

# Is Fintech Leads Cryptocurrencies A Future Indian Currency?

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**ABSTRACT:-** The 21<sup>st</sup> Century, Internet and Technological opportunities are promoting significant changes in the modern business environment which inclusive of innumerable transition and an enormous amount of money transfer within a day, these are all possible only with financial technology. It also called as Fintech, which means introducing e-money; it is easy and rapid transferrable. Later virtual money and cryptocurrencies where emerged to fulfil the gap between fiat money and e-money. This technological development leads to everywhere reconsider their existing technologies and their practices, that will make it possible to improve countries economic growth by way of expanding the business beyond one countries border. This study depicts the recent development in cryptocurrencies, in addition to estimating whether cryptocurrency will be the future currency or not? This paper declared that Indian traditions and practices are not allowing financial technology to eradicate the fiat currency by introducing cryptocurrency.

**KEYWORDS:** Bitcoin, Ethereum, Ripple, Digital Currency, Fintech, Indian Economy.

## 1. INTRODUCTION

The last decade is known for "Era of Globalization & liberalisation". In that globalisation plays a significant role in the Indian financial system. Two things that found a noteworthy part of the nation's financial and economic structure is that payment and settlement frameworks. An efficient payment system acts as a promoter for ensuring liquidity flow within the economy. Subsequently, we were live in a time when 'digital transformation affects everything, making it faster, wider and more systematic'. Which means all technological innovations that help in the faster and more efficient delivery of financial services, as compared to the traditional methods. These financial services include financial literacy and education, insurance and lending, payments, investments, etc. over the past couple of years, Financial technology (FinTech or Fintech) is the new technology and innovation that aims to compete with traditional financial methods in the delivery of financial services. The term FinTech has grown from being a buzzword among tech-savvy business executives to an organised sector characterised by hyper-growth. Dictionary meaning of FinTech is "the new applications, processes, products, or business models in the financial services industry."

India has encountered the crisis of numerous FinTech start-ups, accelerators and incubators over the last few years. FinTech has created a niche of its own in recent years, owing to its vast potential. India is doing everything to establish itself as a universal FinTech hub. With a large market of unserved customers, increasing mobile/ internet banking, favourable demographics,

an active start-up ecosystem and a large technology talent pool, the present phase of improvement has driven conventional payment methods to transform into digital payments, i.e., from cash to e-money payments. These payments are made with the use of digital financial instruments (credit/debit cards, electronic cheques/cash) which is typically backed by a financial institution or bank. The use of smartphones for mobile banking and investing services are examples of technologies aiming to make financial services more accessible to the general public. Digital currency has the same properties of the real currencies and instigates free flow of cash without much barriers cryptocurrency and blockchain are the new internet technology with the potential to transform the financial industry and disrupt markets around the world. Therefore, this paper aims to study on cryptocurrencies and possibilities of Future Indian currency.

## 2. FINANCIAL INCLUSION IN INDIA

Indeed, even after 72 years of Independence, still, a large portion of the Indian Populations are in outside of the formal financial sector. According to Reserve Bank of India report, over 70% of farm households have no access to formal credit facilities and only 60% of household availing the banking facilities. This is more regrettable circumstance particularly states like Bihar; North-Eastern states people individuals' salary is less than national average income. Nearly 80% Micro, Small and Medium Enterprises (MSMEs) end up being self-financed, and 32% end up depending on friends or family networks for

availing credit. These statistical points illustrate that miserable picture of the Indian Economy; these are making clear that we need urgently to amend access to finance in India. These problems can be rectified by only through FinTech executions in India.

### **3. FINTECH REVOLUTION IN INDIA**

Adopting FinTech in India, Government of India played an active role by empowering and promoting digitalisation of the financial system and reducing cash transaction in the economy. Likewise, government introducing various business models and applications such as Peer to Peer (P2P) transactions, crowdfunding and data security. Government providing adequate education and awareness towards utilising such technological development by introducing India Stack, it has provided a worldwide technological framework to entrepreneurs, innovators and corporations, allowing for them fasted growth in Fintech ventures. By introducing the unified payment Interface (UPI), the National Payment Council of India (NPCI) promoting mobile banking and cash transaction through mobile phones, these are significantly reducing the cost of infrastructure for Fintech ventures and also digital banking sectors are growing very faster than expected.

### **4. FINTECH ACCOMPLISHMENT IN INDIA**

The Indian Fintech sector is growing tremendously, especially 34% in payment system followed by 32% in the banking sectors, and 12% in online trading in public and private markets. In Andhra Pradesh state launched Fintech valley tower to accelerating Fintech hub. India Fintech Forum represents the Indian FinTech firms as part of the Global Fintech Hub Federation (GFHF). These are promoting investors to invest in these financial technological sectors. As per the National Association of Software and Service Companies (NASSCOM), India has an existence of around 500 companies in FinTech space, with an investment of more than 500 million dollars. They estimated Fintech software and services market to grow 1.7 times by 2020, making it worthy 8 billion dollars. Recently blockchain technology emerging a vital role in FinTech.

### **5. BLOCKCHAIN**

The blockchain is an innovative technology that combines a number of mathematical, cryptographic and economic principles to maintain a record involving numerous participants without the need for any third-party validator. The blockchain has the potential to disrupt the banking industry to its core through its adaptation for storing, lending, moving, trading, accounting, reconciling and guaranteeing money

through its consensus ledger, cryptographic security and digital signature. The blockchain concept has gained importance after the emergence of cryptocurrencies.

### **6. CRYPTOCURRENCY**

The cryptocurrency is a computerised currency that utilises cryptography to ensure its security. Those currencies are not physically existed as coins or notes, it is in virtual mode only, and it tends to be purchased and sold on particular exchange platforms which are dealing only cryptographic forms of money by using conventional money. It was first begun in internet gaming networks and social media. Nowadays, Cryptocurrencies are acts as a medium of exchange like a physical currency in few countries. It became more popular using transaction because the main reason this currency network generally doesn't have any transaction cost or sometimes very low transaction cost. There are approximately 1,200 different cryptocurrencies are there in current circulation. In this article, took a couple of cryptocurrencies in a short depiction which is based on the largest blockchain network regarding size.

#### **6.1 BITCOINS (BTC)**

Bitcoin is the pioneer and leader of all other digital currencies; this is the first ever peer-to-peer decentralised cryptocurrency. It was first released in the year 2009 by an anonymous individual or gathering known as Satoshi Nakamoto. As per New York report in 2011, Nakamoto went through approximately a year to code the software following after the financial crisis 2008. They had an idea in mind to create an electronic payment system which is separate from central authorities, Coin Desk Writes, and it should be ready to transfer it promptly. In August 2017, bitcoin split into two derivatives, such as classic Bitcoin (BTC) and Bitcoin Cash (BCH). Today bitcoin is accessible for exchange internationally and as of late encountered a massive boom in valuation after ongoing renovations.

#### **6.2 ETHEREUM (ETH)**

The second most well-known blockchain enable empower innovation Ethereum. It is a decentralised software platform that enables Smart Contracts and Distributed Applications (DApps) to build and run without any interruption, extortion, control or interference from a third party. It was first introduced in the year 2013 by Vitalik Buterin; he researched which is based on Bitcoins. In first Burwein Published something called the Ethereum White Paper which is later developed into Ethereum. An online crowd-sale subsidised it during summer of 2014. Later on, July 2015 it was developed by the Ethereum foundation, a Swiss

non-profit organisation with contribution from great minds across the globe. According to Ethereum, it can be used to 'codify, decentralise, secure and trade just about anything'. Ethereum also split into Ethereum (ETH) and Ethereum Classic (ETC)

### **6.3 LITECOIN (LTC)**

Litecoin which is terms as 'Silver to Bitcoin's Gold'. It was created by Charlie Lee, in the year 2011. He is an MIT Graduate and former Google Engineer. Litecoin is based on an open source global payment system, this is not controlled by any central authority and uses "SCRIPT" as a proof of work. It can be decoded with the help of CUPS of the consumer grade, and it is an attempt to rival Bitcoin by using algorithms which are allowed from the mining of regular, unspecialized hardware. It is almost similar to Bitcoin in many ways such as a faster transaction. Especially many merchants are accepting Litecoin as their medium of exchange it leads to the faster growth number of Litecoin.

### **6.4 RIPPLE (XRP)**

Ripple is based on Real Time Gross Settlement (RTGS) system. This currency exchange and payment are done through a unique network, which is called RippleNet. It enables banks to settle cross border payment in real time, with full transparency and also meagre cost. It was first released in the year 2012. In this type of currency does not require any kind of mining-based system, it reduced the use of computing power and minimise the network latency. Ripple is aimed that it will distribute the value of power way to incentivise specific behaviour. Ripple is now being used by commercial institutions around the world, and focuses on deploying scalable blockchain technology to connect payment provider, banks, digital asset exchanges and business through Ripple Net to provide frictionless experience when sending money globally

### **6.5 DARKCOIN (DASH)**

Dark Coin is a more secretive version of Bitcoin. This type of cryptocurrency for used on improving the speed of transaction and secrecy. It is worked on a decentralised master code network that makes transaction almost unnoticeable. It was created and developed by Evan Duffield in the year 2014 January. Later on, Dark Coin was rebranded to Dash, which implies Digital Cash. It has advanced capabilities, including instant transaction (InstantSend), Private transactions (PrivateSend) and decentralised governance and budgeting system (DGBB) which means it the first decentralised autonomous organisation in cryptocurrencies. It is growing very faster rated

with a quick period. Dash can be mined using a CPU or GPU.

### **6.6 MONERO (XMR)**

Monero is a secure, private and untraceable Currency. It was launched in April 2014, this is open source cryptocurrency, soon after launching it reached very high interest among the cryptography community and enthusiasts. The development of Monero is entirely donation based and community-driven system. It has been launched with a strong focus on decentralisation and scalability which enables complete privacy by using a unique technique called 'ring signature'. With this technique, there appears a group of cryptographic signatures including at least one genuine participant.

### **6.7 ZCASH (ZEC)**

Zcash is a decentralised and open source cryptocurrency which is launched in the latter part of 2016. It is defined as HyperText Transfer Protocol Secure; it offers privacy and selective transparency of transaction. It is claimed that provide extra security or privacy where all the transactions are recorded and published on a blockchain, but details such as the sender-recipient, and amount remain private. It offers its users to choose of 'shielded' transaction, which allows for content to be encrypted using the advanced cryptographic technique. The zk-SNARK team developed it.

## **7. CRYPTOCURRENCY AS MEDIUM OF EXCHANGE**

Currency is means, in general, acceptable form of money, it including coins and paper notes, which is issued by a government of the particular country to circulate within an economy as a medium of exchange for the purchase or sale of goods and services between two parties. If cryptocurrency can act as a medium of exchange in India, it has the following benefits. It has a low cost of transfer in comparing with standard currencies. It can be divided into small fractional values, like decimal values. As of now, few developing like Japan as of now authoritatively perceive bitcoin as money in indistinguishable respect from fiat cash. Whereas in China still, they are working on its regulatory policies. Russian President Vladimir Putin has declared that the nation will actualise directions encompassing cryptocurrencies, which included requirement and security laws as it pertains to initial coin offerings.

In India, Reserve bank of India has set up an interdisciplinary committee by the department of economic affairs of the Ministry of Finance. It is chaired by a special secretary Economic Affairs and includes a representative from the Department of Economic Affairs, Department of Revenue

(CBDT), Ministry of Home Affairs, Ministry of Electronics and Information Technology, RBI National Institute for Transforming India and State Bank of India. They introducing of any new cryptocurrency may request an amendment of the currency act. Despite a distrust of the usage of non-fiat cryptocurrencies, central banks across the globe have taken into consideration the effectiveness and technology. In the event that cryptocurrency turn into future cash that is the greatest changes in the Fintech industry.

#### **8. DIFFICULTIES OF IMPLEMENTATION**

Cryptocurrency has shown incredible growth over the most recent couple of years, yet at the same time, it is challenging for the medium of exchange. The main reason is cryptocurrencies are very difficult to procure a new one, it is difficult to grant loans in these currencies, and it is not liquid as fiat currency. Cryptocurrency needs many levels of knowledge in computer technology as it operated as electronically. It is very high volatile in nature, and it is complicated to know the exact current value of the currency. In India, all the rupee notes act as a promissory note, but in cryptocurrency is not like that, there is a huge problem in the form of lack of trust because they are trading with a new and unknown person. Consumers are not having adequate knowledge about using digital currency. Naturally, the risk-averse consumer hesitates to transact with these new concepts. The present threat of hacking personal data and diversion of funds does not make the matter any easy. Still few more laws in the currency have to be as per currency act; hence as of now, it cannot be adopted as a future currency.

#### **9. CONCLUSION**

In the overview of Fintech in India remains favourable to regulatory support, financial inclusion. The digitalisation of service in the industry like to boost the investment in the going forward, and it will rapidly increase the adaptation of emerging technologies in the financial service industry. However, with the rapid improvement of encryption technology over time and cautious approach of the authorities in balancing the forces of change and financial prudence. Still, it is hard to acknowledge cryptocurrency as a medium of exchange in India.

#### **10. REFERENCE**

- [1] BOTOŞ, H. M. (2017). Bitcoin Intelligence – Business Intelligence meets CryptoCurrency. *CES Working Papers*, 488-505
- [2] Ciaian, P., Rajcaniova, M., & Kancs, d. (2016). The digital agenda of virtual currencies: Can BitCoin become a global currency? Springer, 884-919
- [3] DrRavi Kumar Goriparthi, D. P. (2017). Demonetisation in India an Era for Digital Payments. *Splint International Journal of Professionals*, 40-48
- [4] Helms, K. (2017, April 12). India's Government Forms Committee to Investigate Bitcoin, Report Due in 3 Months.
- [5] Lee, J., Long, A., McRae, M., Steiner, J., & Handler, S. G. (2015). Bitcoin Basics: a Primer on Virtual Currencies. *Business Law International*, 21-48
- [6] Luther W. Bitcoin and the Future of Digital Payments. *Independent Review*.2016;20:397-404.
- [7] Narayanan A, Bonneau J, Felten E, Miller A, Goldfeder S. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction Princeton University Press. 2016.
- [8] Rose, C. R. (2015). The Evolution Of Digital Currencies: Bitcoin, A Cryptocurrency Causing A Monetary Revolution. *International Business & Economics Research Journal*, 617-621.