

Fintech: The new buzz in the Education Field

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Abstract

As the world of finance is witnessing a new era of digitalisation, knowledge of Fintech becomes an added advantage or rather sine quo non for modern day financial activities. The need of the hour is to introduce the learning of technology at the school level, specially at the level of management and professional studies. Thus, the upcoming graduates of the financial world should develop an expert knowledge of Fintech. Fintech –the word signifies to the ever-expanding developments in the technological world that has brought a significant change in the financial sector. Fintech has led to the financial inclusion through various innovations. This has resulted in the enhancement of the efficiency and reduction in the risk. FinTech products and services like Crowd funding, Peer to Peer Lending, Big Data, Robo advisors, block chain technology etc. have embraced the financial markets globally. It facilitates the collaboration of the investors and the seekers of the funds in an easy manner. The researcher endeavours to study the need for the introduction of Fintech learning in the education field.

Keywords: Fintech, technology, data analytics, business models

Introduction

As the world of finance is witnessing a new era of digitalisation, knowledge of Fintech becomes an added advantage or rather sine quo non for modern day financial activities. The need of the hour is to introduce the learning of technology at the school level, specially at the level of management and professional studies. Thus, the upcoming graduates of the financial world should develop an expert knowledge of Fintech. Fintech –the word signifies to the ever-expanding developments in the technological world that has brought a significant change in the financial sector. FinTech is formed by combining finance with technology. As per the report of Financial Stability Board, “*FinTech is technologically enabled financial innovation that could*

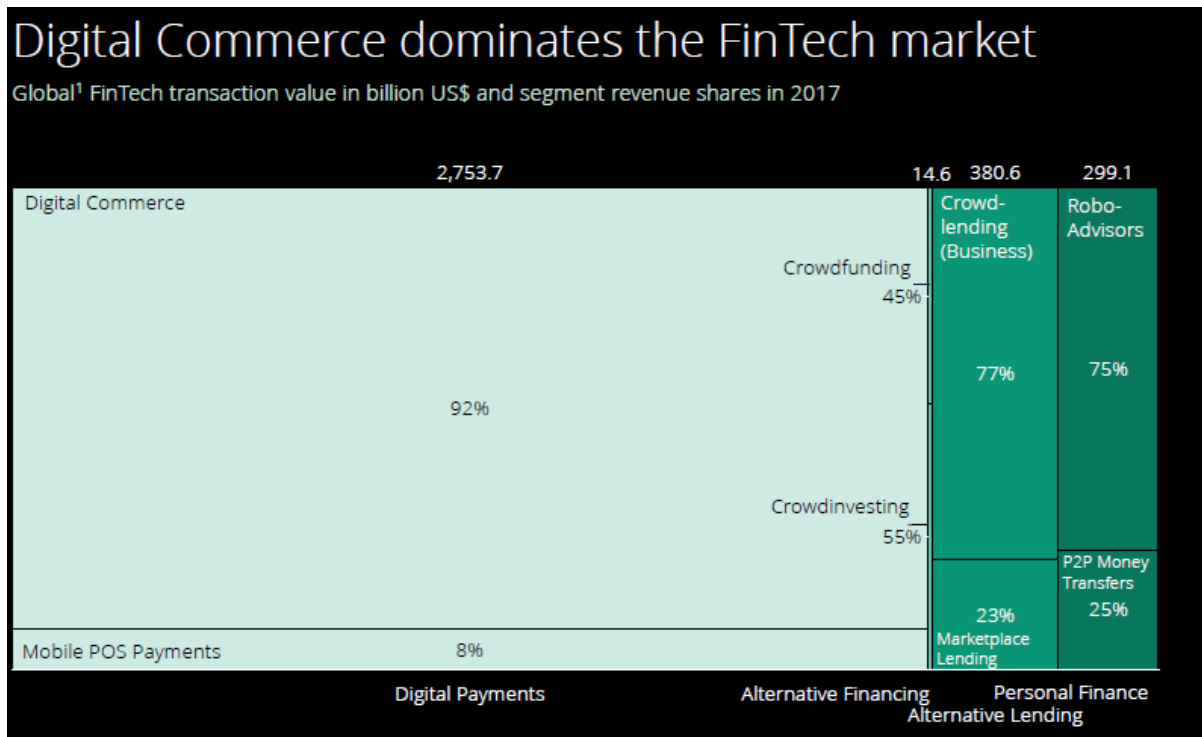
result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services”. The RBI Report, 2018, has also referred it to *the technological start-ups that are emerging to challenge traditional banking and financial players and covers an array of services, including digital payment, online funding and portfolio management platforms.*



Source:https://www.pwc.com/il/en/home/assets/pwc_fintech_global_report.pdf

Fintech encompasses nearly all the areas of financial sectors like banking, investments, education and so on and has led to the financial inclusion through various innovations. This has resulted in the enhancement of the efficiency and reduction in the risk. FinTech products and services like Crowd funding, Peer to Peer Lending, Big Data, Robo advisors, block chain technology etc. have embraced the financial markets globally. It facilitates the collaboration of the investors and the seekers of the funds in an easy manner.

A major contributor to the world's revenue is the digital commerce. The report of Statista depicts the same.



Source: <https://www.statista.com/outlook/295/119/fintech/india>

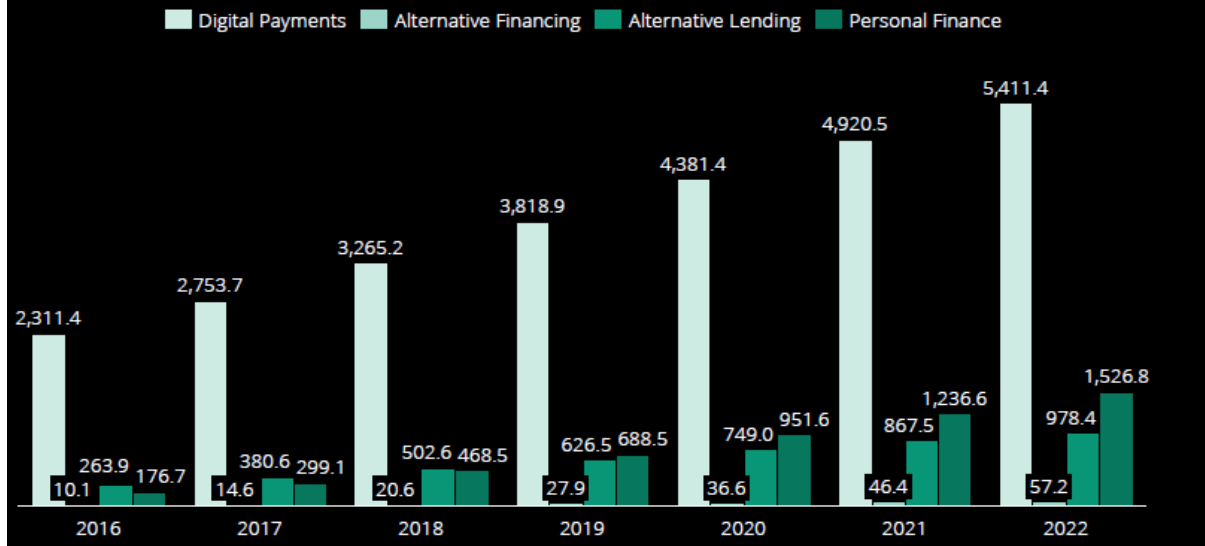
Ernst & Young, in its report titled, “The battle for the Indian consumer- FinTech companies transform the financial services landscape in India dated October 2017”, has pointed out that nearly 33% of the citizens who actively use digital media are moving towards the usage of FinTech product. India and China are witnessing more than 50% rise in the number.

As per the survey report of Statista it has been found out that Fintech market is rising higher and higher with the transaction value amounting to US\$52,905 million in 2018 with China leading to US\$562,408 million, the largest segment being occupied by Digital Payments amounting to US\$51,756 million.

The forecast of global Fintech transaction value provided by the report of Statista is highlighted below:

The global¹ FinTech market will grow to a striking US\$8 trillion by 2022

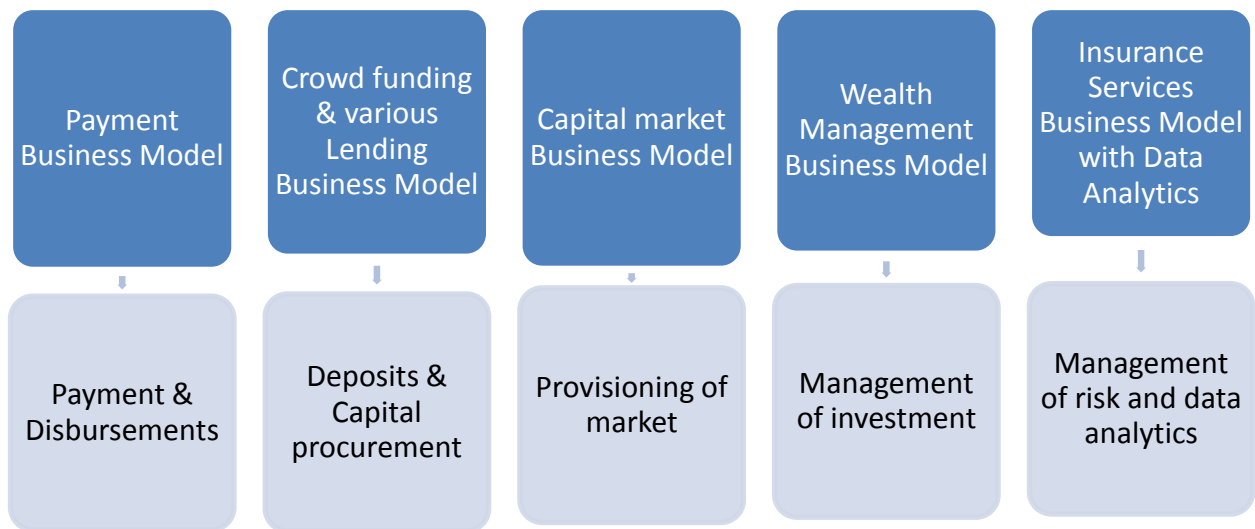
Forecast of global¹ FinTech transaction value in billion US\$



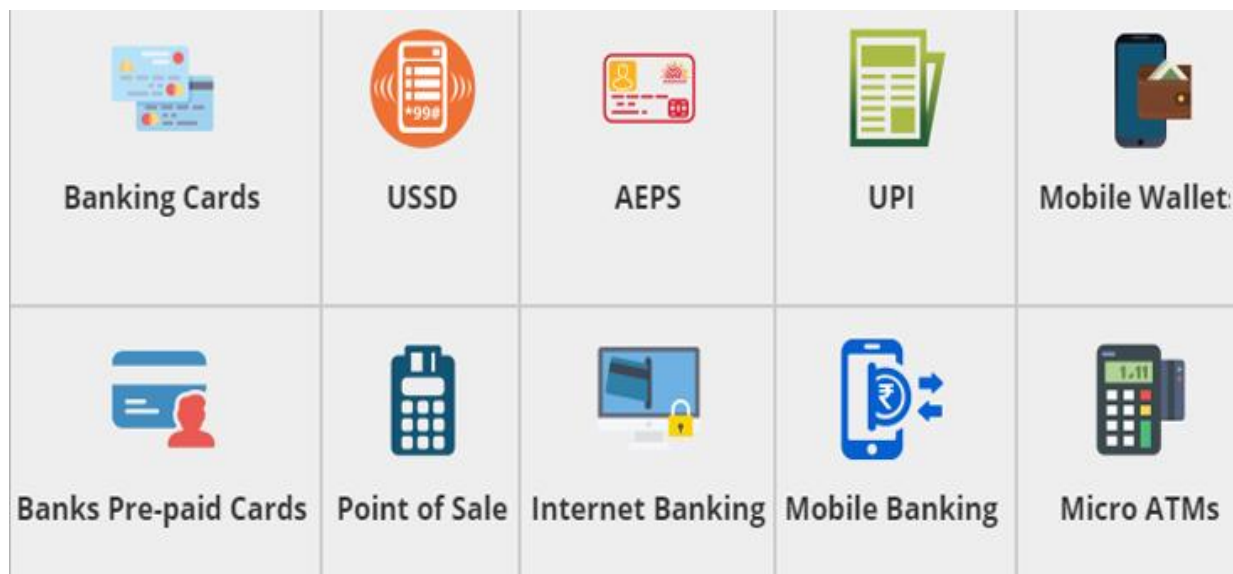
Source: <https://www.statista.com/outlook/295/119/fintech/india>

With the spread of Fintech across the global financial markets, several regulatory measures have also been established to curb the adversities of FinTech in the form of innovation hubs, sandboxes, innovation incubators etc.

In India, Working Group (WG), an inter regulatory body has been set up by Reserve Bank of India to regulate the digital sector of India. As per WG, the various models of Fintech affecting the financial sectors can be categorized into six business models. They are:



Payment Business Model



Source: www.code-brew.com/2018/fintech-making-money-like-never

Payment business model has got wider acceptance in comparison to other models because of its low costs, less complexity and instantaneous convenient operational activity. This model has

eased the payment and transfer of currency both at national and international level. The two markets served by Payment Fintech models are

- i) Customer and Retail payments and
- ii) Wholesale and Corporate payments.

The consumers are experiencing a speedy and convenient payment system through various payment models including peer to peer mobile payments like Venmo and PayPal, mobile wallets like Google Wallet, Apple Pay, and Samsung Pay.

In India, RBI has initiated three types of mobile wallets-

closed wallets	semi closed	open wallets
<ul style="list-style-type: none"> • company based customised wallets which do not permits withdrawal or redemption of cash e.g. Myntra, Makemytrip apps caters to the needs of only the concerned customers. 	<ul style="list-style-type: none"> • allows users to purchase goods and services with listed merchants who have a contract with Wallet Company to receive payment like Paytm, PayUMoney, MobiKwik, Oxigen, etc 	<ul style="list-style-type: none"> • enables the users to redeem and withdraw cash like Vodafone Powered M-Pesa wallets, Freecharge, State Bank Buddy, Chillr, ICICI pockets, JioMoney

The following table highlights some of the leading digital wallet companies in India

e-wallet	Industry	Company	Allowability of bank transfer	Mobile platform	Overall rating (based on Android performance)
Paytm	Private	One97 Communications	Yes	Android, IOS, Windows	4.4

				Phone, Ovi, Blackberry	
Mobikwik	Private	One Mobiwik Systems Private Limited	Yes	Android, IOS, Windows Phone	4.2
Oxigen wallet	Private	Oxigen Services India Pvt. Ltd.	Yes	Android, IOS, Windows Phone	3.7
Citrus wallet	Private	Citrus Pay	Yes	Android, IOS	3.9
Itz cash	Private	Itz Cash Card Ltd.	Yes	Android, IOS	4.4
Freecharge	Private	Snapdeal	No	Android, IOS, Windows Phone	4.3
Axis bank lime	Banking Industry	Axis Bank	No	Android, IOS, Windows Phone	3.6
Airtel money	Telecom Industry	Airtel	Yes	Android, IOS	4.2
ICICI Pockets	Banking Industry	ICICI Bank	Yes	Android, IOS	4.1
Jio money	Telecom Industry	Reliance	No	Android, IOS, Windows Phone	4.2
M Rupee	Telecom Industry	Tata Teleservices Pvt. Ltd.	Yes	Android, IOS, Windows Phone	3.7
SBI Buddy	Banking Industry	State Bank of India	Yes	Android, IOS	3.9

Vodafone M-Pesa	Telecom Industry	Vodafone	Yes	Android, IOS, Windows Phone	4.2
HDFC PayZapp	Banking Industry	HDFC Bank	Yes	Android, IOS	4.0

Source: <http://pmjandhanyojana.co.in/list-e-wallet-companies-india/>

Wealth Management Business Model

Why ROBO Advisor is Better For Your Money?

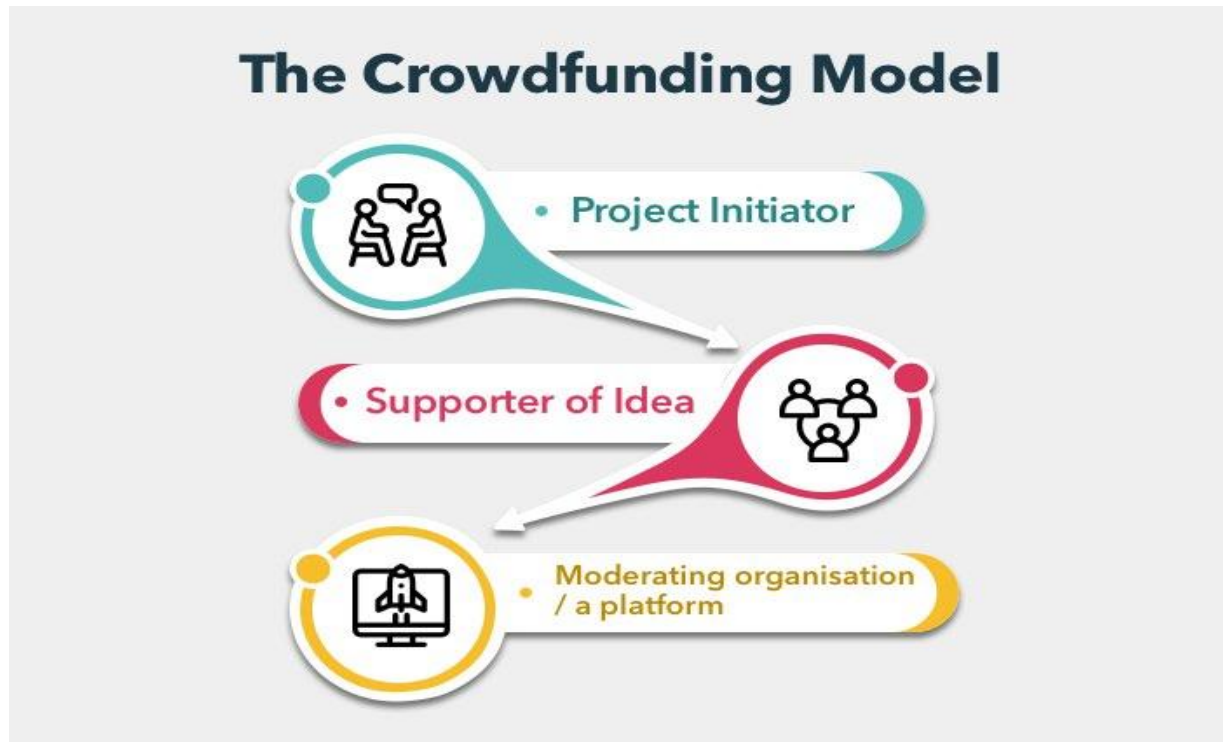


Source: <https://www.code-brew.com/2018/01/01/fintech-making-money-like-never/>

Wealth Management Model assists in providing automated wealth financial advisory through Robo-Advisors. “Robo-advisors”, through algorithmic calculation offers the clients a combination of cheaper investment alternatives based on their preferences. This model is gaining

momentum due to its cheap cost, automatic services and low investment. Some of the companies that have adopted wealth management model include Betterment, Wealthfront, Motif, and Folio.

Crowdfunding Business Model



<https://www.code-brew.com/2018/fintech-making-money-like-never/>

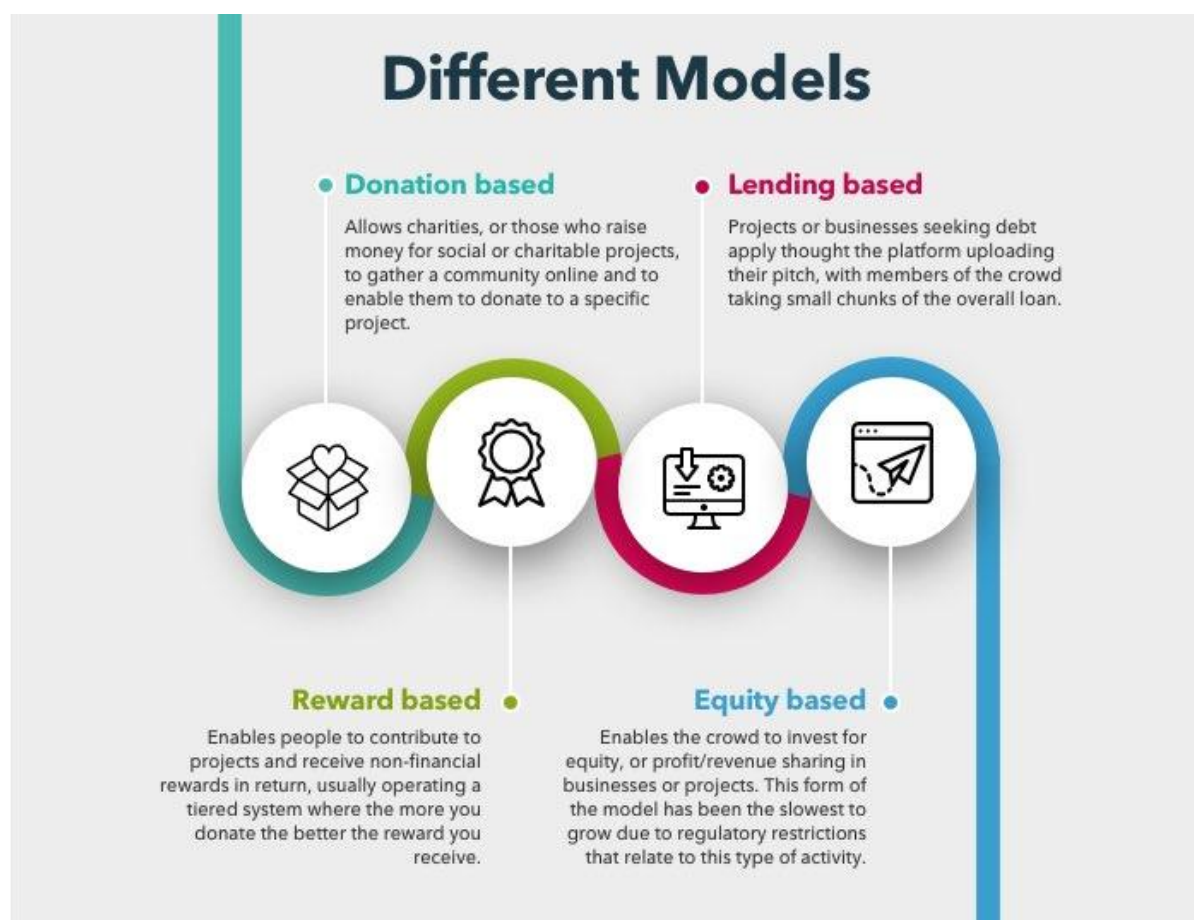
Crowd funding originates from crowdsourcing wherein funds are mobilised through online platforms. These platforms unite the donors and donees as per their requirement. It facilitates hassle free loans through internet.

Crowd funding allows accumulation of financial resources from a large pool of small scale investors for initialising cultural, social or profit nature endeavours. These are facilitated through advertisement on the web by individuals or group of individuals. In other words, it is an initiative to connect people for funding an idea, project or business.

It is a unique method to fund multifariousness ventures. These ventures can range from small projects to large projects aspiring for seed capital assistance from traditional sources of funds.

There are different crowdfunding models such as donation-based crowd funding, rewards-based crowdfunding, equity-based crowdfunding, debt-based crowd funding, Investment based crowd funding and many more.

Though crowdfunding focusses on donations but nearly 80% is confined to reward based. The rewards can be initialized in the form of free sample/ credit of the product or share in the profits/sales or participation in the equity shareholding or cash incentives.



Source :<https://www.code-brew.com/2018/01/01/fintech-making-money-like-never/>

Lending Business Model



Source :<https://www.code-brew.com/2018/01/01/fintech-making-money-like-never/>

Peer to Peer (P2P) lending is another important product of Fintech. As defined by RBI in consultation paper on Peer to peer lending in 2016, P2P lending denotes issuance of unsecured loans to borrowers via an online portal. It has been quoted in inc42.com that “*Since 2014, Indian tech startups have raised over \$32.2 billion across 3,048 deals. Out of the total funding, nearly 42% of the funding was raised in 2017 itself*” and is forecasted to cross \$2.4 billion by 2020, as per the reports by KPMG India and NASSCOM.

There are at present three basic P2P models, according to the research report titled “The Business Models and Economics of Peer-to-Peer Lending” (PDF),

Consumer
lending

i)SME
lending

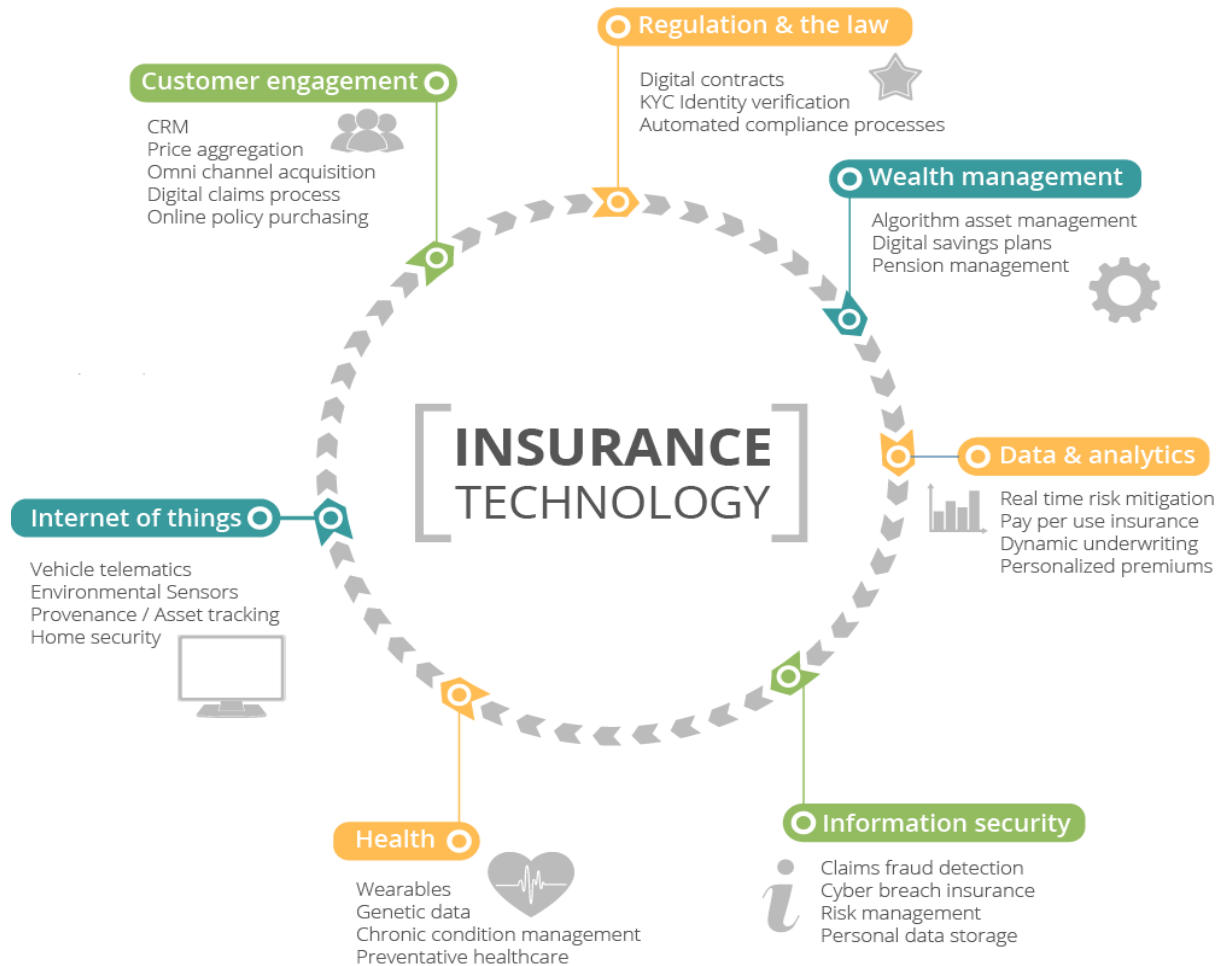
i)Property
lending

As per the data released by Peer-to-Peer Finance Association (P2PFA), P2P lending has reached to \$5.68 Bn (2015) globally from \$2.84 million (2012). KPMG, an accountancy firm, together

with the Cambridge Centre for Alternative Finance has studied that the world's P2P lending market is worth \$130 billion (October 2016). Morgan Stanley, a financial services firm, has predicted that the domain of P2P lending will cross the \$290 billion mark by 2020 with a growing rate of 51%. It has been reported that United States' business has witnessed an increase of \$20 billion (Q2 2016) from \$33 million (Q1 2009).

In India, P2P lending may grow into a \$4 billion-\$5 billion industry by 2023 as per Inc42 Data Labs report. The report also highlighted that \$220.66 million has been funded from the year 2015 to 2017 among the top-notch Devesh Sachdev (CEO of Fusion Microfinance), T.V. Mohandas Pai, Vikas Kapoor, Vikram Lakhota of Tracxn Labs a venture capital and partnership firm. Some of the leading firms engaged in P2P lending are Monexo, Faircent, Rupaiya Exchange, LenDenClub, LoanBaba, LendBox, IndiaMoneymart, i2iFunding.

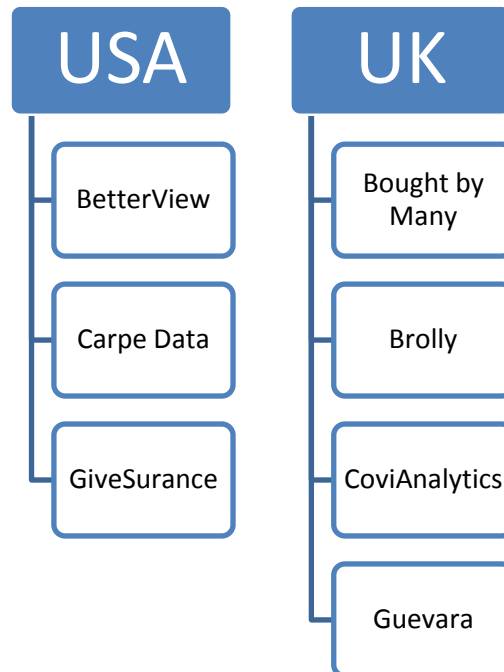
Insurance Services Business Model



Source:<https://www.code-brew.com/2018/01/01/fintech-making-money-like-never/>

InsureTech creates a direct nexus between the customer and the insurer by using data analytics techniques. These usage of the data analytics enables the insurance company to collect data and improve the risk analysis in an easier manner. According to KPMG’s quarterly 2016 report, insurance companies with Fintech are creating new platforms operated automatically in the areas of underwriting, claims, distribution, brokerage.

As per the weekly insights of Medium, a new breed of start-ups is emerging to transform the insurance sector so as to make it social media friendly and adaptable to the needs of a present and young generation. There are many companies which have come out with different techniques to make insurance business simpler especially in USA and UK.



BetterView deals in the insurance of infrastructures using drones to predict the probable future risk to the properties and accordingly assists the clients in choosing an appropriate insurance policy. **Bought by Many** offers insurance coverage for homes, pets, private health and gadgets for free of cost. **Brolly** uses AI and offers free personal coverage through the usage of mobile app. **Carpe Data** uses social media, online contents and other similar devices to extract information so as to introduce new products in the market. They generally deal in the insurance of property, casualty and life. **CoviAnalytics** uses cmile software with automatic data insights intends to simplify compliance of insurance regulations and thereby reducing the costs associated with it. **Guevara**, an online platform, helps the insure to pool their car insurance premiums online.

Apart from insurance business, some companies also assist in procuring donations through online platforms like **GiveSurance** facilitates recurring donations from the donors to charity institutions through their existing insurance payment systems. Other emerging web-based insurance companies are League, Lemonade, Simply Business, So-sure, Trov etc.

At present, there are different players which have emerged in the global Fintech market to spread Fintech and its different models.

The FinTech landscape is highly competitive with a lot of different players

Selected players in the FinTech sector

Digital Payment	Alternative Financing	Alternative Lending	Personal Finance
Digital Commerce 	CrowdFunding 	CrowdLending 	Robo-Advisors
Mobile POS Payments 	CrowdInvesting 	P2P Marketplace Lending 	P2P Money Transfers

Source: <https://www.statista.com/outlook/295/119/fintech/india>

Advantages of Fintech

Fintech, with its numerous innovative models is spreading and encompassing the whole financial world. The main advantage of Fintech is that

- They narrow down the path of a fund seeker and a fund provider in an easy and convenient manner. Its models are comparatively better than the traditional business models and is adding value in lending, payment, insurance and other sectors of business.
- Finance with Information Technology can enhance the business in terms of speed, flexibility and cost.
- In P2P lending business, loan processing procedures are becoming easier and hassle free. Due to its low overhead costs, borrowers can avail loan at a cheaper rate whereas the investors are enjoying higher investment return.
- It is a savior to the SME and MSME's having dearth of adequate securities for their fund requirement. Even a borrower with a low credit rating score can also procure funds on P2P lending platforms.

Challenges of Fintech

Fintech with its innovative models also brings massive challenges to the users.

- Due to the rapid advancement in the technology the pace of innovation is getting faster day by day thereby increasing the expectations of the consumers.
- The biggest challenge with Information technology is the security and privacy.
- Some companies are also facing lot of challenges in migrating from traditional business models to Fintech models.

Despite the challenges imposed by Fintech, the horizon of Fintech and its models are spreading throughout the world. In this competitive world survival is a biggest challenge and Fintech overcomes this challenge. Technology, if embraced in a systematic and friendlier manner can prove a boon to the economy. Experts from different technological fields can be recruited to infuse the various innovative models of Fintech. The model of Fintech should be chosen as per the requirement of the organisation and only after an exhaustive analysis of all the associated complexities of various industries.

India is also one of the country which has is embracing Fintech in a most welcoming manner.

Growth of Fintech in India

India majorly inhabited by unbanked and underbanked population, is experiencing a massive growth in digitalisation. This has paved the path for Fintech ecosystem and its innovative products. The regulatory bodies and the different banks of India have collaborated to augment the financial sector through various models of Fintech. As per the report of Wharton, dated Feb 11,2018, India has,with the collaboration of WhatsApp, launched Unified Payments Interface (UPI), an instant digital payment system through National payments Corporation of India (NPCI) between the participating banks. India is believed to be the first country globally to get the payments facility from WhatsApp. Other initiatives taken by NPCI are

- i) Introduction of Bharat Interface for Money (BHIM), an app that makes payment simple, easy and quick using Unified Payments Interface (UPI). Bank-to-bank payments and collection of money is done instantly using just Mobile number or Virtual Payment Address (UPI ID). E-commerce players like Jabong, Myntra are

- using BHIM in collaboration with various banks to facilitate easy and convenient payments.
- ii) Facilitating online transactions at point of sale (PoS) through Aadhar Enabled Payment System(AePS), a banking model,by verifying the Aadhar from the bank documents
 - iii) Initiating *99#, an Unstructured Supplementary Service Data, which enables mobile banking services to send and receive the information related to fund transfer, enquiry of the balance and other related services. It is called National Unified USSD Platform (NUUP). It helps to maintain a common platform for all banks thereby creating a direct contact with the customers.At present, *99# service is being offered by 41 leading banks & all GSM service providers and can be accessed in 13 different languages including Hindi & English.
 - iv) Facilitating RuPay,i.e.electronic payments through cardpayment scheme in collaboration with Indian banks and financial institutions of India.
 - v) Enabling web-based solution for repetitive and periodic interbanking, high volume and online transactions through National Automated Clearing House (NACH). It alsofacilitates bulk transactions meant for payments of telephone, electricity, water, loans, investments in mutual funds, insurance premium etc.

At present, India has launched “StartUp in India”, a funding initiative to boost the growth of start-up and assist in their funding. As per the report by International Comparative legal guides **Fintech 2018**, India dated 21.05.2018, *Department of Industrial Promotion and Policy has around 8000 companies as start-ups and 99 start-ups to receive assistance with respect to funding (March 2018).*

Several tax incentives under the Income Tax Act, 1961 have also been implemented by the GOI to initiate its “Startup” movement like

- i) Under section 80 IAC, Startup with less than Rs. 25 crore turnover and incorporated after April 1, 2016 is eligible for 100% tax exemption on the profit for three years
- ii) Under section 54EE, exemption from long term capital gain if such long-term capital gain or part thereof is invested in Government's special funds within the six months of the transfer. The maximum amount of investment is Rs.50 lakhs and the block in period is 3 years.

In 2015, Shri Narendra Modi, Prime Minister of India, also launched Digital India and Smart Cities initiatives to increase Foreign Direct Investment (FDI) and mobilise the digital infrastructure of India.

RBI, with its Payment and Settlement System Vision-2018, has taken several initiatives in the global developments of digital technology. It had organised a contest through the Institute for Development and Research in Banking Technology (IDRBT) to use the learnings from experts for further policy adaptations. Other measures taken by RBI are

- i) approval and licensing of Payment banks
- ii) permitting non-banks both as payment system operators and technology service providers,
- iii) introduction of Bharat Bill Payments System (BBPS),
- iv) issuance of directions on accounts aggregators
- v) approval for National electronic toll collection project
- vi) setting up of electronic Trade Receivables Discounting System (TReDs) for the improvement of funds to MSMEs.

SEBI has also initialised the path of Fintech by introducing Screen Based trading and adopting algorithmic and machine-based trading. Robo advisors are also emerging as an investment advisor in the financial sector. It is trying to implement blockchain technology also in areas like trading, clearing and settlement etc.

Insurance sector is also trying to adapt to various innovative technologies of Fintech. They have started adopting digital channels and innovative labs. Advanced statistical models are being employed to establish the relationship between the risk and other measurable factors. Insurance sector is trying to embed automation in their services to speed up the process. There has been a rise in the Online aggregators and new entrants with the knowledge of advanced technology for

the distribution of the policies. To compete with the latest technology new and innovative investment technologies are being infused in the system like hedge funds and securitisation products. They have also collaborated with InsureTech entities and other start-ups to optimise the customer satisfaction in a better and cost-effective manner.

The various initiatives by GOI and RBI have paved the path of digital financial inclusion with schemes like Jan Dhan Yojana, Aadhaar enrolment and licensing of Payment Banks /Small Finance Banks. The various FinTech companies have also emerged to boost the endeavours of government in expanding financial inclusion. The details of such Fintech companies are:

S. No	Name of Start-up	Technology offered
1	Fairassets Technologies India Pvt. Ltd.	P2P Lending
2	Tonetag	Sound mobile based mobile to mobile, mobile to POS payment without internet without Bluetooth solution
3	Coinn Mobile Technologies Pvt. Ltd	Bluetooth based Payment solution
4	Abhar Technologies & Service Pvt. Ltd.	IOT, Enterprise non-IT project management
5	Neural Brain Technologies Pvt. Ltd.	Machine learning based Analytics for productivity analytics
6	Skybits Technologies Pvt Ltd.	AI and machine learning based solution for email segregation, auto response and face recognition.
7	FTL technologies Systems Pvt. Ltd.	Online market place
8	Vibil Technologies Pvt Ltd	Machine Learning and OCR based real time eKYC verification with adhaar, RTO, passport, PAN, Cibil, Income tax offices.
9	Signzy Technologies Pvt. Ltd.	Machine Learning and OCR based real time eKYC verification with adhar, RTO, passport, PAN, Cybil and Income tax offices

10	S2pay digital	Payment Solution without buddy and state bank
11	Lyncbiz India Pvt Ltd.	Gamification
12	VuNet Systems Pvt Ltd	MLP based Data Analytics (Specially for ATM and network)
13	Paydigital technologies Pvt ltd	Independent payment solution mainly for institutions and Universities. Icollect can independently manage this solution.
14	Liv artificial intelligence Pvt ltd.	Voice recognition, Artificial Intelligence, Natural Language processing
15	Propalms Technologies Pvt Ltd (Accops)	Server Virtualization, work from home
16	Prime Chain Technologies Pvt Ltd	Block chain Technologies
17	Think Analytics India Pvt Ltd	Data analytics
18	Woas Technologies Pvt Ltd.(Wooqer)	Enterprise WhatsApp and rapid small application development
19	Active.AI	Artificial Intelligence, Natural Language processing
20	Custmore Interactive Solutions Pvt Ltd.	Customer engagement platform

Source. [rbi.org.in/scripts/Publication Report](http://rbi.org.in/scripts/Publication%20Report.aspx)

Adapting to the various models of Fintech, UPI, e-wallets, immediate payment service (IMPS) and usage of sound waves for last mile payments, India is now striving hard to reach the highest pinnacle in the financial world. Vivek Belgavi, a partner in India Fintech Leader, PwC has rightly pointed out that India is “carving out a niche for itself in low-cost, large-value product distribution as well as transactions.” He also adds that “Around eight to 10 global banks are actively engaged with the fintech ecosystem in India. It is an important and significant test bed for frugal innovation.” But as per Prantik Ray, a professor of Finance at Xavier School of Management (XLRI), “it’s a good beginning for India and a right move in the economic

development of the world. But to facilitate this, the ecosystem requires growth in the innovative fintech world.”

The above-mentioned initiative by the Indian government will smoothen the lending and payment system and will make it more easy, accessible and convenient. As per the data released, by Economics Times in May 2018, Paytm has invested nearly Rs.5,000 crore (\$786 million) and has earmarked further Rs.5,000 crore for the next three years.

The report of Deloitte titled “Regulatory Sandbox: Making India a Global Fintech Hub, issued in July 2017, highlighted the various financial sectors occupied by Fintech segments.

Areas	Fintech Segments	Brief Description
A. Credit	1. Peer-to-Peer Lending 2. Crowd Funding 3. Market Place for Loans 4. Online Lenders – NBFCs using own capital 5. Credit Scoring Platforms	<ul style="list-style-type: none"> All forms of lending market places including Peer-to-Peer lenders and market place that connect non – institutional borrowers and with both institutional and non-institutional lenders Also, includes crowd funding and equity funding platforms NBFCs that use alternative scoring and digital channels for acquisition
B. Payments	6. M-wallets and PPIs 7. Merchant Payments and PoS Services 8. International Remittance 9. Crypto Currencies	<ul style="list-style-type: none"> Services that enable transfer of funds for various use cases - P2P (Person-to-Person), P2M (Person-to-Merchant), G2P (Government-to-Person), etc. Services targeted at both Payee and Merchants by enabling requisite payment infrastructure through mobile or other technologies
C. Investment Management	10. Robo Advisors 11. Discount Brokers 12. Online Financial Advisors	<ul style="list-style-type: none"> Wealth advisory services for mass affluent segments delivered through technology governed rules and investment strategies
D. Personal Finance Management	13. Tax Filling and Processing 14. Spend Management and Financial Planning 15. Credit Services	<ul style="list-style-type: none"> Tools and services for managing personal expenses and spends; also includes tools for tracking personal credit score and credit planning
E. Bank tech	16. Big Data 17. Blockchain 18. Customer Onboarding Platforms	<ul style="list-style-type: none"> Services that utilize many data points such as financial transactions, spending patterns to build risk profile of customer. This provides an alternate to traditional underwriting methods that are unable to serve people with limited credit data. There is significant value in unstructured data. However, it's difficult to analyze unstructured data to add value; a number of new tools are being developed to derive value from large data sets
F. Insure tech	19. Insurance Aggregator 20. IoT, Wearables and Kinematics	<ul style="list-style-type: none"> Small business insurance Usage based insurance

According to one of the blog of “Wharton Fintech” also, Fintech has encompassed the various segments of India’s financial sector like lending, payments and insurance. Sequoia Capital, IDG Ventures, SAIF, Matrix partners are some of the prominent Venture capitalist firms which are funding Indian Fintech startups.

The report of PwC and fintech accelerator Startupbootcamp, titled Fintech Trends India 2017, highlights that though venture capital-backed global fintech investment reduced by 13% in 2016 i.e. from \$14.6 billion (2015) to \$12.7 billion (2016) yet it increased by 12.5% i.e. from \$4.8 billion (2015) to \$5.4 billion (2016) in Asia owing to China and India’s investments. Paytm received the biggest funding from the Japanese conglomerate SoftBank in 2017 ranging to \$1.4 billion. Others Fintech startups to get funding are

Fintech startups	Amount of funding
Policy Bazaar	\$77 million
Capital Float	\$45 million
Swipe Technologies	\$31 million
Razorpay	\$20 million

Adding to the above report The Nasscom-KPMG report estimated that the transaction value for the Indian fintech sector which was approximately \$33 billion (2016) is slated to reach \$73 billion (2020) at a five-year compound annual growth rate (CAGR) of 22%.

As the world progresses towards Fintech world, several rules and regulations also need to be implemented to curb the challenges of Fintech.

Regulations

Several international regulatory bodies like Basel Committee on Banking Supervision (BCBS), Financial Stability Board (FSB), Committee on Payments and Market

InfrastructuresRegulatory(CPMI), World Bank Group (WBG), European Commission (EC), etc. are taking several measures to monitor the growth of Fintech companies globally. Through the use of regulatory sandboxes and innovative hubs, these bodies identify and assess the risks associated with the digitalisation in the financial sector. They also analyse the impact of digital technology in the economy. The basic aim of the regulatory bodies is to strengthen the spread of Fintech innovations for greater accessibility, convenience, efficiency and decentralising of the financial system. Like CPMI has established Working group to monitor and analyse the technical and infrastructural aspects of block chain and distributed ledgers.

India is also taking several steps to strengthen the base of Fintech and its innovative models on one hand as well as regulating its risks and challenges on the other hand. Reserve Bank of India has recently regulated Peer to peer lending business by launching Non-Banking Financial Company - Peer to Peer Lending Platform (Reserve Bank) Directions, 2017. As per the direction, company having a net owned funds of approximately Rs 20 million or such higher amount as specified by the bank can only start or carry on the business of a P2P lending platform with or without obtaining a Certificate of Registration. NBFC-P2P act as an intermediary to provide online marketplace or platform to the P2P lenders and are not allowed to raise deposits as defined under section 45(bb) of the Companies Act, 2013. Blockchain Foundation was launched to promote block chain initiatives in India. A committee on financial and regulatory technology was formed by SEBI to regulate bitcoin transactions. Even the Finance Minister, Shri Arun Jaitley, in his Union Budget Speech, 2018 has announced that Government of India do not consider cryptocurrencies as legal tender money. But till now there has been no formal ban neither from GOI nor from SEBI. As per the Financial Express news dated April 6, 2018, even though RBI is harsh on cryptocurrency but is highly supportive and encourage blockchain technology. As per the news, State Bank of India (SBI) had announced to go for aggressive deployment of blockchain technology in its reconciliation, remittances, and trade finance operations in fiscal year 2019. Mr Mrutyunjay Mahapatra, then deputy managing director and chief information officer at SBI had told to Financial Express that they are going to use blockchain technology aggressively in all the banking transactions.

In April 2018, a policy statement was issued by RBI to restrict certain types of Fintech instruments like issuance of open pre-paid instruments (PPI) was restricted to only some banks.

Obstacles to the growth of Fintech in India

Though India is progressing in the adoption of various models of Fintech but there are numerous causes which obscure their growth. Some of the obstacles are

- i) Regulations imposed by the government and various regulatory bodies to curb the challenges of Fintech but as per Prof. Ravi Aron of Carey Business School, the basic objective of regulations should be to increase transparency, minimisation of fraud and increase of trust and not to route the more profitable fintech business to public sector and government organisations
- ii) There is a need of fast and rapid network systems so as to mobilise the online and cloud-based systems.
- iii) Lack of adequate knowledge and awareness of the various digital models of Fintech.
- iv) Dominance of few top players in the lending business. This creates a hindrance for SMEs and MSMEs.
- v) Absence of a suitable drive for the creation of a world class innovative products. Vivek Belgavi, a partner in India Fintech Leader, PwC has rightly said that, “It requires a different mindset and a lot of patience from all stakeholders”
- vi) Lack of active and suitable equity crowdfunding platform. Prantik Ray, a professor of Finance at XLRI- Xavier School of Management has pointed out that inadequacy of online platforms can prove to be a barrier for fintech entrepreneurs.
- vii) Generally, Fintech serves the purpose of urban and rich people. It has been pointed out by Nadeem Khan, a senior consultant of Dalberg, an advisory and consulting firm, the products which were customised for urban and rich people are being shoved down to consumers of lower income levels. According to him, “the challenge is to innovate at different income levels and be able to customize at scale. The success of fintech and the ability to drive financial inclusion at scale through fintech will depend on that.”
- viii) Fintech is spreading at a very narrow and low pace. The horizon of Fintech is restricted to its domestic market only. Sudhir Sethi, founder-chairman of IDG

Ventures India feels that “Indian companies need to scale first to a global level. Only Paytm has achieved that scale so far,”

Conclusion

The horizon of Fintech and its models are spreading throughout the world. In spite of the challenges associated with the adaptation of Fintech, its contribution in the financial sector is incredible. With the advancement of the technology in the financial world, the government of various countries are taking numerous initiatives to adapt to the models of Fintech besides fusing regulations to curb the challenges of the same.

As per the survey report (2018) of Statista, it has been expected that the Fintech market will show an estimated annual growth rate of 17.8% which will result in total growth of US\$ 101,881 MM in 2022. Even Google and Boston Consulting Group (BCG) has also pointed in its report titled *Digital Payments 2020* that the digital payments in India will surpass \$500 billion by 2020. Thus, the era of Fintech will encompass the whole world with its ever-increasing innovations in the near future.

So it becomes indispensable to have an indepth knowledge of this emerging era of digitalization in the financial world. A study of the various models of fintech will help the graduates and professionals to go ahead smoothly in the e-commerce world leading to the overall growth of the economy.

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