

FinTech for the Economy: Listing Opportunities and Challenges with a special focus on India

Adarsh Choubey
BTech (Chemical)
IIT, BHU.

Abstract

Fintech, or financial technology, has become the latest area to expand the tech industry. Trading systems, expanded credit analysis, online banking and lending—companies use technology to compete with traditional financial services companies or to expand the capabilities of that industry. Financial services as always practiced can become staid and leave consumers and businesses with fewer choices while driving up prices. That's particularly true for those who are not well off. Storing money, getting loans, sending cash to family members, investing over a phone app all provide flexibility, convenience, and immediacy never before available to many. One of the advantages, which is heard from various people pitching ideas and products, is that those in need will suddenly have the attention they deserve. Except, it doesn't quite work that way. Fintech companies typically have the same motivation as any financial services firm. They want to make money from others. Not to be overly disparaging, but it can be a pure rent-taking experience, in the economics definition of the term. Taking rents means extracting portions of transactions. A bit here, a bit more there can lead to tremendous amounts of revenue generated with high margins, meaning big profits. But does fintech generally deliver on its promise to those of low income?

Keywords:

Fintech, Insurtech, Cryptocurrency, Blockchain Technology, Robo advice.

Financial technology, also known as FinTech, is an economic industry composed of companies that use technology to make financial services more efficient. Financial technology companies are generally start-ups trying to disintermediate incumbent financial systems and challenge traditional corporations that are less reliant on software.

Brief History of FinTech

FinTech began to flourish in the 1990s when the Internet and e-commerce business models arose and in the following decade banking in most parts was already completely digitalized. The Global Financial Crisis in 2008, in which many people lost their trust in traditional banking systems, security and transparency has become more important than ever. This shifting mindset and the technology of cloud computing made it possible to invent new customised solutions and standard procedures such as providing access to banking profile, payment and transfer of money with automatically converted currencies. Due to regulation and high expectations on customers side FinTech companies main goal is to create services and implementations with long-term potential. The primary means by which people access the web and make use of different financial services is the smartphone equipped with mobile banking apps and digital wallets such as Google Wallet and Apple Pay. According to Statista (official German statistic service) the mobile payment market might exceed \$1 trillion in 2019.

Benefits for the Economy

Mobile Payments

Ask any young person — millennials and Generation Z — what their go-to payment method is, and they will probably tell you that they pay through mobile apps. Thanks to technological innovation, the global economy is fast moving from cash-based to digital transactions. At least 64% of smartphone users have used any type of mobile payment in the last year. Examples of mobile payment methods include Apple Pay, Google Wallet, and PayPal services.

Insurance

Fintech can also be seen in insurance. Also called insurtech, it encompasses home insurance, car insurance, and data security. Fintech innovations have impacted the insurance industry by improving efficiency, reducing costs, improving risk assessment, and delivering better customer experience. According to a study by Accenture, insurers are paying more attention to insurtech with 86% believing that rapid innovation is a must if they are to retain a competitive edge in the market.

Cryptocurrency and Blockchain Technology

Blockchain technology and cryptocurrency have helped make financial transactions faster and more secure. Some cryptocurrency trading platforms include Coinbase, Robinhood, Cash App, Gemini, and Binance. About 61% of big digital industry names have invested in blockchain technology, according to the Digital Enterprise Report by Okta.

Stock Trading and Robo-Advice

Through robo-advisors (digital-based financial advisors), customers can get answers to investment and finance more efficiently and at lower costs. Robo-advisors can tailor investment plans to the respondents' unique attributes, including age, risk tolerance, current debt, personal assets, and such. Examples of robo-advising services are Ellevest, Wealthfront, The Vanguard Group, Ally Financial, and Betterment.

Digital Lending and Credit

Through open banking technology, you can borrow money without hassle electronically. Open banking refers to the sharing of financial data electronically and securely under customer-approved conditions. Lots of lending apps leverage a customer's transactional information to make lending decisions. Some use peer-to-peer lending where users can get loans without the need for bank involvement. Other fintech startups provide customers free credit reporting, including updated scores and insights. Credit Karma, an excellent example of such a company, also allows customers to check and compare different loans and credit card offers.

AI Virtual Assistants

Virtual assistants have made users mobile experience and access to services from financial institution timely and easy. With this technological innovation, customers can access their credit score data, get alerts about fraud, and make voice or text-enabled payments. An example of this is Eno, Capital One's AI assistant.

Budgeting Assistance

Apps- Last but not least is another alternative finance example is budgeting apps. Created as a fintech solution for customers who struggle to track their finances and spending, these apps have steadily grown in popularity. They help customers keep their income, monthly spending, and payments in check. Examples include Acorns, Mint, and PocketGuard.

Latest Developments in FinTech

1. Massive Investments in Digital Transformation

Experiences with non-banking industries such as retail and communications have shaped consumers' expectations from banks and credit unions. As customers become more digital, more demanding and more tech-savvy, legacy bank infrastructure is strained to support new modes of engagement and grow digital efforts significantly. In response to increasing competitive pressures and people's rising expectations, financial institutions around the world are investing aggressively in digital transformation projects.

2. The Frontiers of Innovation: AI & Blockchain

Blockchain and artificial intelligence (AI) will continue to disrupt the financial services industry. AI development will focus on cognitive use in the sales, marketing, investments, wealth management and compliance sectors of the financial services industry. This is a critical step in moving from advanced robotic technologies like machine learning and predictive analytics to real growth in cognitive computing. Robo-investors will become the centralized fintech platform for wealth managers.

3. Digital-Only Banks Become a Real Threat

With the entire banking industry shifting to digital channels, digital-only players will pose more and more challenges to the historical dominance of traditional banks and credit unions. According to Capgemini's Top 10 Technology Trends in Retail Banking, this new breed of banking providers has defied the conventional model with highly innovative products and services with mass appeal to today's digitally-savvy consumer. These challenger banks will fuel increased competition in the industry, forcing traditional financial institutions to improve their digital offerings and extend their reach to fend off these disruptors.

4. Design Thinking

Banking providers will focus on a few key use cases and technologies where customer-first design is key, like account opening and augmented reality. Augmented Reality (AR) and Virtual Reality (VR) will benefit from developments in immersive UX design aimed at improving the customer experience. The account onboarding process will see a boost from UX design technologies in the form of a more interactive and gamified experience with natural language processing and machine learning.

5. Real-Time Risk Decisions

AI will also support risk management by improving the enterprise-wide risk analysis needed to fulfil the changing needs of the organization. Given the pace at which the financial services industry moves, the goal for 2018 is real-time risk through AI/automation while operating within compliance and regulatory parameters.

6. Alternative Lenders Leverage

Alternative Data Capgemini says that the 2008 financial crisis left banks and credit unions at a disadvantage with credit challenged consumers. This — combined with the emergence of online lending technology and streamlined lending processes — made room for alternative lenders to thrive in this environment. These non-traditional lenders use technology-based algorithms and software integrations to assess credit profiles of customers and are also leveraging alternative data such as social media photos and check-ins, GPS data, e-commerce and online purchases, mobile data, and bill payments.

7. RegTech

With an increasingly complex regulatory environment, financial institutions will also start looking at AI to gain meaning from larger and larger volumes of regulatory data. With newer regulations like Fundamental Review of Trading Book (FRTB) and Consolidated Audit Trail (CAT) compliance, a tech-first approach will become necessary. RegTech has a vital role to play as firms move beyond initial MiFID II compliance and gain more long-term benefits from the regulation and take a tech-first approach to their compliance efforts. This will lay the foundation for greater economies of scale across data, analytics, and related risks.

8. Big Data Gets Even Bigger

Big data initiatives are pushing more sophisticated and more open business models with better data tools and visualizations. While the beginning efforts for data standardization have already started, financial institutions are still relying on legacy data architecture and infrastructure. Stepping forward with future systems is a priority for data in 2018. Additionally, this requires new data infrastructure to comply with the upcoming new data requirements like General Data Protection Regulation (GDPR) and Payment Services Directive II (PSD2). With those changes, new ways of extracting additional value from data have emerged, such as data virtualization, data lineage, and data visualization.

9. Connecting With Third-Party Providers to Drive Customer-Centricity

Through open APIs, banks and credit unions will go through significant changes in the way they provide CX-based processes. Fintech companies are becoming players in the customer journey, and banks and credit unions are no longer in control of the customer journey. Customers are increasingly adopting fintech offerings for better services, leaving banks and credit unions no choice but to adapt – or get left behind.

10. The Cloud: Creeping Into Every Corner

In 2018, adoption of the cloud in banking will increase, but with the focus on security and regulatory compliance continuing to be front and centre. Expect to see enterprise-wide middle- and bank-office applications start to move into the cloud. Banks and credit unions will feel the push to create more cloud-enabled business models in 2018, while the use of open APIs will drive consumer applications to the cloud even more.

Challenges for Fintech Business

Challenge #1: Credibility

This is the number 1 challenge of any innovation, and it holds good for fintech too. Since its money we're dealing with, most people still lack the trust component to rely on fintech to simplify their financial operations. Gaining the confidence of people and have them trust your product that is unfamiliar, takes a lot of time and effort.

Challenge #2: Discovery

You may have a solid product that works very well; you may have gained the trust of a good number of people to start with, who use your product. At this point, you want more than just a handful of people using your product. There are over 600 fintech start-ups in India alone, and let's not forget fintech giants. Getting your product discovered amongst the competition is definitely a challenge.

Challenge #3: Customer relationships

Every business out there requires customers, of course. If you want your customer-base to stick with your product and keep coming back, you need to make sure you retain your customers for the long run by building long-term customer relationships.

Fintech, still being at its early stage of adoption, will raise questions and eyebrows from most people. While its advancements are disruptive, the focus of any Fintech company should be about educating people about the concept.

FinTech in India

India is one of the fastest growing FinTech markets globally and industry research has projected that USD 1 Trillion or 60% of retail and SME credit, will be digitally disbursed by 2029. The Indian FinTech ecosystem is the third largest in the globe, attracting nearly USD 6 billion in investments since 2014. The Indian FinTech industry is creating cutting edge intellectual property assets in advanced risk management and artificial intelligence that will propel India forward in the global digital economy while simultaneously enabling paperless access to finance for every Indian.

For the underprivileged in India

The availability of financial services is critical if we want to escape poverty in the country. It can help millions of people to improve their financial situation as well as to strengthen local economies. The Global Findex Database shows that FinTech plays the biggest role in the rise of global financial inclusion.

Mobile banking and wallets

In many areas, a lack of financial services can be explained easily: there are not enough people in the area to make banks profitable. Towns and cities can be situated on the islands or high in the mountains which makes logistics more complicated. Commercial banks cut expenses and close unprofitable branches leaving behind communities without vital banking services. In this situation, people sometimes have to use illegal alternatives like check-cashing offices that are mostly expensive and definitely more dangerous. Mobile services from traditional banks or even independent mobile banking can solve the problem.

State control and decentralization

In some underdeveloped areas, even governments can't guarantee legitimate protection of savings and financial operations. In these cases, decentralization is the best way to give financial services to the unbanked, and blockchain becomes an important part of this process. Blockchain enabled financial relationship within the system independent from state authorities that can be corrupted or mismanaged. The technology guarantees transparency of all transactions and able to return economic power to the people.

Challenges for FinTech in India

Since the fintech is one among fast-moving technologies, it comes with challenges.

Going digital for payments can be complicated in an economy like India's which is dominated by micro, small and medium enterprises (MSMEs) as they cannot bear the costs. The adoption of fintech is skewed in India but because of lower margin per transaction, larger payment gateways target only handful of large retailers. MSMEs account for only about 5% of \$12-14 billion spent. Coming up with sustainable business models which does not overload consumers with extra charges is also one of the challenges.

Regulatory uncertainty in the fintech sector is making things complicated for both fintech service providers and consumers.. Lack of clarity and legality among fintech companies about KYCs itself is another major challenge.

Knowledge of these digital payments platforms is restricted to the bigger cities of India while rural India struggles to make its way through. There is a gap regarding people's current ability, desire, and need for fintech services. Filling up the gap and making the ends meet is a task for fintech product providers.

Cyber security threats and lack of regulatory mechanisms comes as a major problem for the expansion of services. The fintech sector is still regulated by banking regulations. Although RBI has allowed small banks and payment banks in the recent past, a lot of impediments still remain in the path of innovative fintech players. It's like asking them to operate with one hand tied behind their backs.

Relatively weak infrastructure such as underdeveloped payment systems, lack of customer credit data, legal enforcement mechanisms for payment obligations, power, weak Internet coverage is also a drawback. Underdeveloped technology and venture capital ecosystems, shortage of skilled tech/finance entrepreneurs, small markets, limited revenue potential is also one of the major challenges.

Cash dominance in transactions, informal credit and savings and lack of digital literacy is also a hindrance.

Way Forward for FinTech in India

Fintech providers have to consider the need of customers while developing a payment solution. The availability of small change, which is often refused by banks owing to high storage and transportation costs, inevitably finds its way to small merchants and households, and is used for low-value transactions such as the daily purchase of milk. Payment gateways can address the issue taking it as an opportunity. Fintech providers should work towards the last mile digitization of cash. Infrastructure development is the need of hour and it should be addressed for the expansion of services. Awareness should be created and digital literacy must be improved to understand and analyse the pros and cons of these services. It will help customers to make choices. Fintechs should come up with sustainable business models. It is important not to impose further costs on the end customer or create a solution that merely pushes the consumer issues further down the value chain. There is need to support the formulation of policies that foster the benefits of fintech and mitigate potential risks. Government should set the platform for smooth operations of start-ups with favourable policies and tax incentives specific to the fintech sector.

Conclusion

For India the success or failure of digitizing rests on demonstrating personal value to the end consumer in switching from cash to digital payments. Reaping these benefits requires strengthening of institutional capacity, expanding outreach to stakeholders, and adopting a cross-agency approach involving relevant ministries and agencies. So that the fast moving technology which is a boon for growing economy does not turn into a curse.

Looking back at the history of human beings, technological progress has fundamentally helped to increase people's welfare and develop the economy, though it has sometimes been accompanied by negative aspects such as the use of technologies in wars and environmental pollution. Thus, policymakers should strive to maximize the benefits of technological progress while minimizing its negative aspects. Since recent innovations in information technology have the potential to cause impacts particularly on financial services, how to deal with recent financial innovation symbolized by the word "FinTech" will be the key to designing the economic landscape in the 21st century. In dealing with financial innovation and FinTech, there are many new and challenging issues. In order to overcome those issues, we need to cooperate with a wide-range of entities, including private businesses and academics.

References

1. www.indiafintech.com
2. www.investinindia.org
3. www.livemint.com
4. Fintech in a Flash: Financial Technology Made Easy Book by Austin Rubini

