

FINTECH – AN EXPLORATORY STUDY AND ITS APPLICATIONS



M. Chandra Shekar
Doctoral Research Scholar
Faculty of Commerce - Osmania University
(ICSSR Teacher Research Fellow)
Assistant Professor – Institute of Public Enterprise
Hyderabad



Kumaran. R
Associate Credit Manager
IDFC First Bank
Chennai

Abstract

The evolution of internet disrupted or even shattered some of the conventional industries throughout the '90s and in this 21st century. To cite, the way record industry which has been completely wiped out due to online streaming companies. The street fashion shops are taken over by online retail shops. Also, the Finance and Banking industry is changing rapidly in comparison to other industries. However, the word 'Fintech' is redefining 'Finance and Banking Industry.' Fintech is an amalgamation of Finance and Technology Services. The innovative technological services in order to provide online financial services in comparison to traditional financing practices. Fintech can evolve as a powerful tool by harnessing the spending habits, consumer lifestyle and addressing the pain points of the customer using BIG Data Analytics. The essence of this paper is to study about Fintech and how it enables better access to financing and the disruptions it is bringing to offer the best services in a limited time.

Introduction

'M'oney is a prime factor in any industry as well as in our daily lives. Also, it is natural to consider Fintech as seemingly endless. It has become essential today, starting from providing digital services to transfer money, facilitating to store money in digital wallets. The competition in this sector is increasing daily. Many companies are coming up with new innovative solutions like AI, Big data, and Blockchain. As it helps people to make informed decisions in comparison to the earlier times. It also increases the credibility driven by transparency.

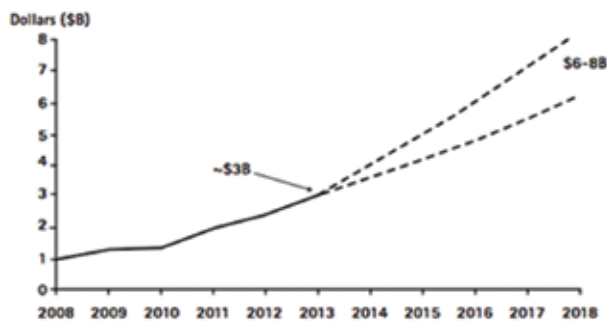
For many years, banks have enjoyed the privilege of governments' protection, especially the banking sector, which prevented newcomers from entering and establishing banking business efficiently. However, everything went upside down after the 2008 market crash. Banks created a deep hole in consumer trust and support. The mix of distrust created by banks and tech advancements like encryption, cloud computing, AI, blockchain et al. created a perfect storm for Fintech companies to rise to this occasion.

The penetration of smartphone along with increasing internet usage are the significant reasons for rapid growth in fintech. The smartphone penetration gave birth to another significant development- the eruption of online payment apps linked with bank accounts, which allows seamless transactions in almost all forms, i.e. for shopping et al. Demonetization was also one of

the significant reason for fintech to grow in India in recent times. Before demonetization Paytm and the digital payment industry did not have much growth, but after demonetization, they had a 3-4 fold increase in growth. The p2p lending business, which is a growing industry, was also accelerated by fintech. Because of the high-interest rates and difficulty in getting bank loans, many people started approaching p2p businesses.

These changes attracted the world's leading innovative technology companies such as Apple, Google, and Amazon created mobile payment systems such as Apple Pay, Google Pay, and Amazon Pay. Many startups are investing in fintech companies. Global investment in fintech has increased ten folds during 2010-2017.

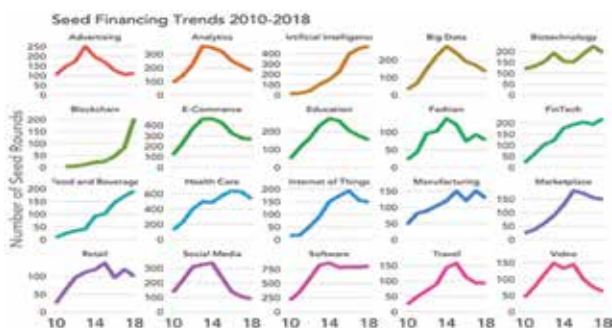
Figure 1: Global Fintech Investment by 2018



Source: Accenture, Partnership Fund analysis of CB Insights data

The reasons for fintech's rapid growth are rising customer expectations, generous VC funding, lesser barriers to entry, and accelerating technological revolution. These forces are creating a scenario where customers are becoming more and more comfortable with fintech. Globally, more than 50% of the people use at least one non-traditional fintech form.

From the below chart, the growth rate of different sectors for eight years from 2010, i.e. after the 2008 Financial crisis where most of the affected countries are trying to setback its financials. The X-axis represents years, and Y-axis represents the number of companies. Fintech, Blockchain, AI are the sectors which are growing number of seed funds. Moreover, Blockchain is the one where it has plenty of applications, especially in the finance sector. The future of Fintech is a blend of AI, Blockchain, Analytics.



Source: <https://www.linkedin.com/pulse/which-categories-seed-startups-thriving-tomasz-tunguz>

The success of Fintech is not due to the money, i.e. it is not just about focusing on the money but deciding on their target customers. Say for example Millennial generation (those who born in between 1981 -1999, currently who are in their 20's and 30's) will care about the different things than Generation X (i.e. who born between 1965-1980, who will be in their 40's and 50's). Millennials and Gen Z are not showing interest in high-end luxury cars like Ferrari or Rolls Royce. They do not even give importance to brands, but they give importance and look into the purpose and values provided by these service providers for them. Millennials and Gen z behave in a different way than Baby boomers or Gen X in digesting and retaining the information about the products or services. We have to remember that those who are in their late 20's who grew up by playing video games are continuing that habit. It gives us the perspective of how the companies should cater to them. For Example, Most of the grandfathers and great grandfathers concentrated on wealth creation, which resulted in a large amount of generation wealth. However, at this point, people less concentrate on the generation of wealth. They inherit wealth. We can see the behavioural change. Fintech can provide service to these kinds of people by acting as an intermediary. There are lots of opportunities available to monetise it depends on how we approach the issue and address them and most importantly, how we describe our target customer.

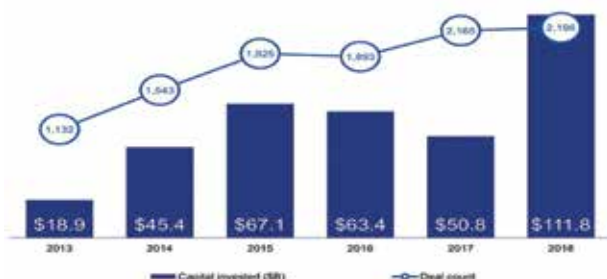
The financial industry has seen changeover in such a way that now, some banks exist in-app only. Like Flipkart and other eCommerce space where everything happens in the virtual world, even banks started operating in that mode. Though the attraction among customer is very less but in future, this model might dominate the market by reducing the number of physical banks.

Rising Investment activity in Fintech

Indian fintech has seen a high level of capital infusion in the industry than before. Several macro-economic factors have contributed to growth. According to the NASSCOM, the Indian fintech market will reach \$2.4 billion in 2020. There are many new generation fintech with cutting edge technology, which is valued more than the traditional banks. There are several global hubs for fintech is being created around the world like London is considered as hub for open banking solutions whereas China is mastering in facial recognition space and Israel is well known for the cybersecurity.

Also, the number of deals that happened in India is rising in comparison to China. The number of VC investments in china has decreased to 29% from 49% in the last quarter of 2018. The number of fintech deals increased by 61% in start of 2019. According to CB insights data Venture Capitalist has invested around \$890 million in around 130 fintech deals in the Asian market.

Total investment activity (VC, PE and M&A) in fintech 2013-2018



Source: consultancy.eu

Is it Fintech or Techfin? Who is going to win the race?

More non-traditional firms are succeeding in capturing the market faster than traditional financial institutions. Moreover, now both have understood the synergies they can create by collaborating. At the same time tech giants also started offering financial services, for example, apple pay, google pay, amazon pay, etc., and creating the solution in the Techfin space.

What is fintech and tech fin? Does both convey the same meaning? Is there any significant difference between them? Not much difference. Based on its underlying organisation, a firm is identified as a fintech or tech fin. Companies which offer financial services efficiently by using digital technologies is known as fintech. For example, mobile banking app by respective banks is an excellent example of fintech in the traditional firm, and in non-traditional firms, we can say Venom, Billdesk, PayPal et al., on the other hand, Techfin are those firms whose core business is technology, but they also provide the financial product as part of the service business. The best example is Google Pay, Alipay, PhonePe et al.

The collaboration will fetch more advantages for both sides of the court. The logic behind this most of the fintech startups will have an innovation mindset, they will be more customer-oriented et al., but what they lack is scaling, strong brand recognition, which is available with traditional banking and finance firms. So it will be a win-win situation for both the players if they collaborate. According to World Fintech report 2018, Most fintech firms are focused on narrow segments of which are not served by the traditional firms, but the problem for them is scaling. With the kind of legacy, the traditional firms have, and tech support from fintech startups will create value for both.

The major challenge is to establish an ecosystem where both of them can benefit from each other. Jack Ma, the founder of Alibaba, said, "In future financial industry will have two significant opportunities. First, traditional firms will go digital like online banking. Other internet banks will emerge, and it will be operated entirely by an outsider. In either case, success depends on how well the company utilise the customer data and learn from that insights and offer according to customer needs.

Collaboration is Everything or in other words sharing Economy will be integrated into every part of IT

Soon, people will need service of the bank, but it will not

be in the present form. Slowly sharing of services will start in financial sector as well like Ola, Uber etc., sharing here means decentralised assets and using that information efficiently to find the service providers rather than people automatically turning to bank. Most of us think financial service companies are those who take care of end to end process of transactions. However, they act as intermediary or take care of one part of the process. The similar way there is some peer to peer transaction-based fintech companies lend money to people by partnering with the traditional banks. These kinds of business models exist in UK, China and US. As mentioned earlier there are many fintech companies which focus on a particular specific problem in the value chain. According to the survey conducted by PwC, the result shows that 44% of the people who are earning less than \$75000 in a year would trust technology companies more than traditional financial companies for p2p lending and this percentage is increased to 68% for the category of people who are earning more than \$100000.

There are many companies which act as enablers. It enables people to raise funds, or in other words, it helps people to borrow money for various purposes. Bankers are the one who connects the people who have money and who needs them. However, in future as we are emphasising from it will not be like that. Apple has filed a patent for p2p money transfer using mobile devices. If it comes then it will disrupt the retail lending format. The thing people use it more than the traditional one because of high cost involved in commission and other fees etc., It costs huge for traditional banks also maintain branches in less densely populated areas. In those banks are trying to partner with the domestic fintech companies to create an alternative distribution channel. M-Pesa in Kenya would be the best example for this where it accepts deposits and payments using mobile phones and agents.

Even in India Postal department is aiming to apply for a small finance bank license. It is because postman knows every nook and corner of his area. It will be easy for him to reach the customers. So in initial stages, it looks like postal department has great market base. For example people who wish to deposit can hand over their cash to postman who will collect at the doorstep. It makes the process easier for people.

Blockchain creates Fintech Growth

Two important things that make everyone in the industry, starting from startup founders to well-established business CXO's to speak about it. First is there is ample chance of making the infrastructure cost less expensive than the existing one. Moreover, second is blockchain gives a number of opportunities for financial sectors starting from smart contracts and so on. As we said at the start block chain makes the infrastructure-less expensive, it is because it is decentralised ledger where authenticity of the transactions is performed by anyone in the block. This process helps to reduce the intermediary who is existing now. So the blockchain process is more efficient and transparent one when compared to the present.

These plethora of opportunity available in the blockchain technology have attracted both budding business and well-established business person to develop their product by concentrating on a specific view as a well comprehensive view

of addressing the problem. Accenture and Ponemon Institute conducted a study on cybercrimes in financial sector, and the report says that cost of cybercrime has increased 40% over the years and money spent by firm to tackle these also increased from \$12.97 million in 2014 to \$18.28 million in 2017. It is challenging to hack the blockchain network. It is like searching lost ring in the sea. The biggest challenge in this exciting technology is having a clear vision of where to apply it and knowing why to apply it.

The New Mainstream: Digital

India consumes 9.8 GB per month, and it is anticipated to double to 18GB in 2024 according to the report published by Swedish equipment manufacturer Ericsson. It is estimated to reach 1.1 billion smartphone user in India by 2024. It shows that the level of digital penetration happened and happening in India. It is same with other emerging countries as well. Digital is applicable in all parts of the financial sector. Think of growing number of digital wallet. Digital wallets are secure, fast and moreover low-cost method to save and send money instantly to the needy person. Before it takes days to send money. Later it was reduced to hours, and now it takes seconds to send or receive money. It all happened because of Digital disruption. Still now it takes 2-3 days for cross border transactions. It is expected that blockchain technology will make that also to happen in minutes.

In recent years the main competitors for banks are not their peers but from a non-traditional competitor. There are many segments in the financial sector is emerging. Every one of us will maintain at least two bank accounts and at least will have minimum of 2 debit/credit cards apart from these will have other individual cards from different business channels. Many of us will find it challenging to maintain all these accounts. There are startups which aggregates all these one apps where an individual can maintain all these in few taps from checking balance to transfer money. Even RBI has permitted 3-4 companies to work on account aggregation as a pilot project. Similar to account aggregation there are startups like Curve which aggregates cards. Multiple cards from different banks will be replaced with single card and using the app and individual will select the card from which amount has to debit.

All these things will help the bank to get data about the consumer spending from which they analyse and give insights on how to save money and inputs on investment from which they can earn. Such data help banks to improve their real-time fraud detection. Over a few years, automation will start coming in the financial sector as well, especially in lending and clearing the cash settlement and in capital markets. To be competitive in the financial market, companies should be ready adopt the change so quickly.

Conclusion

In forthcoming years financial services will like a layer below which everything built on the top of it. To some extent the layer will be owned by a big player and everybody will work with him. The competition will kick out all the wrong companies, and the only good one will survive in the market and dominate

them. It is no more single man show in the Financial Service Industry. To stay in the market and competitive, they have to collaborate with Fintech Companies to grow. Many startups are looking towards to accelerate their growth through faster, cheaper and broader distribution of the services against the traditional ones which are costlier and risky as well.

In the future, it is expected that banks will outsource or share the task of managing technology with external companies so that they can concentrate on risk management and running their business. All physical banks will be closed as all of them are currently on the path to get their processes digitised.

Fintech has excellent social and economic transformative potential. The industry, its consumers and the big corporations are hungry for change and are ready to leap of faith. That is why many people consider fintech to be the fourth industrial revolution. Let us wait and see whether it can replace the traditional banking industry or not? **MA**

References

1. <https://center-forward.org/wp-content/uploads/2018/02/FinTech-3.pdf>
2. <https://www.fintechnews.org/the-role-of-fintech-in-the-future-of-finance/>
3. <https://www.livemint.com/opinion/columns/opinion-the-role-of-fintech-in-shaping-the-future-of-capital-markets-1559234523869.html>
4. <https://guild.co/blog/fintech-and-the-future-of-finance/>
5. <https://www.forbes.com/sites/ciocentral/2018/07/10/how-fintech-initiatives-are-driving-financial-services-innovation/#295f521254fa>
6. <https://www.capgemini.com/news/capgemini-world-fintech-report-2018-highlights-symbiotic-collaboration-as-key-to-future-financial-services-success/>
7. <https://www.bangkokbankinnohub.com/techfin/>
8. <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/indias-fintech-future-looks-bright-but-it-needs-to-find-its-raison-dtre/articleshow/67986757.cms?from=mdr>

m.chandrashekar@ipeindia.org
kumaran2108@gmail.com