

Jyoti Nivas College Autonomous
Post Graduate Centre



Presents

FUTURISTIC FINANCIAL WORLD: FIN TECH

SEON

**E-JOURNAL
(OCTOBER 2019)**

**BY
M.Com (FA)**

1.0 ROLE OF CRYPTO CURRENCY IN PROMOTING INDIA'S DIGITAL ECONOMY

The global economy is inevitably moving towards a digital eco-system. From investment to money transfer, everything is going paperless. The newest and most promising addition to the digital payment sector is crypto currency.

Crypto currency is an internet-based medium of exchange which uses crypto graphical functions to conduct financial transactions. Crypto currencies leverage block chain technology to gain decentralization, transparency, and immutability. The most important feature of a crypto currency is that it is not controlled by any central authority: the decentralized nature of the block chain makes crypto currencies theoretically immune to the old ways of government control and interference. Crypto currencies can be sent directly between two parties via the use of private and public keys. These transfers can be done with minimal processing fees, allowing users to avoid the steep fees charged by traditional financial institutions.

Over the last couple of years, digital currency has been rapidly gaining the public eye. Here are some good reasons behind it.

- **Fraud-Proof:** When crypto currency is created, all confirmed transactions are stored in a public ledger. All identities of coin owners are encrypted to ensure the legitimacy of record keeping. Because the currency is decentralized, you own it. Neither government nor banks has any control over it.
- **Identity Theft:** The ledger ensures that all transactions between “Digital Wallets” can calculate an accurate balance. All transactions are checked to make sure that the coins used are owned by the current spender. This public ledger is also referred to as a “Transaction Block Chain”. Block Chain technology ensures secure digital transactions through encryption and “Smart Contracts” that make the entity virtually un-hackable and void of fraud. With security like this, block chain technology is poised to impact nearly every segment of our lives.
- **Instant Settlement:** Block chain is the reason why crypto currency has any value. Ease of use is the reason why crypto currency is in high demand. All you need is a smart device, an internet connection and instantly you become your own bank making payments and money transfers.
- **Accessible:** There are over two billion people with access to the Internet who don't have rights to use to traditional exchange systems. These individuals are clued-in for the crypto currency market.

The benefits of crypto currencies are many. But the biggest advantage comes from the fact that these currencies, by their nature are secured and easy to transact.

Today countries like India are trying to regulate the cash economy and move the country towards digitalization. But while the efforts are noble, the fact is that digitization is now totally dependent on cell-phones. Today, there are around 300 million smartphones in the country and the number will double to 700 million by 2020.

According to the **Morgan Stanley** report – ‘The Next India- India’s Digital Leap’, there is a scope for visible shifts in economic activity starting in 2018 eventually leading to India being:

- a) Third-largest economy in the world with a GDP of US\$6 trillion
- b) Top five equity markets in the world with a market capitalization of US\$6.1 trillion and
- c) Third largest listed financial services sector in the world with a market-cap of US\$1.8 trillion by 2027.

Morgan Stanley also expect India’s consumer sectors to add about US\$1.5 trillion to their current market cap of US\$500 billion over this period.

1.1 Crypto Currencies are the Big Game Changer

So while we talk of digitization that will be guided by Jan-Dhan accounts, Aadhar and mobile phone connectivity, the big game changer could be crypto currencies. Today, digitization in India is driven through POS machines or internet payments. While the cost of transactions for internet payment is coming down the fact is that there are intermediaries involved in internet payment. These intermediaries which are normally banks act as third parties and add to the cost of the transaction. POS terminals are also costly for most merchants. The number of POS terminals is increasing but still the demand is high but merchants are not showing enough interest.

So can these small merchants use crypto currencies at a lower cost and solve the problem of connectivity or digitization? The answer is yes. As long as data gets cheaper on the mobile phone, crypto currencies can be used to do transaction even with small merchants.

1.2 Benefits that Crypto Currencies can Offer to Digitization:

- **Real Estate:**

Crypto currencies are very much beneficial in the area of real estate. This is because bit coin, one of the leading crypto currencies, is powered by block chain. The block chain is a decentralized ledger that allows users to transact with each other directly and the biggest benefit of a block chain is that a transaction can never be reversed. Thus the chances of fraud get minimized. In the case of real estate, in most developing countries, land records are in a mess. Tracking these records is not easy. Many times these records are tampered. Once these records go on a block chain it will not be easy to tamper the records and this

could ideally solve a major problem for most Indians who lock their wealth into real estate. Poor people with no land records can be benefited through the use of crypto currency.

- **Immediate Settlement:**

In case of absence of a middle man, the crypto currency typically becomes a peer to peer transaction. In such a situation, the contracts can be settled immediately.

- **Transaction Done at Fraction of a Unit**

Crypto currencies can be done at a fraction of a unit. Thus even when someone wants to do a transaction for few rupees or for few dollars, there will not be any additional cost. Typically, banks charge more for smaller transactions and less for larger transactions.

- **No Theft in Transaction**

There can be no identity theft in a crypto currency transaction. So while India can go digital on the basis of Jan-Dhan and Aadhar, there are huge chances of criminals hacking into Aadhar or even the Jan-Dhan accounts. That won't be possible in a typical crypto currency transaction. The person who wants to send crypto currencies is in total control of their transaction as compared to a credit card transaction, where the third party bank is in control of the transaction.

- **They are Global:**

Crypto currencies are truly global and are not bounded by the boundaries of any country. Thus, transactions become very easy. Secondly, there is no third party that can block your account in case the account has been misused. In the case of crypto currencies, the owner owns the private key and thus no third party can take away your money, unless you lose the private key.

Crypto currencies allow you the ultimate ownership of your own money. Thus while people are worried that digitalization will allow the governments to take control of your bank account, the scope of such a thing happening with crypto currencies is limited because the entire operation is decentralized.

- **India Impact:**

The crypto currency revolution is also spreading to India, where Prime Minister Narendra Modi has reduced circulation of cash bills to steer the country towards electronic payment ratification. The Reserve Bank of India is now looking into the newest wave of the future – crypto currency.

A year ago, the Indian government decided to take harsh measures against “Black Money”, funds earned on the black market on which income and other taxes have been evaded, and tax evasion by removing two of their highest value banknotes from circulation resulting in

removing over 22 billion banknotes in circulation. As a result, citizens worried about losing their savings, switched to crypto currency to preserve their funds resulting in a trading volume spike of crypto currency. Since crypto currency is decentralized, Indian regulators are currently working on a legal framework regulating crypto currencies such as Bit coin as well as the central bank of India is developing their own block chain resulting in its very own crypto currency that will be at call.

2.0 FINANCE TECHNOLOGY

Financial technology, often shortened to Fin-tech, is the technology and innovation that aims to compete with traditional financial methods in the delivery of financial services. It is an emerging industry that uses technology to improve activities in finance. The use of smartphones for mobile banking, investing services and crypto currency are examples of technologies aiming to make financial services more accessible to the general public. Financial technology companies consist of both start-ups and established financial institutions and technology companies trying to replace or enhance the usage of financial services provided by existing financial companies.

Impact of Fin-tech is the new application, processes, products, or business models in the financial services industry, which is composed of one or more complementary financial services and provided as an end-to-end process via the Internet. Fin-tech can also be considered as “any innovative ideas that improve financial service processes by proposing technology solutions according to different business situations, while the ideas could also lead to new business models or even new businesses.”

2.1 Impact of Block Chain Technology in Financial Services

Block chain development has created substantial changes in the financial sector and how people conduct financial transactions. This may revolutionize the economy and has already impacted global financial services. Technical innovations have improved the speed and processes necessary in the financial sector. The block chain technology appears to be permanent and is the power behind decentralized currencies.

There are obstacles that must be resolved before block chain can become the standard for financial services. Numerous prominent individuals in finance are willing to give their support to block chain technology. The potential for acceptance regarding business transactions as a tool of exchange has already been established. The majority of experts believe the block chain will continue to impact the financial sector.

- **The Speed and Accessibility of the Block Chain**

There are banks already using the technology of the block chain to move money. Start-up companies have been created to assist banks in using the block chain on an international basis. There have been numerous start-ups established to make this technology available

to both the banks and financial institutions. These solutions are secure, unique and enable transactions to receive immediate verification.

- **The Smart Contracts**

A smart contract enables commercial agreements and transactions to be executed automatically. A traditional contract has less security than a smart contract. Smart contracts also reduce transaction costs to the lowest possible amount by eliminating the middleman.

- **The Potential of Block chain**

Block chain is becoming more recognized and accepted by the financial institutions. Numerous financial institutions are exploring the possibilities potentially available with block chain development. This may change the way business transactions are conducted in the future.

- **Eliminating Fraud**

Block chain can potentially eliminate fraud relating to financial transactions. This is because instead of operating on the traditional centralized system, block chain is decentralized. This means it is incredibly difficult for the block chain to be impacted by cyber-attacks. The potential to eliminate fraud is demonstrated by traditional media buying. By simplifying this process, block chain can eliminate the intermediaries and the lack of transparency. This sector currently has a high rate of fraud.

Block chain operates with contactless interface cards. This provides a much higher level of security. Hardware is used to help secure private keys with smart cards. This provides access to cryptographic keys that are untethered. This ensures block chain transactions are much easier. A smart card can be a USB device, a regular card, a micro SD card or numerous different types of portable card technology provided that they are able to work with the block chain.

- **The KYC Regulations**

The KYC or Know Your Customer regulation is critical for all financial institutions. This regulation enables financial institutions and banks to identify their customers. This regulation was created to minimize money laundering activities and financial crimes. Once block chain technology has been widely accepted, it will be possible to independently identify every customer.

Each customer can be identified and this identity can be made available to the other financial institutions. Once their identity has been confirmed on the block chain, the process is simple. This will eliminate the need for the customers to go through the KYC process every time they do business with a financial institution and save the banks a lot of money in the process.

- **The Insurance Factor**

The block chain will completely change the way insurance is procured. Smart contracts can replace legal contracts for investigating claim settlements, filing insurance claims and premium payments. It will be easier to settle unclaimed files because the block chain registry successfully connects the proverbial dots.

- **The Bottom Line**

There are a lot of daily transactions in the financial sector. The block chain will close the gap for transparency and security. The potential for block chain to dominate financial services as time passes is great and the reasons are obvious.

3.0 BENEFITS OF FINTECH FOR ROBO ADVERTISING

Robo-advisors or robo-advisers are a class of financial adviser that provide financial advice or Investment management online with moderate to minimal human intervention. They provide digital financial advice based on mathematical rules or algorithms. These algorithms are executed by software and thus financial advice do not require a human advisor. The software utilizes its algorithms to automatically allocate, manage and optimize clients' assets.

There are over 100 robo-advisory services. Investment management robo-advice is considered a breakthrough in formerly exclusive wealth management services, bringing services to a broader audience with lower cost compared to traditional human advice. Robo-advisors typically allocate a client's assets on the basis of risk preferences and desired target return. While robo-advisors have the capability of allocating client assets in many investment products such as stocks, bonds, futures, commodities, real estate, the funds are often directed towards ETF portfolios. Clients can choose between offerings with passive asset allocation techniques or active asset management styles. The deployment of robo-advisors in Fintech will offer effective financial advice and automate asset management, investments, and insurance claims processing.

Generally, people consult financial planners and advisors for different investments and major financial decisions. However, financial advisors may offer biased or inaccurate advice and charge expensive consultation fees. Additionally, in today's time and age, we prefer handling multiple tasks online. Hence, using robo-advisors for financial needs is also quite natural. Another group that can benefit from the advent of robo-advisors in fintech is the retirees from the generation of baby boomers. Compared to financial advisors, robo-advisors are inexpensive and more accurate in allocating assets, estate planning, and overall financial advice. Robo-advisors help private investors in wealth management with the help of predefined algorithms and trends in the financial market. The utilization of robo-advisors in fintech is not a new phenomenon. Wealth managers have been using robo-

advisors behind-the-scenes to gain additional information before offering their final recommendation to clients. As robo-advisors became more advanced, wealth managers were able to focus more on building client relationships and save time spent on data entry and investment management.

3.1 Types of Robo-Advisors:

- 1. Full-service robo-advisor:** A full-service robo-advisor can help in all aspects of various investments. It can suggest an investment strategy, take over asset management, and rebalance investment structures.
- 2. Half-service robo-advisor:** A half-service robo-advisor can only suggest investment products to help in the development of investment strategies.
- 3. Self-service robo-advisor:** A self-service robo-advisor only offers tips for financial investment to private investors.

3.2 Applications of Robo-Advisors in Fintech

The introduction of robo-advisors in fintech can benefit investors and financial services in the following ways:

- **Customer On- Boarding**

One of the primary functions of a robo-advisor in fintech is automated customer on- boarding. Robo-advisors collect vital data such as personal information, investment goals, and experience in wealth management through a detailed questionnaire. After obtaining all the required data, robo-advisors will analyse it using deep learning. Robo-advisors evaluate finances, risk tolerance, and investment strategies to maximize gains. Based on accurate analysis, robo-advisors create customized portfolios. Robo-advisors offer critical wealth management advice and suggest investment strategies and services for customers.

- **Asset Allocation**

Asset allocation is the process of selecting suitable investment strategies based on a user's risk tolerance. Robo-advisors utilize predefined algorithms to determine the type of asset allocation. For instance, higher portfolio risk may be more suitable for investing in stocks whereas, lower portfolio risk may be suitable for investing in fixed income products. In this manner, robo-advisors in fintech decide the most suitable asset allocation technique based on predefined models.

Robo-advisors in fintech can also help in rebalancing asset allocation. A customer's specified percentage of investment in stocks and fixed incomes can change due to factors like reinvestment of dividends. Then, the customer may wish to rebalance their asset allocations. For instance, a user has an asset allocation with 40% fixed incomes and 60% stocks. However, their asset allocation changed to 30% fixed

incomes and 70% stocks due to reinvestment of dividends. In this scenario, the user may wish to rebalance to their original allocation structure to avoid risks. Robo-advisors can suggest techniques for rebalancing asset allocation of their clients.

- **Balance Projection**

Robo-advisors in fintech can estimate and predict how the portfolio balance of a customer would look like if the customer invests according to its strategies. For this purpose, robo-advisors analyse investment strategies and potential risks to understand their impact on personal finances in the future. Robo-advisors can make portfolio balance data more visually appealing by presenting a balance curve based on mathematical function development or static growth. For example, 60% investment in stocks and 40% investment in fixed income may increase the portfolio balance by 3%. Alternatively, 40% investment in stocks and 60% investment in fixed income may increase the portfolio balance by 4%. With this approach, robo-advisors in fintech can help users compare different investment strategies and determine the most suitable one. Hence, users can develop a data-driven approach towards wealth management with the help of robo-advisors.

- **Insurance**

Selecting the right investment policy and filing insurance claims can be extremely complicated. Generally, insurance policyholders may contact an insurance agent for insurance claims. Moreover, insurance claims processing requires multiple documents and the entire process can be time-consuming and tedious.

The introduction of robo-advisors in fintech can simplify insurance procedures right from selecting insurance policies to issuing insurance claims. Robo-advisors ask a series of questions to potential policyholders for gathering vital data. With the help of accumulated data, robo-advisors can suggest personalized insurance policies to the users. Additionally, in case a customer already has insurance coverage, then the robo-advisor can help switching to a similar insurance policy and secure a refund, if possible. Robo-advisors can also accept insurance claims and process them autonomously. This approach of claims processing can be quicker than the traditional one.

- **Taxes**

In the state of South Carolina, individuals get a \$50 tax deduction when they donate a dead deer to underprivileged people. Thanks to robo-advisors, people don't need to move to South Carolina and hunt deer for tax deductions. Robo-advisors can help customers reduce the impact of taxes. As overall wealth increases, even small taxation rates can prove to have a magnified effect. Therefore, the right combination of investments from a tax perspective can be feasible in reducing taxes substantially. Robo-advisors can analyse personal income and the value of estate to

suggest suitable investment strategies. With this approach, the utilization of robo-advisors in fintech can enable tax savings.

- **Retirement Planning**

According to reports, 67% of Americans believe that they will outlive their retirement savings. Retirement planning is a crucial aspect of wealth management that requires several documents for balancing taxes, managing income requirements and estate protection. In case of high net-worth individuals, the entire process of retirement planning can be complicated due to various business investments and assets. Hence, everyone needs a financial advisor for retirement planning. The advent of robo-investors in fintech can simplify the process of retirement planning. Robo-investors can easily access each user's portfolio to get an accurate estimate of their finances. Robo-advisors can analyse market trends to suggest an approach that would ensure maximum returns. Additionally, robo-advisors can help in movements of securities to streamline the entire process.

- **Estate Planning**

Estate planning is a complex process involves preparing for probate, inheritance, disabilities, asset protection and tax planning. For this process, estate owners have to evaluate the value of several assets that they own and decide the power of attorney. This process can be increasingly complicated for high net-worth individuals who own multiple valuable assets such as artworks, properties, businesses and luxury vehicles. Attorney's and financial planner's fees are another concern during estate planning. The adoption of robo-advisors in fintech can streamline the entire estate planning process. Robo-advisors can access each user's portfolio to evaluate the value of their estate. After accurate evaluation, robo-advisors can help in developing wills to simplify the procedure. Also, robo-advisors can suggest a suitable type of insurance based on the assets that a user owns. Robo-advisors can also help in asset protection and planning for disabilities and terminal illnesses.

4.0 USE OF CROWD FUNDING IN FINTECH

Began by President Obama's JOBS act which encourages the funding of small businesses in the United States, crowd funding has developed into a huge benefit for start-ups. By definition crowd funding is "The practice of funding a project or venture by raising many small amounts of money from a large number of people, typically via the Internet". Thus, crowd funding has become the champion of small businesses, allowing them to have a chance to succeed by showcasing innovate business models to the world.

The most obvious benefit of crowd funding for entrepreneurs is the funding. With so many start-ups in the market, it is hard to gather the money needed to bring ideas to life. Through crowd funding, ventures that do not have a company builder like Fin Leap behind them,

can gain support at the very beginning. Crowd funding provides a way for innovate ideas to be presented attractively, so it can be launched. Moreover, a crowd funding platform can help successful entrepreneurs to validate their product which can then help with gathering the Series 'A' funding. It makes validation faster and more scalable. Additionally, a crowd funding platform allows entrepreneurs to get insights from their future customers and experts in the start-up field while building awareness for the idea.

Crowdfunding is a way of raising money through the collective effort of family, friends, individual investors and customers. This method taps into the collective efforts of many people primarily online through crowdfunding and social media platforms.

In 2014, more than US\$16 billion were raised through crowdfunding worldwide, which increased to over US\$34 billion in 2015 and is estimated to increase in 2016. Crowdfunding has proven itself very popular in the world in its short history. All the signs show that crowdfunding is poised to be the next big investment trend.

4.1 Top Ten Biggest Fintech Crowdfunding Agencies:

1. KickStarter

Kickstarter is a global crowdfunding platform for projects such as tech, music, movie, art, games, photography, comics and design. The platform has helped more than 80,000 projects get funds with a strong community of repeat supporters. Around 300,000 individuals on Kickstarter have funded 10 projects or more. Persons who back up Kickstarter ventures are provided with tangible rewards and high-class know-hows in exchange for their pledges

2. Crowd Cube

Crowd cube is a leading investment and award-winning crowdfunding platform. It is one of the longest-established sites in the UK providing a variety of firms, the opportunity to get funding. Established as an alternative to the banks, venture capital funding and angel investors, the Crowd Cube platform is used by many start-ups to raise capital.

3. Indiegogo

Indiegogo is a global crowdfunding website established in 2008. The site is among the first sites to provide crowdfunding. The site allows people to ask funds for a charity, ideas or start-up business. The site's market is all people who have ideas and need to raise funds to finance their goals. About fifteen million individuals visit the platform on a monthly basis.

4. GoFundMe

GoFundMe is a platform that enables people to raise fund for events like celebrations and graduations to challenging circumstances such as accidents and illnesses. Over \$2 billion has been raised for inspiring campaigns by people via the platform.

5. Circle Up

Circle Up connects innovative consumer and retail companies with accredited investors. Businesses must typically have considerable revenue (> \$500,000 annually) or other pointers of potential success. Companies are assessed by private equity investors before being accepted on the site. The company has been featured on CNBC's Squawk Box.

6. Tilt

Tilt is a crowdfunding business that allows communities and groups to fundraise, collect, or pool money online. In the last three years, the Tilt platform has been very popular among community organizers and college students. According to Social Times, Tilt is the fastest-growing crowdfunding platform—defeating stalwarts, Kickstarter and GoFundMe.

7. Our Crowd

Our Crowd is built for accredited investors to offer venture capital funding for start-ups. The company was founded by serial entrepreneur, angel investor and venture capitalist Jonathan Medved. In March 2016, the company raised over \$10 million from Singapore's United Overseas Bank, with the goal of expanding into Asian markets.

8. Peer backers

Consistently known as one of the top crowdfunding sites in the industry, Peer backers focuses on funding innovators and entrepreneurs. The site has hosted thousands of civic, entrepreneurial and creative projects from around the world. After witnessing such a high industry failure rate for projects, Peerbackers established Crowdfunding Academy to provide support and education to people who want to crowdfund.

9. Crowd funder

Crowd funder is the leading UK crowdfunding platform, connecting projects with people to make great ideas happen. The platform has over 442,000 members and thousands of projects. The company provides a fund distribution and campaign sponsorship product that stimulates community engagement.

10. Seeds

Seeds is the world's leading equity crowdfunding platform for investing in businesses you believe in. It was the first equity crowdfunding platform to get regulatory approval from the Financial Conduct Authority in the UK.

5.0 BLOCKCHAIN TECHNOLOGY

The blockchain technology is a decentralized ledger that keeps a record of transactions that takes place across a peer-to-peer network. This technology allows participants from across the network to confirm their transaction without the need for a central authority, this includes money transactions, voting, settling trades and many more.

5.1 Importance of Blockchain Technology

The blockchain is one of the hottest and fastest growing skills in the IT sector today. It is said that there are around 44% of organizations that have adopted blockchain globally. We all know that this technology has taken quite a turn in the industry given its popularity in providing safe and secured online transactions.

This technology is already the talk of the tech world. Although it is a complex technology, most individuals and organizations have started adopting blockchain because of the many benefits it offers to the industry today. Apart from the financial sector, it has gained a lot of attention in the other industries as well.

5.2 How does it work?

If someone requests for a transaction, this transaction is then broadcasted to a P2P network that consists of computers which are known as nodes. The sole purpose of these nodes is to validate the transaction and the status of the user using algorithms. Now this verified transaction can either involve cryptocurrency, records, transactions or any kind of other data. This verified transaction is then combined with other transactions that create another block of data. The block of data is then added to the existing blockchain. This blockchain cannot be altered and is permanent.

For some of you who are wondering what is cryptocurrency? It is a digital currency that is designed in a manner where it serves as a medium of exchange using cryptography. This helps in securing transactions, have control over the creation of transaction units and the verification likewise. Bitcoin can be an excellent example of cryptocurrency.

5.3 The Importance and Impact of Blockchain Technology and Decentralization

- **Security purposes**

The digital world is filled with hackers looking to breach information or steal data from sources. With blockchain technology, the information stored has robust security making it impossible for one to hack.

- **Transparency**

Since everything is displayed on the network, there are very few chances that there would be any kind of discrepancy that can be created.

- **Inexpensive**

Most of the traditional financial models that are available in the market are expensive, however, with block chain it is inexpensive.

- **Transaction time**

An individual can send, receive money and financial documents within a couple of minutes, this reduces the burden of waiting for hours together.

- **Financial efficiency**

Decentralized blockchain allows one to make transactions from individual to individual without the involvement of the third party. This help saves a lot of money while making transactions, unlike traditional banks.

- **Protect businesses from fraud**

The blockchain is an open source ledgers that is why it is very easy to identify if fraud has taken place since every transaction is recorded on them.

- **The industries disrupted by blockchain**

The banking sector isn't the only industry that has been impacted by blockchain technology. Other sectors like law firms or law enforcement are other industries that can be disrupted by blockchain technologies.

5.4 Current State Of Blockchain

The Blockchain Technology market is expected to increase by up to \$2.3 Billion Dollars by the year 2021.

Blockchain has become one of the top buzzwords in the world today. While the technology was made infamous by the Bitcoin cryptocurrency, its future prospects are way beyond that realm.

The hyper ledger project run by the Linux Foundation, with over 100 companies as members (including big names like IBM, JP Morgan, etc.) is an umbrella project seeking to discover and create new applications for Blockchain Technology.

Platforms such as Ethereum are playing an incremental role in the development of decentralized apps using Blockchain Technology and Smart Contracts.

Coming to Smart contracts. It's the icing on this cake. In its essence, a smart contract program allows automation of certain activities taking place in the process of a transaction. Think of it as an escrow service, but with the middleman being replaced by a smart autonomous program coded using the Solidity Programming language.

5.5 Forecast of the State of Blockchain over the Next Decade

In the next 10 years, blockchain may not be commonplace, but it will gain traction as we'll see new emerging platforms and implementations. Similar to how the Internet grew over time. We will definitely begin to see new Dapps with a lot of promise.

However, the starters here would be the corporate giants of the world, and it's likely that Public Blockchain won't find a valuable use case even after 10 years from now.

Public Blockchain are difficult to implement. Moreover, governments won't be so willing to make things so transparent in a span of 10 years.

Even in the next 10 years, it would be difficult to see any existing company shifting towards a Blockchain network for transactions or record-keeping. Even if some do, it would perhaps take 5 more years for any visible change.

But for start-ups, Blockchain will be a new playground to explore, as many new start-ups will emerge using Blockchain development. The advantage for these start-ups will be that unlike established businesses, they won't have any existing load or method to throw away.

So in conclusion, it would be best to say that Blockchain will continue to remain as popular, if not more, even 10 years from now. But by then, it would be a much more mature technology. Market leaders will keep innovating on it and acquire new and emerging start-ups digging deeper into the technology.

6.0 THE FIVE BIGGEST TECHNOLOGY TRENDS AFFECTING FINTECH TODAY

6.1. Artificial Intelligence and Machine Learning

Discussions about artificial intelligence and machine learning have dominated the tech world for the past year. To IBM, we refer to it as cognitive computing and it emphasizes that artificial intelligence should augment human intelligence, not replace it. In finance, AI is helping detect and fight fraud before it can be detected by humans. Stacks of new compliance regulations are being fed into artificial intelligence systems like IBM Watson to help businesses stay on top of the ever-changing rules. Chatbots built with AI are able to help agents satisfy customer questions with accuracy and speed, or even satisfy customers with no human manpower at all. In wealth management, AI is helping with stress testing a market scenario and removing biases from investment decisions. We are just now beginning to scratch the surface learning what we can do with AI and machine learning, in and out of the Fintech Industry.

6.2. API's

The benefits of creating applications using APIs are being recognized as the best way to keep up with tsunami of business and economic challenges faced by the financial industry. Fintech start-ups have dominated the landscape by creating mobile apps that have challenged, and in some cases, surpassed the established banking industry. By using APIs, these small but dynamic businesses are able to innovate with agility and speed that larger established banks and financial institutions are unable duplicate. To keep pace, banks are now investing heavily to improve their ability to create innovative mobile apps, while participating in developer sandboxes and also the API economy. Banks could be positioned to regain dominance in this area due to the amount of data they've collected over the years and have barely touched.

6.3. Blockchain

Blockchain or distributed ledger technology is promising to bring trust and transparency to a world filled with uncertainty and the threat of fraud. Large financial players are collaborating in consortiums to rebuild infrastructure based on this new technology to replace legacy and incompatible systems. From trade finance platforms, to cross border payments and digital identification, eliminating inefficiencies created by lack of trust and transparency is a major selling point of implementing blockchain technology. By removing these intermediaries in business processes and creating innovative networks, blockchain is streamlining the exchange of value across ecosystems.

6.4. Human Digital Interfaces

Most of us have trouble going a day without one of our digital devices, so it's natural to see mobile technology becoming more integrated into our daily lives. We're already using our voice to make commands rather than touching our screen or typing. Passwords are being replaced by biometric finger, retinal, or face scans as security checks. Technology is gauging our emotional state based on our interactions with our devices. Gestures can be used to trigger an action. For the next few years, expect to see these interfaces showing up in more places and being perfected. I'm not sure if I'm ready for cyborg type integration with technology, but you can be sure that someone is already tinkering with those ideas.

6.5. Quantum Computing

A traditional computer system is based on bits that are either 0's or 1's. Quantum computing uses qubits, essentially enabling a computer to go beyond simply two states to store an enormous amount of information while using less energy. Quantum computers will not replace traditional computers, but will be able to solve computationally difficult problems such as maximizing returns for investments based on a given risk profile. In addition to finding answers fast, consider the accuracy achievable in artificial intelligence

or machine learning. It might even make technology look intuitive. Technology to detect fraud or money laundering is an area well suited for quantum computing.

7. CONCLUSION

Certainly, it will enhance the maintenance of land registry records; the transparency of ownership and title transfers mean that there can be no false ownership claims.

But block chain has the potential to create a globally liquid secondary market for real estate. Properties could become tradable investments freeing up much needed capital in an otherwise illiquid market.

These overarching benefits are compelling key industry players to collaborate with top fin-tech vendors to envision a new operating model for finance. It is no surprise why the six largest banks of the world – Barclays, Credit Suisse, Canadian Imperial Bank of Commerce, HSBC, MUFG and State Street teamed up to create a new form of digital cash for streamlining financial transactions over the block chain.

Approximately 66% of banks and 90% of payment companies are expected to adopt the technology by 2020. Private block chain adoption is also attracting significant interest from banks. For instance, R3 CEV is helping create private block chain systems and has garnered the support of over 40 global financial stalwarts like UBS, Barclays, JP Morgan and Royal Bank of Scotland to name a few. Another great case in point would be the Ethereum Alliance that focuses on building private block chain systems by acquiring huge investments from large corporates.

There is no way of knowing where block chain will lead us. But what we do know is that adoption of this nascent technology is gathering momentum. Trustworthy, transparent and immutable, blockchain is here to stay and I am sure that it will redefine many aspects of our financial lives.
