known for being conservative in their financial preferences. On the other hand, traditional banking and financial institutions can leverage their existing customer base and adopt digital products that nurture strong financial relationships while improving service efficiency and broadening access to meet changing needs. The disruptive potential of Fintech firms can provoke the much needed modernization of the traditional sector, reducing costs in the process and increasing the size of the banking population. Reacting to these opportunities and challenges, banks like Federal Bank announced a partnership with Start-up Village to develop innovative banking products, the U.K. giant Barclays is set to operationalize its fifth global Fintech innovation centre that will be located in India, and Goldman Sachs Principal Strategic Investments Group (GSPSI) is looking to invest in Bengaluru's Fintechstart-up scene. Mobile wallet firms like such as FreeCharge, MobiKwik, Oxigen, Paytm, etc have

witnessed a surge in usage of their wallets and the money loaded into them post November 8. Now, the habit of evading taxes will not change overnight, but other major hurdles such as awareness, internet connectivity and infrastructure in terms of digital payments can be dealt with now. While urban centres mostly enjoy high speed internet connectivity, suburban areas are deprived of a stable internet connection.

One good thing is that people from the rural parts of India can impeccably transact through mobile phones with the help of the recently launched UPI (Unified Payments Interface) by NPCI (National Payments Corporation of India) making digital transactions as simple as sending a text message. While the Indian market is large and warmed up for financial innovations, start-ups do face a unique set of challenges. While the government is trying to simplify the development of new financial technologies, the market regulations are still tough. Also, access to consumer data is scarce as India is still a case-centric country, leading to a high risk for fraud and loops in security and there is lack of consumer education which prevents people from getting on board easily. The digital revolution is transmuting operations across the financial and banking sector. What looks cheering is that the Indian government and regulatory institutions have endorsed an entrepreneurial climate for Fintech in India. However, policies and governance will need to match the speed of innovation in this sector, predominantly to ensure secure and transparent growth.

Promote a Digital Approach to Financial Inclusion – Promote digital financial services as a priority to drive development of inclusive financial systems, including through coordinated, monitored, and appraised national strategies and action plans. Of course, in countries with widespread access to banking, incumbents' pursuit of digital by default strategies risks causing damage through the exclusion of consumers who cannot, or choose not to engage with digital channels, particularly if bank branch closures ensue. It will be significant that those working in the consumer interest maintain sight of the interests of these groups and guarantee they are treated impartially by breadwinners.



Benefits of Fintech in future

As Fintech becomes more mainstream and commercialized, it endures to fascinate greater regulatory inspection from a number of different federal and state regulators. Fintech is also a very major source of creating jobs as moreover a large number of start-ups and venture are emerging to acquire the need of the time. Countries and states like with high Fintech acceptance rates and the homes of

many Fintech start-ups, such as California and New York, have begun implementing oversight protections for consumers by mandating compliance for Fintech start-ups to the concerned Department of Financial Oversight in California and the Department of Financial Services in New York. India, also being the one of the major adopter of the Fintech has a very abundant impact on its economy.



Conclusion

Fintech is such a kind of innovation where the entire world is embracing such new and efficient technique of service. Where the combination of higher spending power and a freer adaption of technological adoption mean that banks and other financial institutions have an entire market of willing and able customers to offer better financial products/services at lower costs. The fact that unbanked population in India halved from 577 million to 233 million speaks volume about the advancement of financial inclusion efforts. Technology is the chief enabler and equalizer today. As we connect one-on-one in real time, it has created enormous new flows of trade for markets that were underserved or overlooked. Cell phone subscription in India has crossed one billion. So the first massive change in the network effect of financial inclusion is that millions of people who previously had zero access to digital services are now on the network and are connected for good. It is also very inspiring that we have a central bank that is equally fervent about promoting modernisations and technology.

The Reserve Bank in its continued efforts towards building vigorous and secure payment and settlement systems for accomplishing a less-cash society published Vision 2018 which highlights the need for making regulations more responsive to technological developments and innovations in the payments space. India now has the best digital infrastructure for financial universalization and the fact that we have the Jan-Dhan, Aadhaar and Mobile (JAM) layer, we have an indigenous Indian stack that is boosting us from being data poor nation to a data rich nation. In addition to this the data available through GST Network, under which companies will upload nearly three billion invoices every month and government will effectually have real-time economic data 24X7. Fintech adoption and moving away from tradition banking method would not be without complications.



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