

Artificial Intelligence Infintech

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ABSTRACT:

Technology becomes an integral part of the life of human beings. Technological innovations are valuable facilitators for individuals, corporations and governments to overcome their day to day challenges and create value in the businesses. In order to be successful in a challenging environment, we must accept and enhance technological advancement into practice.

In today's business environment technology affects or affects strategy, planning, business core competencies, model, processes, operations etc. In the era of Industry 4.0, VUCA world, a challenging and competitive business environment, we must apply or implement the right technology at the right time in the right business for getting long term success.

Twenty first century is the century of technology, which includes various innovations like artificial intelligence, Fintech, e-governance, e-business, e-commerce, mobile commerce, business informatics, data mining, block chain, machine learning etc. Because of this advanced technology the entire world comes closer and operations are on the tip of fingers.

In this chapter researcher has covered a study on Artificial Intelligence in Fintech, their growth, utilities, today's scenario and future trends in the world of globalised business environment. In this study researchers have also proposed a competitive model of Artificial Intelligence in Fintech for businesses.

INTRODUCTION AND CONCEPTUAL BACKGROUND:

People, process, businesses, information and technology all are key elements in the world of digitization. Businesses use digital technology for many reasons like enhancing productivity, automation in the operations and implementation of innovative processes which aim to decrease costs and increase profits. Businesses need to follow a methodological approach while bringing such a kind of technological transformation into reality.

Let's have a look at some of the concepts of advanced and digital technology.

Artificial Intelligence: Artificial Intelligence is the computer embedded advanced technology which builds smart things with the help of human intelligence being capable of performing human work.

Examples: Robots, Automated Cars, Virtual Bookings, Online Money Transfer, Tax e-filing, NLP tools etc.

E-Governance: Electronic Governance is a simple information technology application in which a business, individual, government and employees can have a direct connection with the government in an efficient, transparent and convenient manner.

Examples: Digital India, National Portal of India, Aadhar, MyGov.in, UMANG, CET etc.

E-Business: E business or online business stated as a business which is all across the internet and are directly dealing with their core customers such as buyers.

Examples: Amazon, Flipcart, eBay, Myntra etc.

Mobile Commerce: Mobile commerce or m-commerce is a term which relates to the wireless electronic devices such as mobiles, tablets, computers and purchasing of the items with E-commerce sites and transactions followed in it.

Examples: Mobile Banking, Amazon Mobile App, Flipcart Mobile App, Digital Wallet etc.

E-Commerce: E-commerce is for the buying and selling of products using online transactions. E-commerce includes mobile commerce, internet marketing etc., and also comes under the term E-business.

Examples: Amazon, Flipcart, eBay, Olx, Quikr etc.

Business Informatics: Business Informatics refers to the creations and development of new ideas and technology frameworks for organisations to work effectively and efficiently.

Examples: Information Technology, Computer Science, Econometrics etc.

Data Mining: Data Mining is a method which includes process, pattern, trends and tools for searching particular data from a large set of data to predict the outcomes. It helps in finding out a set of data which is required. Data mining consists of machine learning, statistics and database systems.

Examples: Marketing, Retail, Banking, Medicines, TV and Radios etc.

Block Chain: BlockChain is the process in which different types of data are recorded which is related to a particular set of data. It consists of data blocks which are connected with the help of a chain to its main block.

Examples: Bitcoin, Spotify etc.

Machine Learning: Machine Learning is a computer based technology which helps in the study of online methods and experiences of transactions or processes.

Examples: Image Recognition, Speech Recognition, Medical Diagnosis, Predictions etc.

FINTECH: Term FINTECH describes Financial Technology. It helps the organisations, governments, people and entrepreneurs to manage their financial operations. It is a core financial transaction based term in today’s business world. Artificial Technology plays a vital and supportive role in Financial Technology.

Examples: Paytm, ItzCash Card, MobiKwik, Bank Bazaar, InCred, Lendingkart, Policy Bazaar, CCAvenue, Clear Tax, Upstocks etc.

FINTECH SCENARIO IN INDIA:

Since last decade all the financial transactions in terms of receipts and payments were happening by using cash. According to a survey approximately 97% of people in India were using hard cash as their payment option for buying and selling and 3% of the people were using digital payments & cash both. The first sign of significant change in the Indian payment ecosystem was seen after the formal commencement of operations of National Payment Corporation of India (NPCI) in 2009 onwards.

After 2015 onwards due to easy ways of payments, awareness, sensitization and handiness of digital payments portals including advancement in safety and security in online payments, many people started using the online or digital payment methods like Net Banking, Mobile Banking, Credit Cards, Debit Cards, IMPS, RTGS, NEFT and Other Digital Wallets as well.

In November 2016, when demonetisation was introduced by the government in India, it seemed to be a golden opportunity for all Fintech Companies to gain maximum share from the market because many currency notes were banned in the country. People started using and relying on Fintech Applications like Paytm, Phonepe etc. The biggest software technology company that is Google also jumped in the Fintech market and introduced Google pay as a digital payment option for the world.

The continuous support of the government resulted in innovation and advancement of digital technology and creation of UPIs payment method that helped banking and financial sectors to grow more and faster. E-market or online markets have started growing at a very high speed because of UPIs connected with the E-commerce website which made easy delivery and payments for the consumers and marketers.

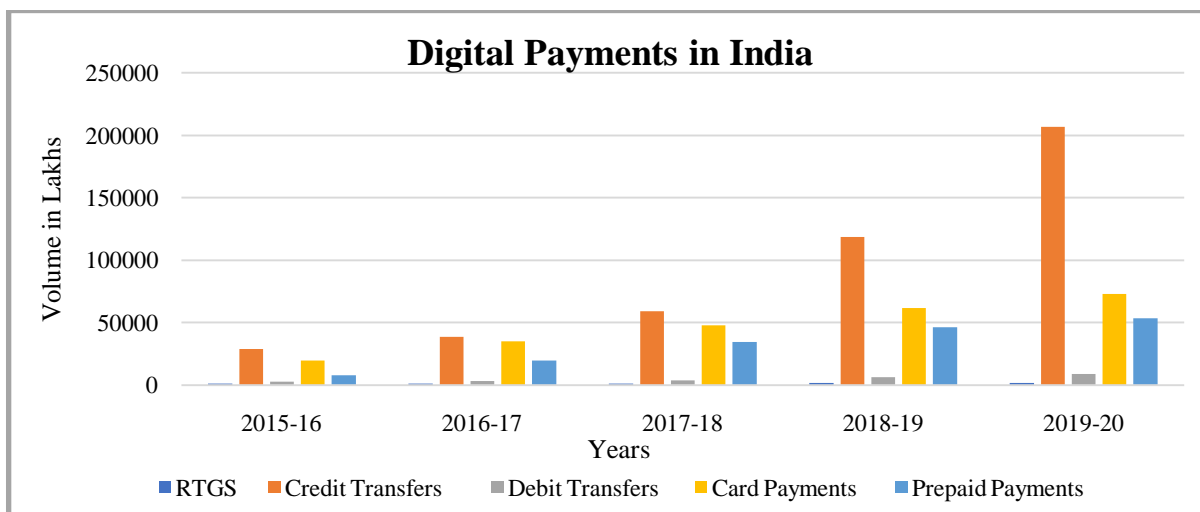
Amid Covid 19, India has seen a 60% rise in Fintech Investments. Indian economy has emerged as Asia’s biggest market for Fintech dealings and left China behind.

According to the reports of US based Payment System Company, India is going to account for 71.7% of the total online payments volume leaving cash and cheques at 28.3% by the year 2025 in digital payments.

DIGITAL PAYMENT SCENARIO IN INDIA:

Volume in Lakhs					
Years	RTGS	Credit Transfers	Debit Transfers	Card Payments	Prepaid Payments
2015-16	983	28,536	2,769	19,593	7,480
2016-17	1,079	38,381	2,952	34,864	19,637
2017-18	1,244	58,792	3,788	47,486	34,591
2018-19	1,366	1,18,751	6,382	61,769	46,072
2019-20	1,507	2,06,662	8,957	73,012	53,318

Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=statistics>



In the digital payment system of India, there are five categories which are commonly followed by users for online settlement of transactions like RTGS, Credit Transfers, Debit Transfers, Card Payments and Prepaid Payments.

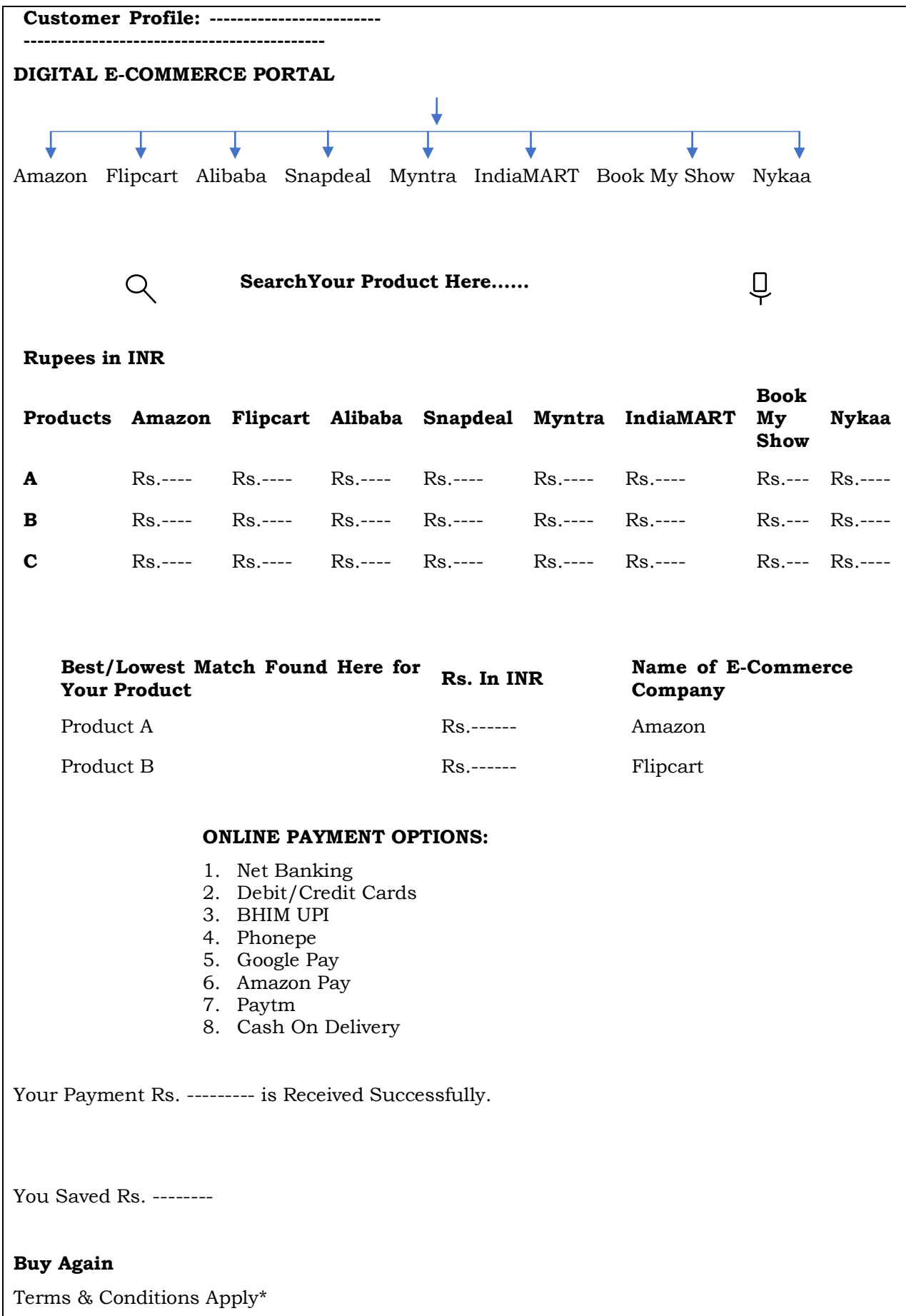
PROPOSED AI BASED FINTECH MODEL:

In today's globalised world of e-market or online market, there are many applications which are being used to buy and sell all kinds of products to the consumer by e-commerce companies. The significant goals of such e-commerce companies are quick settlement of online transactions, easy & step by step receipts and payments options, speedy transfer or delivery and customer satisfaction.

Nowadays, every e-commerce company has their own developed applications and portals with the help that they sell the products to the customers and receive the payment against that transaction.

The researchers found that comparison of a one single product on different e-commerce sites is a time consuming process and customers' expected results might not be available. Different e-commerce sites or companies provide different rates for the same product and different types of cash backs and discount offers to gain customers loyalty. Sometimes fraudulent practices may happen.

This proposed AI based Fintech Model will be a customer friendly application for the e-commerce companies through which customers will be easily able to compare his willing product under different kinds of e-commerce sites. This application will be completely monitored and regulated by e-governance. This is going to be a one of the successful and secured gateway or platform for e-commerce companies and customers are assured of the right quality of products at the right price.



The above proposed model shows the overview of a newly designed AI application with all the Fintech at one place. The e-commerce application is completely based on the comparison of products under one roof with different Fintech. This model will be heading e-commerce businesses towards customer loyalty

and satisfaction because customers will be able to search for the same product under different e-commerce sites, comparing their prices and make buy decisions.

In this model all the Fintech companies or gateway are available for the payment options and the application is regulated by the e-governance so fraudulent activities and errors will be minimal. In this application all the information regarding payments, cash backs, rewards etc. are provided and the customer has maximum all other benefits which he will be getting by using this app.

In this AI based model different e-commerce companies need to enrol with a marginal percentage of benefits in collaboration with Fintech. It is a fully loaded customer friendly application which will require very less storage space in the electronic gazette.

This is very important for e-commerce sites to look forward to minimizing small mistakes which happen unintentionally. Sometimes customers may buy a product, which is fake/expired/outdated/obsolete/low quality and has been delivered to a customer. In this case there will be a 100% cashback to the customer with a delivery of the product he demanded. The 100% cashback will be borne by the AI Application Company and e-commerce Company according to the collaboration norms which they have agreed upon.

The process of buying the product will be done through Fintech like Google pay, Paytm, Phonepe, etc. and higher rewards will be offered to the customers. This will help the customer to think about which payment gateway he should select for payment.



It's a customer friendly model, users just have to download it and no other e-commerce company's application is required. So storage space can be saved in the electronic gazette and enjoy buying benefits of the e-commerce site under one umbrella. This will enhance the growth for both the Fintech and e-commerce companies in near future.

How it Works:

Example: Mr. Ram wishes you to buy an Apple iPhone 12.

We will take the above example where, Mr. Ram wishes you to buy an Apple iPhone 12.

A customer will search for the above product in the search box of application.

	Apple iPhone 12	
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The AI based application will search for the product as per the requirement of customer need to buy in the e-commerce sites which are enabled by the customer himself.

Products	Amazon	Flipcart	Alibaba	Snapdeal	Myntra	India MART	Book My Show	Nykaa
Apple iPhone 12	50,000/-	50,500/-	51,000/-	50,700/-	50,600/-	NA	NA	NA

Here is the result for products searched by customers in the AI based application for different e-commerce sites, product availability with prices quoted by them. Customer will decide from which e-commerce company he should buy and the role of the Fintech get ways comes in.

Payments Get way:		
1	Net Banking	5% cashback for using SBI bank debit card
2	Debit/Credit Cards	5% off using Xyz bank cards, 2% regular off
3	BHIM UPI	Special rewards up to 10% cashback
4	Phonepe	Assured gifts, cashbacks, rewards.
5	Google Pay	Up to 20% off or cashback rewards
6	Amazon Pay	Assured credits and memberships
7	Cash on Delivery	Cash discount, if any applicable
8	Paytm	Points, rewards and free gift vouchers

*Terms & conditions apply

Fintech Companies play a very important role, through them customers can get assurance of payment, customer loyalty, gifts, vouchers, cashbacks and rewards for the transaction he has done. Due to

assurance in payment gateway, customers use these Fintech services outside AI based applications for the regular payments, if any.

CONCLUSION:

Fintech is the latest buzzword in the area of the financial sector. Fintech has changed the traditional financial system to modern financial system. Fintech is described as the latest financial innovation in the financial sector.

The government of India has taken various initiatives to develop and promote Fintech in Indian markets. Indian economy won't be a superpower without the development of the Fintech Industry.

AI based Fintech models are highly human friendly and easy to use for the customers. Customers can get every benefit of online shopping under one umbrella, saves time, receives rewards or cashback and enjoys satisfaction of online buying. As it's been supported by e-governance, a sigh of relief for the customer as the government is a part of it. It maintains full transparency with the customer and secrecy of customer information at the higher side.

This proposed AI based Fintech model of e-commerce market and its different applications can also be implemented in online bookings, food market, transportation services, healthcare services, FMCG sector and many more.

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