

OPERATIONAL CONCEPTS IN CRYPTOCURRENCY – AN ANALYSIS

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ABSTRACT:

Bitcoin is digital money and decentralized payment system. As it is a form of virtual currency there is no need of handing notes or tokens to the seller while purchasing the goods. Every single payment is immediately logged digitally (on computers) on a transaction log that tracks the time of purchase and number of bitcoins owned. Bitcoin is digital money and decentralized payment system. As it is a form of virtual currency there is no need of handing notes or tokens to the seller while purchasing the goods. Every single payment is immediately logged digitally (on computers) on a transaction log that tracks the time of purchase and number of bitcoins owned. Bitcoin is one of the most interesting digital currencies that is available on the market, and with a current increase in popularity of this thrilling cryptocurrency, there are a number of people who are interested in determining where the Bitcoin actually came from. The journey and evolution of the Bitcoin is as interesting as the currency itself, and with it still being in its infancy having only first been thought of back in 2007, we are certain to see a huge number of developments due to be implemented in recent times. From Bitcoin being introduced in stores, to the revolutionary Bitcoin casinos that we are so fond of here at Bitcoin Casino Pro, we're taking a deeper look into the evolution of the Bitcoin.

Keywords: Bitcoin, Cryptocurrency, virtual money, currency, banks

INTRODUCTION:

After the financial crises of 2007-08, a new idea was born into the world that gave the human race a financial breath of fresh air. The current money system is centralized systems as all transaction has to pass through middleman which are banks. Banks impose relatively higher transaction charges on the thus costing the person to transact. Nakamoto proposed a peer-to-peer system for the digital currency now termed as BITCOIN.

OBJECTIVE OF THE STUDY

To understand the concept of Bitcoins market In India thoroughly.

OPERATIONAL CONCEPTS IN CRYPTOCURRENCY

A currency is a medium that people can use for selling or buying, such as gold (commodity currency) or dollar (fiat currency). Dollar is an example of a fiat currency and every fiat currency has a centralized government to control the inflation and deflation.

Throughout the history, many items have been used as medium of exchange and store of value, such as clay tablets, gold, silver, metal coins and now paper money even plastic money (debit and credit cards). As our understanding of money as a store of value, medium of exchange and unit of currency has matured towards the methods and modes of exchanging it. There has been a drastic advancement in improving the mode of exchange from precious metal coins to paper money then towards cheque and credit cards. However credit cards are not created for the internet era; they have been adopted to meet the needs of consumers operating in a networked and digital world. The accessibility of internet all over the world in digital economy why can't the currency specifically designed to work through the internet and which is not backed up by any authority. Such a phenomenal creation was that of Bitcoin.

In the early days, bitcoin miners solved these math problems with the processors and their computers. Soon miners discovered that graphics cards used for gaming were much better suited to this kind of working. Graphic cards are faster; they use more electricity and generate a lot of heat. The first commercial bitcoin mining products included chips that were reprogrammed for mining bitcoins. These chips were faster but still power-hungry. ASIC, application specific integrated circuit chips are designed specifically for Bitcoin Mining. As the popularity of bitcoin increases, more miners join the network making it more difficult for individuals to solve the math problems. To overcome this, miners have developed a way to work together in pools known as pooled mining. Pools of miners find solutions faster and each miner is rewarded proportionate to the amount of work he or she provides. Mining is an important and integral part of bitcoin that ensures fairness while keeping the bitcoin network stable, safe and secure

In simple words, bitcoin is the first decentralized digital currency. Bitcoins are the digital coins, we can send through the internet. It can be transferred directly from person to person via the net without going through a bank or clearing house. It can be used in every country and there are no pre-requisites and arbitrary limits. The standard unit of representation is called a BTC, like INR or USD.

Only 21 million Bitcoins can ever come into existence. Currently, there are about 14 million of these in the market. So, there are about 7.5 billion people in the world, then how this currency can serve the need of so many people? Well, the answer is you can buy/sell/spend even a fraction of bitcoin. You can break bitcoin up to 8 decimal places and the smallest unit of bitcoin is called Satoshi.

SCOPE OF BITCOINS MARKET IN INDIA

In the present digital era, where technology has played a crucial role in transforming the digital economy of the world, India is no different in taking baby steps while adopting the digital form of currencies such as Bitcoins. At present, there exist an estimated total Bitcoin turnover of Rs.300 crore in India with a huge user

base of around 1,00,000 people. It is also being forecasted by industry experts that Bitcoin is all set to expand its user base steadily across different parts of India with their adoption is said to be growing at 200-300 per cent annually in order to bring a digital revolution.

India currently has around 50,000 Bitcoin enthusiasts, with 30,000 of them actually owning the currency. However, being the Bitcoin concept not traditional, some retailers have realized the advantages of accepting the currency. Apart from that, Bitcoins are quickly transforming from being trading units to shopping currency, eventually giving the Indian e-commerce industry a boom to avail online transaction with the use of digital currencies.

CHALLENGES AND OPPORTUNITIES OF BITCOINS MARKET IN INDIA

BIGGEST THREATS TO BITCOINS-IN GENERAL PERSPECTIVE

- The price of a bitcoin can unpredictably increase or decrease over a short period of time due to its young economy, novel nature, and sometimes illiquid markets. When the unit first came into existence it was worth a few US cents. Its price topped out at well over \$1,000 in 2013. Now, a single bitcoin is worth about \$435.
- There's also the problem an apparent vulnerability to theft when bitcoins are stored in digital wallets. This may be what has happened at Tokyo-based bitcoin exchange MtGox , which filed for bankruptcy in 2014.
- The virtual currency movement also faces legitimacy issues because of the way it allows for anonymous transaction. Detractors say bitcoin's use on the underground silk road website, where users could buy drugs and guns with it, is proof that it is a bad thing.
- The lack of properly laid out, uniform regulations about bitcoins (and other virtual currency) increase the uncertainty regarding their future. Many government authorities are concerned about the use of bitcoins for speculative trading, money laundering, and crime (like buying and selling of drugs and other illegal items).
- Acceptability issue – There aren't a lot places where bitcoins are accepted as payment. This is likely to change, but for now the average person will mostly buy bitcoins as investment.

A STUDY ON GROWING TREND FOR BITCOINS IN INDIA

- Unlike conventional currencies, with bitcoin if you lose it, there is no mechanism to recover stolen or lost bitcoins. The best way to store your bitcoins is on disk that is disconnected from the internet.
- Regulatory issues – some governments, including Russia and China, have heavily restricted how Bitcoins can be used.

CHALLENGES TO BITCOINS MARKET – IN INDIAN SCENARIO

There exist several challenges with the adoption of bitcoin such as need for an easy way to exchange bitcoins for Indian rupees but their respective solutions are also present to overcome these simultaneously. Consumer would definitely do well to adapt to this technology quickly.

For say, many beginners generally face the security or privacy issues as they download their wallet software, create one or two address, and then keep using those addresses for an extended period of time. If you want privacy, then that is not the best way to use your wallet. The more you use an address the easier it is for an observer to build up a profile of your activity, whether for advertising or more sinister purposes, and even to link that activity to your personal identity.

Each time you are going to receive a payment you should create a new address specifically for that purpose, and then never use that address again afterwards. No matter how many of them you create, all of your old addresses will still be able to receive payment in case somebody sends you money using an old address they have on file for you.

Despite the fact that the estimate of bitcoins has declined pointedly, speculators and industry professionals believes that with india turning out to be progressively advance and society moving toward cashless exchanges, this is going to transform the world of digital transactions.

OPPORTUNITIES FOR BITCOIN MARKET IN INDIA

There has been quite a lot of good news coming out of india recently including positive response about Blockchains from the RBI few months back, in the form of an official statement and some new guidelines about cryptocurrencies and the Blockchain. “with its potential to fight counterfeiting, the ‘Blockchain’ is likely to bring about a major transformation in the functioning of financial markets, collateral identification(land records for instance) and payments system,” reads the statement. Indian market is all set with the smartest minds by leveraging Bitcoin as an asset to bring a revolution in present digital world.

E- commerce industry in india could leverage the bitcoin potential as markets in india cannot remain immune to this development. It is essential for the key industry players in Indian bitcoin industry to work with enthusiasm at a fast pace and ensure seamless service for increasing the number of people adopting Bitcoin in the country.

As a global IT competitor, india should start looking at maximizing its efforts to take the maximum benefits of Blockchain technology; filling the voids and convince the users to adopt Bitcoins by providing better experience at user ends. Adoption of Bitcoin has extreme potential to enable flawless transactions and provide great financial solutions for a transparent process. But in this dynamic space, scalability is equally important. Investments should be the main focus in crypto-currency mining and subsequently transforming it into an active investment. This is the high time for the Indian government to push reforms and keep the sentiments high.

Increasing competition is must from new as well as already established key industry players to enter the domestic market in order to bring efficiency and to ensure a fertile and receptive market for bitcoins in India.

Moreover, it will generate much diversified offering in various segments and will lead to the creation of a robust structure across the digital platform. With all of its troubles, there is a major growth in the country's internet and e-commerce businesses in the near future for the country. This growth is causing interest within the country for companies to implement businesses that improve e-commerce and money transfers to benefit from this growth. To help this trend and create monetary flexibility in the country, the national payments corp of india is working to develop a unified payment interface(UPI) which is intended to move india to become a cashless society.Entrepreneurs within the country are seeing this as a natural opportunity for the proliferation of bitcoin and other cryptocurrencies within the country.

It's reported that india currently has around 30,000 Bitcoin owners in the country, and that number is expected to grow. Even indian's Reserve Bank has acknowledged Bitcoin as a currency of the future. However, it's clear that entrepreneurs in the country and investors from inside, and outside the country are not sitting still. The opportunities are just too big in the world's largest democracy.

POSITIVE BENEFITS OF BITCOINS IN INDIA

Bitcoin is a currency like no other. In short it's digital money that solves many of the problems our current currencies suffer from and introduces many other uncertainties we never had to deal with before. Bitcoins have a way to go before becoming a serious alternative to existing electronic transaction systems, but they do provide real advantage to users.

FINDINGS

- i. Bit coins has started penetration in India in recent days when compared to other developed countries such as US & UK. The digital currency started to step its footprints in developing countries to some extent i.e., India. People here and there are aware about the virtual currency especially Bit coins.
- ii. Although Indians are willing to accept first cryptocurrency which is of peer to-peer approach, but not ready to replace the present conventional currency wholly due to various reasons.
- iii. As the acceptability of Bitcoins in India seems to be low as of now and also it is harder to find the users who accepts Bitcoins for transactions. But in the mere future there will be a spike of trading of Bitcoins in India.
- iv. The usage flexibility level of Bitcoins gives easiness among the public but it requires much more security measures with successful implementation in a greater extent for the quick outreach of the genuine users.
- v. Bitcoins usage process tends to inconvenience in spending much time to understand the working process. Thus the concept is quite complicated to understand as of its usage.
- vi. Bitcoins adoption completely relies on luminaries in the field who are trading presently with digital currency.

- vii. There are number of usability challenges which is foregone by the users such as regulatory issues, security threats, low adoptability, acceptability issues, poor mobile platform, etc.
- viii. Bitcoins awareness programme is required to spread the emergence of Bitcoins in India since it is not approved by the government which is posing as a biggest threat for its user.
- ix. Eminence towards legal recording of transaction of Bitcoin which lacks of technological advancement tends to low adoption among users.
- x. Even though the adoption of bitcoin is non-advantageous to the Indian economy but if the higher level of security measure given to the safe transaction then there may be chance of growth in its use.
- xi. Demonetization led to a positive impact of proliferation of value of its multiple. Thus the change resulted in e-wallet transaction and other major alternatives of digital currency which are popping in India.
- xii. Though the RBI's move towards regulating the Bitcoins, but it's not of immediate step. Still it has shy-away approach to regulate and recognize the bitcoins in India.
- xiii. Bitcoins value getting snow-balled after the demonetization in India. In near future its adoptability might grow which majorly depend upon the governments regulatory measures undertaken.

SUGGESTIONS:

- i. The success of the adoption of bitcoins completely rely on the initiative measures taken up by the government to create awareness to know the significance of virtual currencies contribution to the Indian economy and to educate people how to acquire them and trade with them in a lawful manner.
- ii. Bitcoins startups should be recognized and government should provide approval of transaction undertaken by them in order to encourage the trade to bring efficiency and to ensure a fertile & receptive market for Bitcoins in India. More and more competition leads to a strong enhancement in Bitcoins trading platform.
- iii. Government should intervene in the transactions of Bitcoins and make sure it is progressive to ensure right growth will come out with positive regulations on digital currencies to support the growth of wonderful technology.
- iv. Bitcoins has characteristics that make it well-suited to work as a complement to Growing cryptocurrency market and that there are ways to minimize the risk borne by bitcoins users such as security issues where government authority should consider these issues in order to provide safety and securities for the users
- v. Biggest threat to bitcoins is its own adoptability issue, absence of counter parties, financial, legal and security risks arising from usage should be addressed by the central bank and bought under its purview to bestow authoritative regulatory approval for this digital currency.
- vi. The researcher believes that bitcoin will have most success especially in developing countries where millions of people still have no access to bank account and that bitcoins will foster trade and stimulate the

economies in these regions (i.e., India) which is possible by the carefully elaborated regulation in a well-informed manner, to avoid precautionary measures from curtailing the future of these new technologies.

vii. The bitcoin user experience & technology is highly complex. With the current bitcoin interface; it is difficult to navigate the various bitcoin online purchase points and ultimately to buy bitcoins. The researcher would be concerned that competitors such as Apple Inc. may be able to simplify the experience and would become the dominant player in the emerging digital currency market.

viii. The threat is that of course same innovative technology can be exploited by criminals, terrorist for money laundering to perform illicit & illegal activities. So, obviously this disruptive technology requires some sort of government regulation altogether try to explore the technology rather declaring as illegal of its usage.

The debate over regulatory decisions regarding decentralized virtual currencies reached a cacophonous point, lawmakers around the world are now wondering whether the time has arrived to regulate this emerging innovation. So in order to have best future for bitcoins growth in India, the Indian government should look at some high profile of entrepreneurs, governments & institutions that have made.

CONCLUSION

The progression of bitcoin would revamp and enhance the globalism, security, democracy, virtual approach. Among all the different digital currencies in this space, bitcoin is inarguably the most successful currency to hit the market and to create a disruptive new economy. Bitcoin has forced the world to stand up and take notice. Bitcoins faces many user adoptability challenges which pose a threat to its growth in present scenario and also the bitcoins are not approved by the government and there is no central system to monitor it so, it becomes the user's responsibility to ensure that it remains secure. As compared to other cryptocurrencies bitcoins Market Cap is higher. Bitcoin grasped the attention of regulatory bodies and financial institutions due to its huge potential to become a new prominent financial payment mechanism. Over the last few months, current users of bitcoins as a medium of exchange are limited. It is currently inconvenient to use because the common payment system is yet to be adopt it. Moreover, many people are still not aware and some are not even interested in bitcoins. But after demonetization people started to rush towards exchanging their old notes into bitcoins, with that great move by the government it even impacted on bitcoins market and its value burgeon with that of earlier. To conclude overall, bitcoin is reaching a financial maturity phase. It is growing from a merely internet phenomena to a recognised carrier of value for the real economy. Due to the nature of bitcoins network, it will be nearly impossible to shut down this payment system in future.

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