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# Influence of FinTech Companies on Banking Landscape An Exploratory Study in Indian Context

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**Abstract.** Globally, there is a disruption in the financial sector due to the emergence of FinTech companies. The industry is changing in the way it functions. Hence, it is important to understand the changing landscape in the Indian context. The key players identified in the landscape are regulators, traditional banks, and FinTech companies. The objective of the study is to understand in Indian context 1) Role of key players in the changing landscape and 2) Influence of FinTech companies on the ecosystem. This study observes that there will be an emergence of the multi-dimensional relationship among the participants in the ecosystem and the scope of regulation will widen. This paper also observes that FinTech has a positive influence on meeting Sustainable Development Goals and the challenges of regulation considering this larger goal will vary based on the risk involved in business models and products, with technology playing a pivotal role.

**Keywords:** FinTech; Emerging Technologies; Traditional Banks; Regulator

## 1 Introduction

The banking and financial services (BFS) industry of India is changing rapidly with the advent of the FinTech ecosystem. Post financial crisis of 2008, it has been observed that there is decreased loyalty to a single bank, an increase in tech-savvy customer segment, and other changing behaviours of consumers leading to innovative banking practices [1]. While the traditional banks had the advantage of trust, the fintech companies focused on value creation in terms of usage patterns, convenience, price, variety in the offering, etc. Given the changing scenario, the objective of the study is to understand 1) the Role of key players in the changing landscape and 2) the Influence of FinTech companies on the ecosystem in the Indian context. The study is exploratory in nature using secondary data for analysis. The study analyses the development, design, and diffusion of technology architecture and solutions through 1) five FinTech companies that are emerging in this decade of FinTech era 2) five financial institutions/bank and five core banking solutions that are deployed in these institutions 3) infrastructure and regulatory policies and guidelines. The study aims to understand how each one of these players in the ecosystem view technology and the challenges emerging due to the evolving landscape.

The paper is divided into two parts: The first part briefly explains the methodology of the study and lists the key findings. In the next part, the role of each entity and the influence of FinTech companies on the ecosystem are discussed.

## 2 Methodology

As a first step, five traditional banks were shortlisted. Their respective websites and the annual reports of 2019-20 were taken as the reference to understand the product details. The data collected include 1) What are the collaborated offerings in the digital space 2) What features are highlighted on the product/services being offered 3) What are the underlying technology, components and layers defined in their banking technology product. As a next step, five companies that emerged as FinTech players as per the definition in this study were shortlisted. Broadly, the FinTech companies in India belong to the following categories 1) Lending 2) Payments 3) Neobank/Accounting 3) RegTech 4) Enablers 5) Financial Inclusion 6) Insurance 7) Investments. For the analysis for this study, the FinTech companies belonging to Neobank/Accounting focusing on SMB were considered. As a final step, the background information on regulatory aspects was collected from publicly available news releases and reports.

## 3 Findings and Analysis

### 3.1 Banks at the Time of FinTech

The Banking sector is disrupted by business model innovation with the advent of FinTech companies. Though FinTech companies offer innovative banking products and services through technology, there are few practical issues for them to scale. Currently, the traditional banks are licensed to integrate with the payment systems in the Indian context. But they seem to be lacking in innovation capabilities, presence of underserved customer segments, and geographical areas. With the changing business models, technology architecture has also evolved to mimic the change in business. To overcome the disadvantages on these ends, banks are observed to have adopted an increased level of collaboration. It is also seen that the banks had a partnership with an established incubator or played the role of incubator for the FinTech startups.

### 3.2 FinTech Companies and Their Offerings

All the FinTech samples were startups and had a venture capitalist deal. In all the samples, the utility of the product or service, the beneficiaries, and the ease of access to the product are highlighted while the details of the functionality of the product or service are often described through FAQ (Frequently Asked Questions) section. (**Error! Reference source not found.**)

**Table 1.** FinTech Segments in Indian Market

<b>Product/Service</b>	<b>Reason behind growth</b>	<b>Business Model of FinTech Players</b>	<b>Identified Technology</b>
<b>Payments</b>	Increase in smart phones, internet connectivity, online shopping	Payment bank licenses – through hybrid model where mobile services interact with banking services	Integration of payment processing into web applications, transaction through UPI.
<b>Lending and Investment, Trade Finance, Insurance</b>	Presence of crowd funding, financial aggregators etc.	Through portals and collaboration	Payment and Settlement systems, Robo-advisory solutions
<b>Account Aggregators</b>	Increased spending and financial planning requirements	NBFC (Non-banking)	Data Analytics

### 3.3 Regulatory Bodies in Evolving Landscape

The payment system architecture UPI (Unified Payment Interface, 2016) has made all the systems seamlessly communicate with each other serving as the major digital channel. The non-banks do not have access to these payment systems and can interact only through registered banks. In 2019, the steering committee of the Ministry of Finance of Government of India, analysed the developments in the FinTech space and published a list of recommendations.

## 4 Discussion

### 4.1 Roles of Entities

Based on the study, it is seen that 1) FinTech companies focus on innovation of financial products and generating customer experience. They penetrate new segments and markets and co-brand with a bank when required. However, underlying architecture details are not disclosed. 2) Traditional banks understand the market need and partner with FinTech companies. Their primary objective has been to meet regulatory requirements. They entrust the technology integration to system integrator that mirrors the business model using extensible technology. 3) the role of regulator is to understand the landscape and accommodates the same in the policy framework and guidelines for all regulatory bodies. This body has the holistic vision of the changes happening currently, has the responsibility to meet the policy and societal goals in enabling transformational changes.

## **4.2 Identity of FinTech**

It should be noted that FinTech companies are operating in a crossover space between technology and financial sectors. They bring out innovative financial products through emerging technology which still is not under the purview of the regulatory framework. As a result, the identity of the FinTech companies tends to vary in comparison to traditional banks who are licensed to operate. In this case, the tendency to possess the sectoral identity of technology domain is stronger than that of the finance domain.

## **4.3 Challenges for Regulator**

The regulatory focus has been on consumer protection and market integrity. In the current operating space, FinTech has the risk of both these factors. New technology by itself cannot be considered as risk and the enabling ability of technology has to be leveraged. Hence the focus shifts to protecting consumers and data security. Similarly, the identity dilemma of FinTech companies and their regulations are also challenging. The impact of technology innovations, its legal implications, resilience of operations due to FinTech is to be explored. The traditional banks enjoy the customer trust and therefore have access to interface with the central bank's framework. This allows them to act as front-end of FinTech companies. However, in case of breach or violations, they have to be held equally responsible and cannot blame it on failed technology. Here again, the policy makers are forced to consider the need for creating the level playing field for both banks and FinTech companies.

But it has to be understood that the innovation of the product stems from technology as against traditional product offering by banks where the offered product is configured in the technology system. Hence the policy has to adjust its boundary and provide flexibility accordingly. The failure to do so may result in the lack of development in innovations. However, lack of technical details shared for enabling the product offering is a cause for concern and the regulators have to take cognizant of the same.

## **4.4 Multi-Dimensional Relationship of Entities**

### **FinTech and Banks**

Banks are likely to be the backbone of industry and will promote the innovative ideas of FinTech companies through collaboration. The responsibility of the technology integration may continue to lie with the bank as per the regulatory guidelines and with emerging technology total cost of ownership in the maintenance of the system might reduce. The modular architecture enables the infrastructure to grow as rapidly as that of the business model.

### **FinTech Companies and Technologies**

Given the contribution to financial inclusion, deeper and faster penetration, FinTech's core strength is innovation. Currently, in the Indian context, startups dominate the field. However, the future of FinTech in Indian context largely lies with regulation.

**FinTech and Regulator**

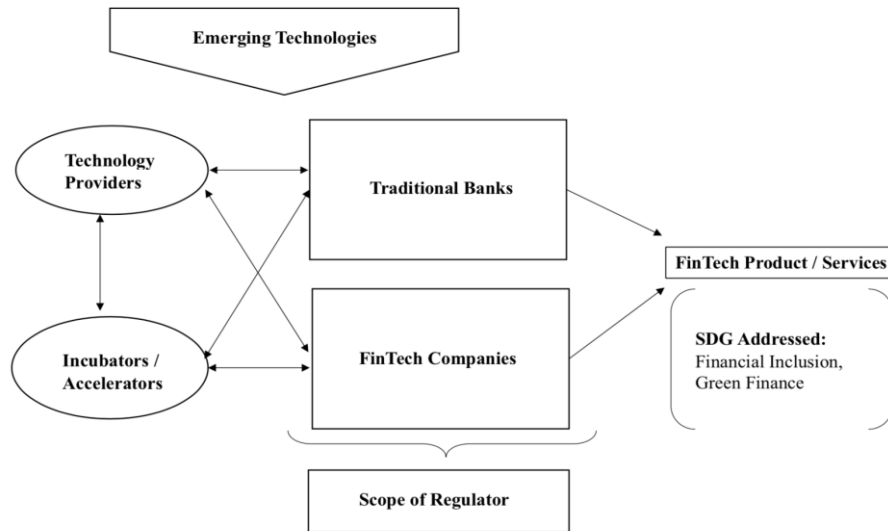
The policies and measures are being taken to address the operational concerns; Government is focusing on technology-related infrastructure required to create the base for the expansion of FinTech services. Largely, studies [2] state that FinTech related policies can fall under three categories 1) Governing FinTech based financial services 2) Governing underlying technology of such offerings 3) Policy Initiatives. All these three are applicable in Indian context as well. There will be a need for robust policy in place for each of the categories and should be open to change continuously. The next challenge is the risk assessment that includes operational risk among banks due to third-party service providers, data protection, and security. The macro-financial risks tend to rise if there is greater fund flow in the certain segment and that is unstable.

**4.5 Role of FinTech in SDGs**

It can be observed that tilting focus towards consumers through deeper market penetration, new experience generation, reduced intermediaries in transactions etc, through FinTech companies aids in accelerating the Government aim in meeting financial inclusion. The digital model further aids in meeting green-based finance. The role of technology aids in achieving all these goals. However, the critical issue and risk is that of the digital divide leading to the financial divide which will be the key concern for the regulator.

**5 Conclusion - Quo Vadis?**

Thus, it can be observed that today, enabling technologies are the foundations for most of the innovations in the delivery of financial services. In providing products and services, the traditional banks used technology as a delivery channel but the fintech companies use technology as a value creator. There is an emergence of a multi-dimensional relationship among the entities identified. So what could be the approach the regulator is likely to explore in Indian context? Will FinTech be recognised as technology sector or as finance sector? Given the change in technology, innovation, demand, participants and their roles the scope of regulator varies which is captured through the following framework:



**Fig. 1.** Framework of FinTech Landscape in Indian Context

## 6 Limitation and Way Forward

Post Covid-19, there is expected to have an impact on all sectors. It is speculated there will be increased financial inclusion, digital transactions, and more internet penetrations. The product innovations might increase. The level of disruption, the way the industry will react and restructure, the impact of technology on competition and consumer is not clearly defined at the moment. All these aspects are not considered in the current analysis. Similarly, Sustainable Development Goals (SDG) will undergo a revision of priority based on the pandemic impact. The socio technology perspective on the success of FinTech in the changed macro conditions is to be explored.

### References

1. Hansen, T.: The role of trust in financial customer-seller relationships before and after the financial crisis. *Journal of Consumer Behaviour* 13(6), 442-452 (2014).
2. Ehrentraud, J., Ocampo, D. G., Garzoni, L., & Piccolo, M. : Policy responses to fintech: a cross-country overview. *FSI Insights on policy implementation*, (23). (2020)