National Journal of Multidisciplinary Research and Development
ISSN: 2455-9040
Impact Factor: RJIF 5.22
www.nationaljournals.com
Volume 3; Issue 1; January 2018; Page No. 186-189

Bit coin: A strategic overview

[1] Priya Srivastava, [2] Dr. P Sekar, [3] Dr. R Guna Sundari

[1] Ph.D, Research Scholar, PG & Research Department of Commerce, Hindusthan College of Arts and Science, Coimbatore, Tamil Nadu, India

[2] Associate Professor, PG & Research Department of Commerce, Hindusthan College of Arts and Science, Coimbatore, Tamil Nadu, India

[3] Assistant Professor, Department of Commerce, Sri Ramakrishna College of Arts & Science, Coimbatore, Tamil Nadu, India

Abstract
A promise to make an offering of lower amount of transaction fees than actual traditional online payment mechanisms and is being operated by a decentralized authority, unlike government-issued currencies, is actually a type of peer to peer reviewed BITCOIN. Today's market cap for all sorts of bitcoins (abbreviated BTC or, less frequently, XBT) in circulation has exceeds to $7 billion.
Physically, bit coins are not available, only the actual balances kept on a public ledger in the cloud that – along with all Bitcoin transactions – is being verified by a massive amount of computing power. Bit coins are not actually being issued or backed by any banks or governments, nor are the individual bitcoins is being valuable as a commodity. Despite it's not actually a legal tender, Bitcoin charts are very much high on popularity, and has triggered the launch or commencement of other effective virtual currencies together which, collectively referred to as Altcoins.

Keywords: digital currency, alt coins, block chain, financial innovation

Introduction
The primary group of supporters, adopters, and contributors for bitcoins are actually the recipient or beneficiary of the initial & foremost bitcoin transactions, programmer Hal Finney, who has actually downloaded the software of bit coin, the day it was being released, and has received 10 bitcoins from Nakamoto for the world's first bitcoin transaction. Other early supporters include are Wei Dai, originator & the creator of bitcoin antecedent *b-money*, and Nick Szabo, the initiator of bitcoin predecessor *bit gold*.
What is needed is actually an electronic payment system primarily based on cryptographic proof instead of mutual trust, allowing any two of willing parties for transacting directly with each other exclusive of the actual need of a trusted third party.
BitCoin began operating in Jan 2009 and is the first decentralized crypto currency, with the second crypto currency, Name coin, not emerging until more than two years in April 2011. Today there are hundreds of crypto currencies that have actually existed at some point. The common element of these different crypto currency systems is the public ledger "blockchain" that is shared between network participants and the use of native tokens as a way to incentivize participants for running the network in the absence of central authority. However there are significant differences between some crypto currencies with regard to level of innovations.
The cost of Mediation & Transaction Costs increases simultaneously, which limits on the amount of minimum practical transaction size & cutting the possibility for all sorts of smaller casual or informal transactions, and there is a broader cost in the loss of a facility to make a Non – Reversible payments meant for these types of non – reversible services. With the option of reversal, the need for trust actually spreads. Merchants must be suspicious of their customers, hassling with extra additional information, for what they would actually otherwise need. A certain percentage of fraud is accepted which seems to be unavoidable. These costs & payment uncertainties' can be avoided in person by using physical currency, but no mechanisms' which exists to make payments over a communications channel without a trusted party.

BITCOIN – Overview
The BITCOIN Scheme carries qualities of a payment system which facilitates the transfer of value between the transacting parties. Unlike Traditional Payment systems, typically involving the transfer of value, being denominated in sovereign currency such as US Dollar, BITCOIN has its own Metric for a value of significance called a BITCOIN. In essence a BITCOIN is actually an Electronic Token without any prior reference to any underlying essential commodity or Sovereign Currency, and is not a liability to be shown on a Balance Sheet. Owing a BITCOIN actually amounts to nothing more than having the ability to knack these BITCOINS in BITCOIN Ecosystem. As such, a BITCOIN does not possess any intrinsic value rather; it derives mainly from its use for making the exact payments in BITCOIN System, & for the purpose of accumulating gains from BITCOINS' potential appreciation. To our knowledge of facts, a BITCOIN does not have any legal tender status in any

of the jurisdiction at the time of its writing. Moreover, some Economists have questioned whether BITCOINS met the standard attributes of money.

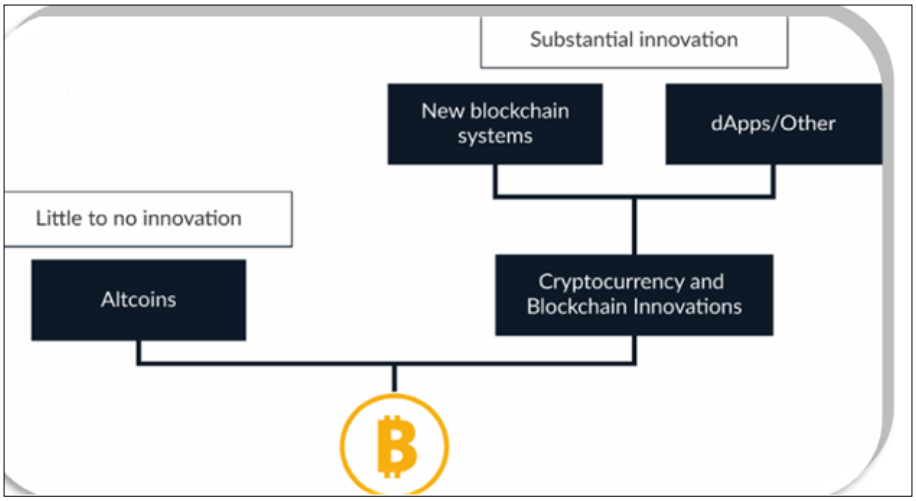

Fig 1: The world of crypto currencies beyond Bitcoin

How BITCOIN Works?

An initial payment for facilitating instant digital transaction is the Bitcoins, which actually uses peer-to-peer technology. The independent individuals & the companies who own foremost computing power and participate by making a contribution in the Bitcoin network, also known as "miners," are actually motivated by rewards (the release of liberate of new bitcoin) & transaction fees is being paid in bitcoin. These miners can actually be thought of as the decentralized authority making an enforce of the credibility or reliability of the Bitcoin network. New bitcoin is being unconfined to release to the miners at a fixed, but periodically at a declining rate, such that the total supply of contribution of bitcoins approaches to 21 million. One bitcoin is being divisible to exactly eight decimal places (100 millionth of one bitcoin), and this smallest unit is sometimes referred to as a Satoshi. If necessary, & if the participating miners do acknowledge for a change, Bitcoin could eventually in long run can be made divisible to even more decimal places.

Bitcoin mining is the progression through which bitcoins are being released to come into circulation of movement. Basically, on the whole, it involves solving a computationally difficult or complex puzzle to ascertain a new block, which is being added to the block chain, and actually receiving a reward in form of few bitcoins. The block reward of payment was 50 new bitcoins in 2009; & it decreases every four years. As more and more bitcoins are being bent to be created, the difficulty of mining process – that is, the amount of actual computing power involved – increases. The mining difficulty significantly began at 1.0 with Bit coin's debut back in 2009; & at the end of the year, it was just only 1.18. As of April 2017, the mining difficulty is expected to increase over 4.24 *billion*. Once, a normal or ordinary desktop computer sufficed for the mining process; now, to combat the difficulty level, miners must use a faster hardware like Application-Specific Integrated Circuits (ASIC), & more advanced processing units like Graphic Processing Units (GPUs), etc.

What's BITCOIN Worth?

The worth of foremost bitcoin transactions were actually being negotiated by individuals on the bitcoin talk forum with the meeting in a form of prominent transaction of 10,000 BTC used to indirectly procure two pizzas being delivered by Papa John's.

On April 2017, a bitcoin is worth of significant value counting on $ 1,223 – a substantial huge jump from late 2016, when it was around making an approx of $ 770.

Bit coin's price, quite to a extent depend on size of its mining network, since the larger network is, the more complex, & thus more costly, it will actually be producing new bitcoins. As a result, the value of bitcoin has to increase as its cost of production also rises. The Bitcoin mining network's summative aggregate power has more than tripled over the past 12 months.

Usage of BITCOINS

It is an electronic or digital currency that works on a peer-to-peer basis. This means that it is decentralized and has no central authority controlling it. Like currency notes, it can be sent from one person to another, but without a central bank or the government attempting to track it. The system depends on cryptography for controlling the creation of the currency. While no one has the authority to control the generation of the coins or make a tracking of them, the system itself is designed in such a way that the network maintains a fool proof system of the record of each & every transaction as well as tracking issuance of the actual currency.

The beauty of this cryptocurrency is that if you receive a bitcoin from another, you can be as sure of the payment as you would on receiving physical currency notes, with the same anonymity ascribed to it. No one need to know if your neighbour spent 2 bitcoins early this morning to buy a gold, but the transaction is actually being recorded for posterity.

This anonymity is lacking in other forms of digital payment such as online banking or e-wallets.

Bitcoin Value: More than money

It's clear to say that bitcoin has actually burst the bounds of Silicon Alley and Silicon Valley for mostly two likely reasons: First, because the know - how of technology is complex and potentially revolutionary, (hashes, nonces, mining & blockchain), even financially sophisticated refined readers needs to educate themselves on what it actually is. And secondly, it's different from any other asset class or financial concept that has existed till now.

The exponential growth of bit coin's price is another reason bitcoin has gone mainstream. A lot of people are interested in how and where they can invest in bitcoins, and brokers are scrambling to be first in the space to offer bitcoin - based investments to normal consumers, sometimes by making an offer of ETFs or in recent times, by creating bitcoin futures.

Bitcoin - mania may wane as fast as it surged. The cryptocurrency has actually proven or established to be capable of wild price swings, & other virtual currencies are gaining ground. But for now, bitcoin is still a 21st century gold.

By making an investment in cryptocurrencies & other Initial Coin Offerings ("ICOs") is actually highly risky & speculative, and this article is not a recommendation or the author to make an investment in cryptocurrencies or other ICOs. Since each individual's situation is actually considered unique, a qualified professional should always be consulted before making any financial decisions.

Financial institution uptake

Financial institutions have actually shown a willingness to make experimentation with blockchain technologies to drive ready operational efficiencies and access the previously untapped or untouched markets (Torpey, 2015). There has been unwillingness by large financial institutions to for adopting specific currencies of either Bitcoin or Ether, as organizations are looking forward to maintain a control of their ledger & transaction validation process, something that might be challenged with the embracing of Bitcoin or Ether (Torpey, 2015). While blockchain technology is likely to be adopted by financial institutions during the five-year timeline, it is unlikely that either Bitcoin or Ether currencies will be extensively adopted by major financial institutions.

Payment system for BITCOINS

When an individual send a bitcoin to a receiver, the transaction is included in the blockchain & is broadcasted to the network. The blockchain guarantees that the same bitcoin is not being spended twice by the same user. A computer network makes a validate of this transaction by using algorithms so that the transaction could actually becomes unalterable. Once validated, the transaction will actually be added to others to create a block of data for the ledger.

Risk for Investing in a BITCOIN

The conception of a virtual prevalence currency is still novel of tale and by making a comparison with actual traditional investments, Bitcoin doesn't encompasses with a long term track record or history of credibility to back it. With their increasing utilisation, bitcoins are actually becoming less experimental every single day, of course; still, after exactly eight years, they (like all digital currencies) remain in a sort of development phase only, still evolving. "It is pretty much the highest-risk, highest-return investment that you can possibly make," says Barry Silbert, CEO of Digital Currency Group, who builds and invests in Bitcoin and blockchain companies.

Not for the risk-adverse, in other words. If an individual is considering investing in bitcoin, understand these unique investment risks:

- **Regulatory Risk**

Bitcoins are actually a ruled out as a rival contender for government currency and might be used for black market transactions, money laundering, illegal activities or tax evasion. With this, governments may seek out to standardize, hamper or ban the use & sale of bitcoins, and some have already done. Others are actually imminent with coming of various rules.

Although more agencies will pursue suit, issuing rules and guidelines, the lack of consistent regulations concerning about bitcoins (and other virtual currency) raises questions over their permanence of longevity, liquidity & universality.

- **Security Risk**

Since Bitcoin exchanges are completely digital & as with any virtual system, are actually at risk from hackers, malware and operational glitches, which results into transfer to any another account without any information, users can prevent the stolen bitcoin encrypted with a private key if they are being stored on a computer which is not connected to the internet, or else by choosing to use a paper wallet – printing out the Bitcoin private keys and addresses, and not keeping them on a computer at all. Hackers can also target Bitcoin exchanges, gaining access to thousands of accounts and digital wallets where bitcoins are stored.

It's a kind of a problematic once an individual remember that all Bitcoin transactions are permanent and irreversible. It's like dealing with cash: Any transaction carried out with bitcoins can only be reversed if the person who has received them refunds them. There is actually no third party or a payment processor, as in the case of a debit or a credit card – hence, no source of protection or appeal is there, if a problem arises.

- **Insurance Risk**

Some investments are insured through the Securities Investor Protection Corporation. Normal bank accounts are insured through the Federal Deposit Insurance Corporation (FDIC) up to a certain amount depending on the jurisdiction. Bitcoin exchanges and Bitcoin accounts are not insured by any type of federal or government program.

- **Fraud Risk**

As Bitcoin uses a private key encryption for verifying the owners & the register catalog of transactions, fraudsters and scammers may make an attempt to endeavor by selling false bitcoins. For instance, in July 2013, the SEC actually brought legal action against an operator of a Bitcoin being related to a Ponzi scheme.

- **Market Risk**

Like with any investment, Bitcoin values can fluctuate. Indeed

to be sure, the value & the worth of a currency have actually seen wild swings in its price over its short existence. Subjected to a high volume in buying and selling on exchanges, it has a high sensitivity to "news." According to the CFPB, the price of bitcoins has fallen by 61% in a single day for the year 2013, while the one-day price drop for the year 2014 has actually risen up by 80%.

- **Tax Risk**

As a bitcoin is not actually eligible to be included in any of the tax-advantaged retirement accounts, there are certainly no good, & legal options to shield the investments from taxation purpose.

Status of Bitcoin in India

Use of the bitcoin is on the increase in India. Bitcoin exchanges allow buying and selling of bitcoins, using Indian rupees. On the internet, some of the bitcoin exchanges in India are bitcoin.in, unocoin, indiabitcoin.com, etc. It's possible to make a withdraw of money in Indian rupees from bitcoins being held in one's bitcoin wallet. Bitcoin transactions are actually being carried out in India and can, thus, act as a medium to carry out terror finance. The responsibility for the regulation of currency in India rests with the Reserve Bank of India (RBI). As per its press release of December 24, 2013,7 the RBI has cautioned the users, holders & traders of Virtual Currencies (VCs), including bitcoins, about the potential financial, operational, legal, customer protection and security being related to risks that they are exposing themselves to. It mentions that use of virtual currencies like the bitcoin as a medium for payment is not authorized by any central bank or monetary authority. The RBI has also have stated that it is presently examining the issues being associated with the usage, holding and trading of VCs under the extant legal and regulatory framework of the country, including foreign exchange and payment systems laws & regulations. However, there are no legislative or regulatory frameworks or laws that have been passed in India as yet. As being advised by the RBI it's only a recommendation, use of the bitcoin is not illegal in India. Terrorists can, therefore utilize loopholes in the bitcoin regulatory framework in India for terror funding. However, the supporters of the bitcoin in India state that it's reliable because the bitcoin service providers are actually following the Know Your Customer (KYC) guidelines. However, if the RBI has not being recognized with the bitcoin in India, the following of KYC guidelines has no meaning as these are not regulated by any legally authorized entity in India.

Conclusion

Since the establishment of Bitcoin 2009, its use in a form of cryptocurrency has actually been debated extensively as it has become a highly controversial divisive topic. The debates are being stimulated by the fact that some argue it actually has the potential to disrupt the financial system as we know about it. On a positive note, the minimal fees & the lack of regulations makes it much easier & cheaper to send money internationally, which makes the capital available in exact places that requires it the most & were previously unable to gain any access to capital flows. However, when looking at the negatives, the implementation of this currency also allows for the facilitation of criminal activity, and it takes away from the ability of the government to generate revenue through taxation.

As bit coin and the block chain continue to progress, it is noteworthy to keep a close watch on block chain, given its capabilities to innovate various areas to relevant to society as well as lives of digital age. The progression of Bit coin and block chain would revamp and enhance the following concepts:

- Globalism - Bit coin & Block chain address globalism with mobile applications and exchange platforms that facilitate financial and economic activities worldwide.
- Security - The block chain technology addresses security in areas including insurance, law, & data security by validation of information in block chain ledger.
- Democracy - Bit coin & Block chain addresses democracy by reshaping the functions of governments, organizations, and corporations with commercial influence in addition to block chain's ability to make voting system more effective.

References

1. bitcoinfuture.weebly.com
2. Is Bitcoin a Real Currency? An economic appraisal www.nber.org
3. BITCOIN-economist's perspective people. fas.harvard.edu
4. Haber S, Stornetta WS. How to time-stamp a digital document. In Journal of Cryptology. 1991; 3(2):99-111.
5. Bitcoin. The New York Times www.nytimes.com
6. Merkle RC. Protocols for public key cryptosystems, In Proc. Symposium on Security and Privacy, IEEE Computer Society. 1980, 122-133.
7. Back A. Hashcash - a denial of service counter-measure. http://www.hashcash.org/papers/hashcash.pdf, 2002.