A role of Bitcoin in various comparison of Cryptocurrencies in virtual Competitive business

Dr. S. Mathivilasini
Assistant Professor
Department of Computer Science
Ethiraj college for women
Chennai

D.Saravanan
Faculty of Operations & IT
ICFAI Business School (IBS), Hyderabad,
The ICFAI Foundation for Higher Education (IFHE)
(Deemed to be university u/s 3 of the UGC Act 1956)
Hyderabad-India.

Abstract

This Paper newly address the concept of growing Bitcoin, it offers the digital process or event innovation that creates a new technology as well as how it contacts with sustaining digital exchange to implements its potential payment system. This paper identifies subject to block chain and how Bitcoin technologies are integrated with block chain. Here the objective is achieved by means of various terminologies used in Bitcoin. In this paper we discussed applications of Blockchain and the types of Crypto currency applied in banking sector.

Keyword: Bitcoin, Blockchain, Cryptocurrency

I. Introduction:

Bitcoin initially came from Satoshi Nakamoto in 2009. It creates transaction process that are recorded in the Block chain, usually block chain, a stamped series of immutable records of data that are linked using cryptography. Block chain is challenging the status the most popular place to secure store, trusted crypto currency Wallet and the block explorer to search, verify transaction on the Bitcoin using special devices through Blockchain. From a business perspective Bitcoin, the best known cryptocurrency, a medium of exchange US dollar, different currencies and user encryption techniques, Regulatory implication and competing Platforms to verify, transfers, trades, voting applications far beyond cryptocurrency. The Bitcoin works with Block chain a shared public ledger. All confirmed transaction are included in the block chain. Here it allows Bitcoin Wallet on your mobile phone. The data and the transaction details, thereby ensuring actually owned by the spender. Here Blockchain are enhanced with cryptographic techniques. Each and every time Bitcoin enables secret key for protecting a piece of data termed as seed. The transaction used for broadcast to the network signals to be confirmed with 10-15 minutes. We ensure using Bitcoin Wallet. Bitcoin Wallet is a digital pace to store your transaction information. The important job of this is to store digital currencies with secured virtual space for more transaction. There are four types of Wallet.

1. Cold Wallet

Cold Wallet is an offline Wallet; it doesn't require network connection. It mainly focuses to store Bitcoin for long time and give high level of security using cold Wallet.

2. Hardware wallet

The most popular common type of Bitcoin Wallet is hardware Wallet. These Wallets are special devices to maintain securely data while transaction takes place.

3. Hot wallet

Hot Wallet often connected with the Internet that requires crypto exchanges.
Here the Wallet keys are maintained by the service provider and not by the customer. These Wallet transactions are used for small amount of fund transfer. This helps only for short transactions.

4. Web Wallet

Web Wallet are automatically Managed by third parties. The Trade-off though is that third party is responsible for maintaining the integrity of the Wallet, Here Transactions takes only few minutes. The main advantage ensures you to get   safe funds. Easy access, fast Transactions.

The Main aim of Blockchain to start with digital information to the introduced and distributed through the world wide web. Here Bitcoin device is built on the Block chain. The transaction made in Bitcoin are verified by a network. Since Blockchain being decentralised

. By integrity block chain in to bank. It also exchanges the transaction funds between institutions more securely that are broadcast to its origination destination.

Fig 1.1 Bitcoin   Fig 1.2 Cryptocurrency

2.The Benefits of Applying Block Chain Technology in Bitcoin.

Today mostly the innovations in different fields to understand the benefits of bit coin behind this Block chain, is decentralized in nature. It gives best business through enhanced security and easily traceable. Block chain not only used for exchange of Cryptocurrencies.In financial systems Block chain responsible to act with Greater Transparency. The main important role of this Block chain   removes the work of Middlemen in many fields like payment system, Financial Management services. It uses p2p cross-border transfer with a new digital platform. This proves to be increased efficiency at all the times. Next talking about the scenario. Here it always uses encrypted techniques for each new transaction and that is obviously linked to

previous Transaction. Each and every time of transaction block is added to a ledger which always form a chain. Once the block is formed it is impossible to modification and unable to change the process of transaction.

3.Concept of Blockchain in Modern Technology business cyber security

Guardtie:

This   Company uses keylens signature system using block chain to secure the health records of the current citizen

REMME :

It is one of the decentralized authentication process. Normally aims to replace login and password.

HealthCare:

This mainly focuses for disease control to tell the effectiveness of disaster   relief and also used for tracking the progress of patients even after they leave hospital.

Investment Process in Bit coin

Bitcoin investment focuses the value of Blockchain in integration with Financial Purpose, interest of the people and often the ratio compared with crypto currencies. Bitcoin still involves some security issues; the investors should be very careful before they begin to start with Bitcoin.

Initial   step to start with Bitcoin

1. Investor those who want to trade Bitcoin first need a place to store the device i, e Digital Wallet

2. They need to buy a Bitcoin usually achieved by connecting a Wallet to a bank account i,e credit card or debit card.

3. All exchange of data in marketplace to trade traditional   currencies using Bitcoin transaction through block chain terminology like Agreement Ledgers, Altcoin, Attestation ledgers.

Block chain permanently stores all the transaction block by block on the Blockchain. when the Bitcoin device add a block to the Block chain, they always acknowledge with terminal connected with that device. i,e Bitcoin Mining. Bitcoin Miners keep the network securely   by approving transaction.

    5.   Bitcoin Mining Hardware Comparison

Ant Miner S7   Ant Miner S9   Avalon6

Capacity Ratio	Ant Miner S7	Ant Miner S9	Avalon6
Advertised Capacity	4.73 Th/s	13.5 Th/S	3.5 Th/S
Power Efficiency	0.25 W/Gh	0.098 W/Gh	0.29W/Gh
Weight	8.8 Pounds	8.1 Pounds	9.5 Pounds
Guide	Yes	Yes	NO

Table 1.Examples of Recent Bitcoin ASIC miner machine Type

Machine	Hashrate (TH/s)	Power Use (W)	Power Efficiency (J/GH)
Antminer S9	14	1,372	0.098
Antminer T9	12.5	1,576	0.126
Antminer T9+	10.5	1,332	0.127
Antminer V9	4	1,027	0.257
Antminer S7	4.73	1,293	0.273
AvalonMiner 821	11	1,200	0.109
AvalonMiner 761	8.8	1,320	0.150
AvalonMiner 741	7.3	1,150	0.160
Bitfury B8 Black	55	5,600	0.11
Bitfury B8	47	6,400	0.13

Source: Bitmain, Bitfury, and Canaan.

5. The Virtual transaction of Banking in Bitcoin and Blockchain

 Almost with all Banking sector brought to life with an iconic image. The widely raised of bit coin and other digital currencies could have high impacts on financial systems in all central banks. Although physical currency is still widely used in most countries. Consumers all around the world routinely conduct credit cards or mobile pay. Here the idea behind the digital currencies is not new to everyone.

Carstens

When introduced credit card, we had to learn how to deal with credit card. The same way, Ingves most of the central back money produced with wholesale central bank money and almost money is already electronic based.

6. Features of Cryptocurrency (Bitcoin)

1. Decentralized and no central Authority

Generally, fiat   Currencies central authorities and banks always control the financial systems Here Bitcoin with other Cryptocurrencies, all the transactions could be processed in an open network system. Wherever in centralized banking sector almost all the distributed networking system all around the world, which are considered as individual nodes. Henceforth all the transaction is validated and verified by each node through Cryptographic technique and updated in a public distributed ledger called a Blockchain. Here the transaction is across peer-to peer network.

2. Anonymous/pseudo-anonymous

In Bitcoin, it has no central authority. Here user need not to identify themselves while doing transaction with Cryptocurrency. When a request is initiated   by the user, the decentralized network will check the transaction with the particular nodes and recorded it on the Blockchain. Bitcoin support both private key and public key system to authenticate all transactions. Here user   has the ability to create their own anonymous identities and digital Wallets to transact on the decentralized system.

3. Irreversible and Immutable.

The immutable features of Cryptocurrency mean that it is impossible for anyone of the user, but the owner of the respective private key transactions cannot be changed once it is recorded and impossible to modify the transaction, cryptography makes it very difficult for modification. All transaction is transparently recorded on the Block chain and open to public.

    a. Limited Supply and Scarcity
      Currencies like dollar, euros have limited supply usually central bank can issue much fiat currencies as they require. Most of the countries often manipulate their currency to be inflationary over a period of time. For example Bitcoin has a maximum supply of 2 million, once this limit is reached no new Bitcoin can be mixed. Cryptocurrency intentionally   create Scarcity to prevent currency manipulation and decrease of value overtime.

Bitcoin are mainly used to buy goods and services across the world through Bitcoin payment mode. Bitcoin provide customized level of anonymity. Moreover, International payment system can be made easily to any country. Bitcoin provide a way to transact securely online as they use very strong cryptographic algorithm.one important aspects of Bitcoin, is that unlike credit card or debit card, there is no need to provide personal information to complete the whole transactions. Nowadays online shopping increases also number of customers through Bitcoin transaction users can make payments. Bitcoin on their smartphones through wallet apps.

4. Growth Factors of Bitcoin

The Things that favour the growth of Bitcoin adaptation are as follows

1. The Awareness about Bitcoin growing in Effective manner.
2. The customer uses Bitcoin transactions is increasing rapidly.
3. A large number of people do not prefer governments regulations on their wealth and would rather prefer storing in Bitcoin's.

Bitcoin vs. other Major Cryptocurriencies

Bitcoin with Cryptocurrencies include Bitcoin cash, Ripple, Stellar, Ether, Litecoin, EOS

Bitcoin cash(BCH)

It helps in transaction process very accurately and speed up the network inability to proposed upgrades Bitcoin cashes maximum block size is 8mb.In BCH more transaction can be done in each second.

Ripple (XRP)

Ripple is a Cryptocuurrency follows a payment network called Ripple Net used in backing sector and financial institutions including American Express. Since Bitcoin uses decentralized technique. Ripple operates in a very different way to other digital currencies.

Stellar

Stellar is a payment network that operates in similar way to RippleNet and it can process in multiple currencies. It is underpinned by a cryptocurrency called lumens(XLM) commonly referred to as stellar. It allows only small transactions.

Ether(ETU)

Ether is the cryptocurrency of the ethereum network where the users can utilize their own code to decentralized applications and create smart contracts. It prevents hackers from spanning the network.

Litecoin (LTC)

Litecoin is entirely designed to be silver to Bitcoin gold according to its founder Charlie Lee, to supply of silver outstrips the supply of gold. It supplies maximum of 84 million coins four times greater than Bitcoin's

EOS

This is one of the Blockchain platform to replicate the key functionality of a computer's hardware and operating system. It basically provides tools and services for developers to build apps including user login, authentication and databases. It provides responsibility for processing and other transaction is distributed across the network.

Fig 6.1 Share of Virtual Currencies Market Cap (2016-2017)

Fig   6.2
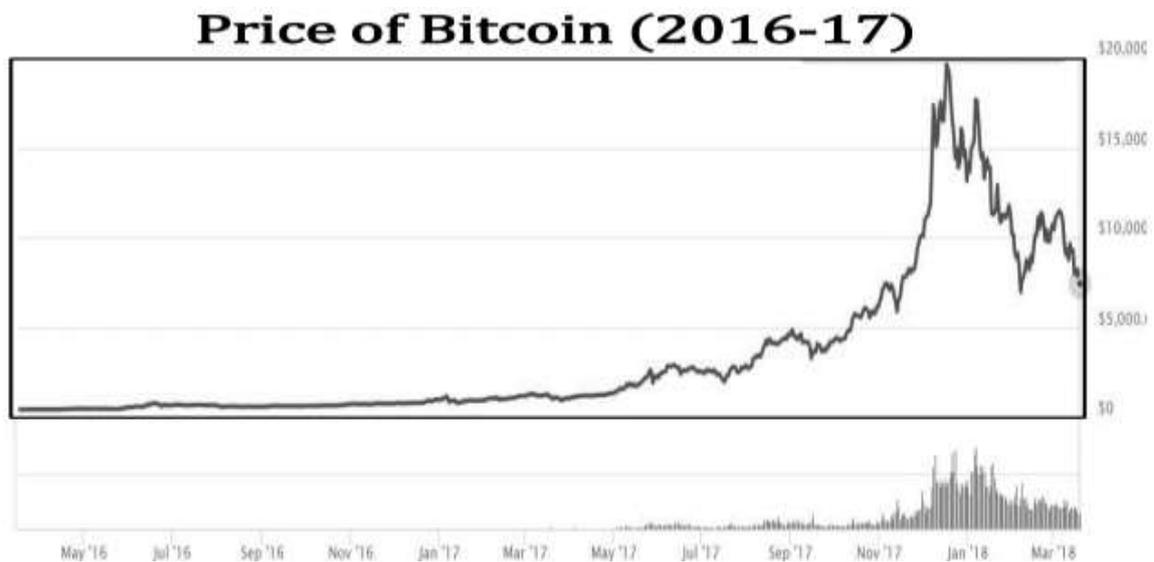
Conclusion

      This paper fairly outlined various techniques used in Bitcoin determining the current and futures transaction details in the recent technology. Bitcoin are created in digital environment through a mining process to solve complex algorithm and crunch number. Here it focuses the main benefits of decentralization transactions with cryptocurrencies that aspires to become part of the mainstream financial system in widely divergent criteria to avoid fraud and hacker's attacks. In despite recent issues, its success since 2009 launch has inspired the various creation of alternative cryptocurrencies   such as Litecoin, EOS etc.

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