



BITCOIN – GENESIS, OPPORTUNITIES, RISK AND POSSIBILITIES

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ABSTRACT

Over the years we have seen the colossal development of internet before our eyes. We have also witnessed the growth of Google, Facebook and many others. As a unique technology Bitcoin, also is being built on top of the internet. Bitcoin is now a new currency that people are starting to talk about, the money of the future. Bitcoin is also just a big experiment, with no guarantees and we might be wasting our time exploring its concepts and ideas. It is at the crossroads of technology, philosophy, politics and everything, exploring the ways and means of settling into the financial system. Bitcoin was created to provide an alternative to the banking system. This paper discusses about Bitcoin, its genesis, opportunities, risk and possibilities, regulation in India, price in India.

KEYWORDS : Bitcoin, Digital Currency, Cryptocurrency, Virtual Currency

Introduction**What is Bitcoin?**

We cannot explain what Bitcoin is in just a few sentences, as it took people some time to understand what the Internet was back in 1994, the same way it takes time to understand Bitcoin. We have seen a myriad of innovations constantly being made, that same type of innovation is happening again with Bitcoin. The Internet changed the way the world communicates; Bitcoin has brought in change the way money works. With Bitcoin you can put a bank in your pocket.

Bitcoin is a revolutionary technology that enables a new way to send payments over the Internet. You can think of it as an open accounting system where thousands of computers all over the world work together to track ownership of digital tokens called Bitcoins. When someone sends someone Bitcoins, the transaction is broadcast to the entire network, after the transaction is verified, it is recorded in a public ledger called the blockchain. In order to achieve efficiency the transactions are grouped together in batches. A batch is called a block and each block has a link to the previous block, except for the first, which is called genesis block. This linking together of blocks is the chain part of the block chain. The blockchain contains the record of all the bitcoin transaction that has taken place since the origination of the system and it is shared and maintained on the network, so everyone maintains the books.

Bitcoin is a peer-to-peer system, so there is no central authority; instead bitcoins are issued to users who help process transactions in the network. This is known as bitcoin mining. Bitcoin miners are specialized computers that do the work required to verify and record transactions in the blockchain. Miners are rewarded with bitcoins and these new bitcoins are released into circulation. Initially the rewards for the miners are appealing and as time goes by, the mining reward decreases. The result is a predictable supply that's governed by scarcity, making Bitcoins somewhat like a digital gold. Bitcoin is the gold standard of digital currency. The system is programmed so that only 21 million bitcoins will ever exist. The availability of bitcoins cannot be manipulated by governments or financial institutions and bitcoin transactions occur directly between two parties without a middleman. It is the first cryptocurrency of the Internet and everyone is free to use it. With Bitcoin, you can send any amount of money to anyone anywhere in the world as easily as sending an email.

The Genesis

Bitcoin was created in 2009 by what's believed to be a pseudonym, a person named Satoshi Nakamoto. Till date Satoshi Nakamoto is believed to be a fictitious person and no clear identity has been made regarding the creator of Bitcoin. The history of creation of Bitcoin is interesting. On Halloween 2008, someone using the name Satoshi Nakamoto, posted on a cryptography mailing list. The post

contained a link to a white paper - Bitcoin: A Peer-to-Peer Electronic Cash System in which Satoshi proposed a new type of payment system for the Internet. It described a protocol that used peer-to-peer networking, proof of work and public key cryptography. For years, computer scientists had been experimenting with these technologies to create digital money. But Satoshi discovered a way to combine them that had never been done before. In doing so, he invented Bitcoin. There are no records of Nakamoto's existence prior to the creation of Bitcoin. On his profile page, he claimed to be a 34-year-old man living in Japan. Although Satoshi Nakamoto is a Japanese name, he wrote in perfect English when communicating online and went through great lengths to keep his identity unknown.

Opportunities

Bitcoin supporters and in particular merchants, say that one of the currency's most enticing promises is that it could significantly bring down payment processing costs. It is commonly prevalent that retailers pay 2 to 3 percent of the value of a customer sale when a credit card is used, which has been a long standing complaint of the retailers and have explored other options, but without much luck. For example in the US, PayPal, the online payment system, typically charges merchants a fee between 2.2 percent and 2.9 percent, as well as a per-transaction fee of 30 cents. On the other hand fees for a merchant accepting bitcoin payments often range from nothing to less than 2 percent because of the open nature of the technology. For example, Coinbase a digital currency wallet and platform, does not charge its merchants for the first \$1 million in sales, imposing a 1 percent fee after that on the conversion of bitcoin into local currency. It was believed that Bitcoin will do to the banking industry what email did to the postal service. On 22nd of May 2010, Laszlo Hanyecz made the first real-world transaction by buying two pizzas in Jacksonville, Florida for 10,000 BTC.

Price of Bitcoins

The price of bitcoins has gone through various cycles of appreciation and depreciation referred to by some as bubbles and busts. The price of bitcoin virtually from nothing in 2009, it rose to \$17,900 in November, 2017 and saw a sharp descent and is around \$9,000 as of now. Although acceptance of Bitcoin in the Indian scene is unclear, it's popularity has never faded, from a modest amount around 7000 in the year 2014 it rose to an all-time high of 12,59,942 and now it is around 6,00,000.

Risk

The unsavory use of bitcoin ranges from being used in Ponzi schemes, as a medium of payment of ransom for holding files hostage in computers and to aiding criminal transactions, virtual currencies are the medium of choice to maintain anonymity and looking for a way to transfer monetary values across the globe and

avoid detection. Cyber security issues are considered to be the main issue by the experts, as it carries a huge scope for money laundering and other illegal activities through use of an unregulated digital currency concept. The worst case scenario is that, this virtual currency has become new tool for fraudsters who are promoting bitcoins as the next big investment products with unlimited returns.

The Role of the Regulatory Authorities

As digital currency is a totally new concept in India, the regulators are sorting out ways to regulate this entire gamut of digital currency and also the jurisdiction is not clear as to who should regulate them. In India RBI has mooted several measures to contain the misuse of virtual currencies. The RBI had issued an advisory on the trading in virtual currencies, in line with the advisory warning from the Reserve Bank of India (RBI) against use and trading of virtual currencies due to potential money laundering and cyber security risks many organisations dealing in these currencies have suspended their operations. Regulatory framework for virtual currencies by the RBI is yet to be issued; it has issued an advisory cautioning general public against use of virtual currencies. After the issue of the advisory on December 24, 2016, a number of entities offering bitcoin services have either suspended their operations, temporarily or indefinitely and a few other websites have gone down.

Points in Favour of Bitcoin

- One world, one currency
- No intermediary
- Saves time
- It could replace fiat currency
- Negligible or no fee for making payments
- As there is a ceiling on the number of bitcoins in circulation (21 million) the rise in prices is justified, as demand is increasing while supply is limited.
- Since the ledger is decentralized and nobody can control/alter it, data safety is ensured and while everybody has access to it.
- Reduction in the volatility.
- If not accepting bitcoin many countries, atleast, have started discussing.

Points Against Bitcoin

- It was created out of thin air
- Creator is an anonymous individual
- No regulator
- People are investing for great returns, instead of understanding it
- Some countries have already put a ban on bitcoin exchanges

List of Cryptocurrencies.

As on 10th April 2018 the number of cryptocurrencies available over the internet is over 1565 and ever growing. A new cryptocurrency can be created and introduced into the system at any time. Considering the market capitalization, Bitcoin is currently (April 10, 2018) the largest blockchain network, followed by Ethereum, Ripple, Bitcoin Cash, Litecoin, and EOS.

Possibilities

Till now, there is only a limited use of bitcoin as a medium of exchange, excluding its usage for illegal activities. It has gained popularity as a means of transfer of funds beyond the conventional and highly regulated channels. It is also viewed as a speculative investment opportunity. People believe that bitcoin may develop into a full-fledged currency and enter the financial system with acceptance from all corners. The mechanism of the bitcoin system has secured strong support from many of the components in the financial system. As always there will be government intervention and in future this technology may well be adopted by the financial institutions.

Conclusion

It is never easy to predict the future. This suits to bitcoin also. Although bitcoin represents a great leap in technological payments processing system, its success will depend only if it is put to good

use. It will always be a challenge in containing its use for illegal activities. To enter the mainstream of the financial system, it must take into consideration the following: ward of its competitors, stay minimal in processing cost, heed to the government regulations, etc.,

References:

- [1] Narayanan, Bonneau, Felten, Miller, Goldfeder, 'Bitcoin and Cryptocurrency Technologies - A Comprehensive Introduction', 2016, Princeton University Press
- [2] Pagliery, Jose 'Bitcoin and the Future of Money', 2014, Triumph Books LLC.
- [3] Szmigielski, Albert 'Bitcoin Essentials - Gain insights into Bitcoin, a cryptocurrency and a powerful technology, to optimize your Bitcoin mining techniques' 2016, Packt Publishing
- [4] <http://newlibertystandard.wikifoundry.com>
- [5] <https://bitcoin.org/bitcoin.pdf>
- [6] https://en.wikipedia.org/wiki/History_of_bitcoin#Prices_and_value_history
- [7] https://en.wikipedia.org/wiki/List_of_cryptocurrencies
- [8] <https://www.ndtv.com/business/bitcoin-operators-shut-up-shop-in-india-amid-rbi-warning-375904>
- [9] <https://www.nytimes.com/2013/10/31/technology/bitcoin-pursues-the-mainstream.html>