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ROLE OF FINTECH IN FINANCIAL SECTORS IN INDIA

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Abstract

A Fintech to compete with traditional financial methods in financial services. Finance is seen as one of the industry's most vulnerable to distraction by software because financial services, much like publishing, are made of information rather than concrete goods. It is considered by many to be a relatively recent development and how it's very accurate using in industries. In Fintech companies are use a variety of technologies in nowadays, it's including AI, Big data, Block Chain, Robotic Process Automation and others. While it has evolved very quickly over the last decade, that's mainly due to advancements in technology.

Keywords: Fintech ,BigData, BlockChain, Finance Sector

Introduction

Fintech is usually applied to the segment of the technology startup scene that is disrupting sectors such as mobile payments, money transfers, loans, fundraising and even asset management. It should be creating new markets for them in starting time. Fintech is covered the Software, Mobile Applications, and other new technologies. In this new one created to improve and automate to additional form of finance for business and customers also like this new technology. Around the years 2009 and 2010, many fintech companies such as Pay tm, Mobikwik, and Freecharge started making inroads into the country promising quick digital payments solutions. The demonetization drive of 2016, was the turning point for fintech companies in India. The real story of Fintech started in India at 2016 when the demonetization of the 500- and 1000-rupees currency notes happened.

Development of Fintech

Financial technology, perhaps, has been evolving ever since the banks started providing online services. The term 'fintech' also gained traction only recently. However, the origin of fintech, in its primitive form, can be traced back to the latter half of 19th Century when people began moving money through telegrams and morse code. More specifically, the interlink age of finance and technology has a long history and together they evolved through three distinct eras (Arner et al., 2015) as follows:

Fintech 1.0 (1866–1967): Pre-digitization Era

Development of the fundamental infrastructure for the first major attempt of financial globalization with the introduction of telegraph in 1838 and laying of the first successful transatlantic cable in 1860, perhaps, can be considered the earliest instances of fintech. Subsequently, the introduction of Automated Teller Machine (ATM) in 1967 by Barclays Bank marked the inception of modern era of financial technology. The code breaking tools that were commercially developed into early computers by IBM and invention of

handheld calculators by Texas Instruments in 1967 were also the giant leaps in this direction. In 1950s, credit cards were introduced in America by Diners' Club (1950), Bank of America (1958) and American Express (1958). Interbank Card Association (presently MasterCard) was established in 1966. In 1964, Xerox Company came up with its first commercial version of fax machine. Thus, by 1966, a global telexnet work was already in place that provided the foundation for the next round of fintech turnaround.

Fintech 2.0 (1967-2008): Era of Traditional Digital Financial Services

In the sphere of payments and settlements, the Inter-Computer Bureau was initiated in UK in 1968. This subsequently formed the ground for today's Bankers' Automated Clearing Services (BACS). A somehow similar arrangement, the US Clearing House Interbank Payments System (CHIPS) was introduced in 1970. Fedwire, which was operating as a telegraphic system since 1918 was also converted into an electronic system. Responding to the need for a cross-border inter connected payment system, Society of Worldwide Interbank Financial Telecommunications (SWIFT) was established in 1973. Soon after this, the fall of Herstatt Bank in 1974 raised the need for addressing the increased risk of international financial linkages. This triggered the regulatory intervention in form of a series of international soft law agreements on devising a robust payment and settlement system. In the field of securities transactions, the establishment of NASDAQ in USA in 1971 and subsequently the National Market System, brought the end of physical trading era in securities dated back to 1600s. In the personal banking segment, introduction of online banking in USA and UK (by Nottingham Building Society) in 1983 marked the beginning of fintech in personal transactions. Financial institutions also started applying fintech in their internal operations. By 1984, usage of Bloomberg terminals became a common phenomenon. Some even argued the possible role of computerized trading system (which automatically bought and sold securities based on pre-set price levels) behind the great 1987 stock market crash. Regulators from the late 1980s, therefore, started to consider the fintech issues while framing regulations. Moreover, financial services, from this very period, became largely a digital industry with ever increasing volume of transactions among the financial market participants across the globe.

Internet set the next stage of fintech development since 1995 with the use of WorldWideWeb (www) to provide online account checking by Wells Fargo. By 2005, banks without physical branches were introduced (e.g., ING Direct, HDFC Direct) in UK.

India was also not far behind in this fintech revolution. Indian banking sector adopted computerization in late 1980s. In 1987, HSBC bank introduced the first ATM. ECS was started by RBI in 1990.

In 1991, India joined SWIFT. In 1996, online banking was introduced by ICICI which was immediately followed by other banks such as HDFC bank and IndusIndbank. In 2002, mobile banking, in form of SMS banking was introduced. RBI started RTGS in 2004 and NEFT in 2005. Cheque Truncation System (CTS) was introduced in 2008.

Fintech 3.0 (2008–till date):

The Great Financial Crisis of 2008 caused a massive turnaround leading to the third stage of fintech evolution, or better called revolution. Financial crisis and its after effects changed the public perception about banking services, increased the amount of regulatory scrutiny on banks and above all destabilized the economic conditions across nations. As a result, the business policies and structures of banks were reshaped to provide banks more risk absorbing capacity. Banks also turned to P2P lending platforms and other innovations. Though not directly, but the reduced job opportunities following the financial crisis brought about a start-up boom with extremely talented entrepreneurs floating their business ideas in diverse fields including finance. India, with a pool of young and skilled population soon joined this bandwagon.

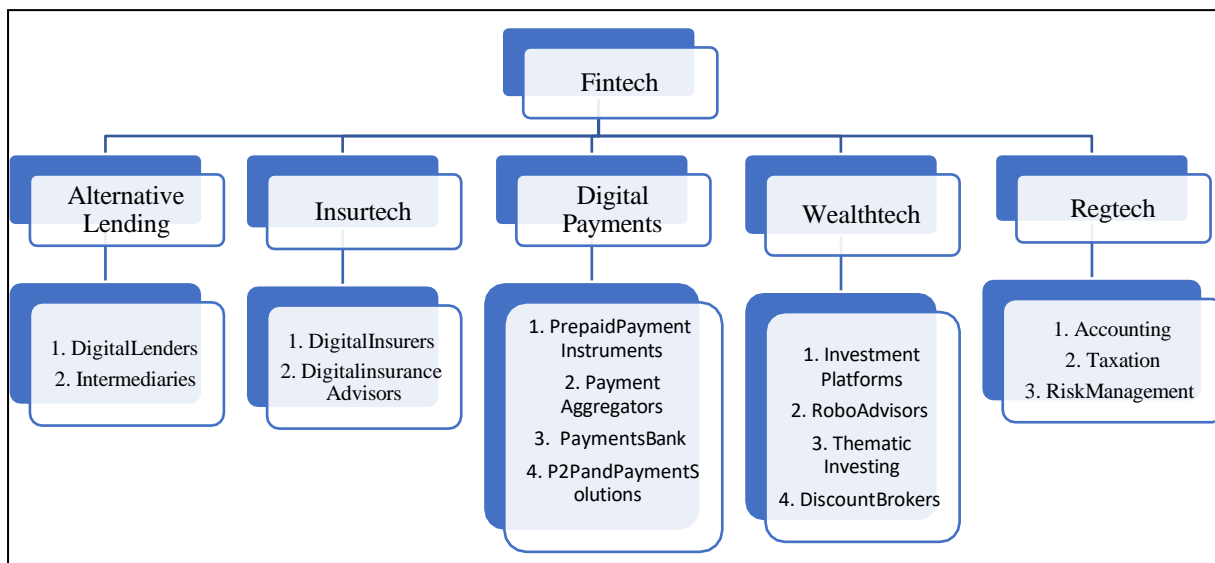
India was well off during the Great Financial Crisis because of its robust regulatory framework for the banking industry. It strengthened such framework further by incorporating the tech angle in framing the regulations. In 2010, RBI introduced IMPS (Immediate Payment Service). In 2016, the Unified Payment Interface (UPI) took the digitization in financial transactions to a new level. The demonetization initiative of 2016 immensely promoted digital payment adoption and contributed significantly to the rise of a whole host of digital payment solution providers and financial innovators.

Fintech Environment in India

Fintech firms have reshaped the Indian financial services sector including lending, insurance, digital payment, wealth management, regulation and others with rapid pace.

The fintech environment in India can broadly be classified into the following categories:

Fin tech Environment in India



Alternative Lending:

These segments use client data and technologies like Artificial Intelligence and Machine Learning for application screening and loan disposal and also provide aggregation services. The key sub-segments are –

- Digital Lending (Retail lending—e.g., InstaPaisa, Rupeek;)
- Intermediaries including P2P platforms (e.g., LenDenClub)

Insurtech:

This segment is focusing on selling insurance products at the point of purchase of a product or service, digital settlement of claims, small ticket insurance (Sachet Insurance) and aggregation services. The key sub-segments are –

- Digital Insurers (e.g., DigitandAcko)
- Digital Insurance Advisor (e.g., Policybazar, Coverfox.com)

Digital Payments:

This segment is the most funded section of the fintech firms in India which have so far got the maximum government support to lead the adoption of electronic payment after the 2016 demonetization drive.

The sub-segments are –

- Prepaid Payment Instruments
- Payment Aggregators (Mobile and Digital Wallets) - e.g., Paytm, Freecharge, Phonepay
- Payment Gateway - e.g., BillDesk, CCAvenue
- Payment Bank - e.g., Paytm Payment Bank
- P2P Payment - e.g., Phonepay

Wealthtech:

These firms use sophisticated technologies including AI, Machine Learning and Analytics to offer investment and wealth management services.

The key sub-segments include –

- Investment Platform - e.g., ETmoney, Smallcase
- Digital Discount Brokerages - e.g., Zerodha
- Thematic Investing - e.g., Trendlyne
- Robo advisor - e.g., Kuvera, Scripbox

Regtech:

These firms offer solutions targeted at the new and complex regulations that traditional financing firms and fintech firms are subject to. They also provide risk management services. The key sub-segments are –

- Accounting - e.g., Khatabook
- Taxation - e.g., Cleartax, EaseMyGST
- Risk Management - e.g., CustomerXPs

- E-KYC–e.g., Signzy, inVOID

Fintech Impact in Financial Sectors

Fintech companies offer data analytics and insights that allow banks to gain valuable customer insights and increase efficiency in their operations. In these powerful analytical tools, banks can better understand customer needs and design products and services to meet those demands. Application of Fintech have revolutionized the banking sector, providing banks with increased efficiency, cost reduction, improved security, enhanced customer experience, increased transparency, accessibility, faster payments, and more.

It should be promoting financial stability through channels of cloud technology, artificial intelligence, and data technology. Individuals are gaining confidence in utilizing Fintech services as a result of the numerous adaptable financial options offered by various companies. Due to digital banking, people no longer feel compelled to establish a bank account. Fintech companies can help boost competition and accelerate financial inclusion in India by lowering costs and enhancing access to financial services for people in low-income groups, rural areas, and other underserved sectors of the Indian economy. Fintech raises labor productivity, which refers to output per worker or per hour worked, and definitely fosters economic growth. It has a significant favorable regional and provincial effect on GDP growth in every country.

The fintech (financial technology) industry has had a significant impact on the financial sector in recent years. Fintech refers to the use of technology and innovation to improve and enhance financial services. Here are some key ways in which fintech has impacted the financial sector:

1. **Digital Payments and Transfers:** Fintech companies have revolutionized the way we make payments and transfers. Mobile payment platforms, such as PayPal, Venmo, and Alipay, have made it easier and more convenient for individuals and businesses to send and receive money digitally. These platforms have reduced the reliance on traditional banking systems and enabled faster and more efficient transactions.
2. **Peer-to-Peer Lending and Crowd Funding:** Fintech has disrupted the lending industry by introducing peer-to-peer (P2P) lending platforms and crowd funding platforms. P2P lending connects borrowers directly with lenders, cutting out the traditional intermediaries like banks. Crowd funding platforms allow individuals and businesses to raise funds from a large number of people for their projects or ventures. These platforms have increased access to capital for borrowers and provided new investment opportunities for individuals.
3. **Robo-Advisors and Wealth Management:** Fintech has transformed the wealth management industry with the introduction of robo-advisors. Robo-advisors are online platforms that provide automated investment advice and portfolio management based on algorithms and user input. They offer lower fees compared to traditional financial advisors and have made investment services more accessible to a wider range of investors.
4. **Blockchain and Cryptocurrencies:** Fintech has popularized blockchain technology and crypto currencies like Bitcoin and Ethereum. Blockchain, a decentralized and secure digital ledger, has the potential to streamline various financial processes, such as cross-border payments, supply chain management, and smart contracts. Cryptocurrencies have gained traction as alternative digital currencies and investment assets, although their adoption and regulatory environment vary across countries.
5. **Open Banking and APIs:** Fintech has facilitated the concept of open banking, which involves the sharing of financial data through secure application programming interfaces (APIs) between different financial institutions and third-party providers. Open banking enables consumers to access and manage their financial information in a consolidated manner and allows fintech companies to develop innovative products and services using this data.
6. **Financial Inclusion:** Fintech has played a crucial role in promoting financial inclusion by providing access to financial services for underserved populations. Through mobile banking, digital wallets, and microfinance platforms, fintech has expanded financial access to individuals in remote areas or those without traditional banking relationships.

This has the potential to boost economic growth and reduce inequality.

7. **Regulatory Challenges and Collaboration:** The emergence of fintech has posed regulatory challenges for governments and financial authorities. Regulators need to strike a balance between fostering innovation and ensuring consumer protection, privacy, and financial stability. Collaboration between traditional financial institutions and fintech startups has become more prevalent as both parties seek to leverage each other's strengths and navigate regulatory frameworks.

Overall, fintech has transformed various aspects of the financial sector, making financial services more accessible, efficient, and inclusive. As technology continues to advance, we can expect further disruption and innovation in the years to come.

Fintech Future Technologies

The fintech sector, currently holding a mere 2% share of global financial services revenue, is estimated to reach \$1.5 trillion in annual revenue by 2030, constituting almost 25% of all banking valuations worldwide. The constantly evolving nature of fintech makes it a dynamic and exciting place to work. In 2023, cyber security and automation remain key trends in fintech. Financial technology use increases the risk of cyber-attacks, making cybersecurity a top priority.

Artificial Intelligence: AI streamlines their operations and reduces costs, while still offering high-quality financial services to their customers.

- **Cloud Computing:** Using fintech technology in industries it should be quickly and easily scale their operations up or down as needed without having to invest in costly hardware and infrastructure
- **Block Chain:** Block chain technology is a data management system using complex cryptography to power many cryptocurrencies and other decentralized applications.
- **IoT:** It's also a cyber-security tool, providing a secure way to process and encrypt payment information and the fintech industry more efficient, reliable and secure.

Conclusion

Fintech is very fast growing and let offers and opportunities to develop the quality of financial services providing to the industries. It should improve the customer satisfaction, financial inclusion, welfare gains, economic growth and potential meet the new risks and threaten financial stability. It helps in managing resources efficiently and find effective ways to utilize financial accounting information. Fintech find the effective ways to consume the financial accounting and helps in managing the resources to efficiently using in companies. Fintech is utilized to help companies, business owners, and consumers better manage their financial operations, processes, and lives.

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