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Bitcoin technology and its applications

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ABSTRACT

Objective: The paper discuss the basic impact of cryptocurrency on Indian market. All the transactions takes place through safety and security of cryptography key.This study is basically just to have a safe transactions through internet which maintain a clear record by ledger.

Method and statistical analysis: Thisstudy is based on secondary data analysis, various concept, techniques have been considered in order to find the objectives.

Findings: Bitcoin is one of the fastest digital currency which is used and distributed electronically by keeping all safety measurements in mind.bitcoin records digital transactions which helps in keeping digital records for longer time (Divide sections of your work and just give an overview of the same)

Application/ Implementations: Indian market is moving from the traditional methods to electronic currency and that's the reason we are moving to bitcoins. Although it does not reveal properly that is this the name of the person or some group of members had just started it. All the transactions take place through safety and security of cryptography key and hence after so much of tight security nobody could hack the system as model is complex.

Keywords: Cryptography, Bitcoin system, Blockchain network, Harsh Encryption, Proof of work.

Introduction:-

Bitcoin has invented in the year 2009 by Satoshi Nakamoto. In simple term, it can be defined as a currency that is distributed electronically through peer-to-peer connection without any central server. Bitcoin is used on the internet.No internet means no bitcoin. Transfer the money from one right person to another is again a major challenge faced by every running organization. So this problem has solved through very high and tight security term called cryptography key.(Bayu Adhi Tama, 2017)

Cryptography is a networking term that is used to convert the readable content into unreadable form while transmitting data and only those people can access the data who's having the key to access it. All the transactions take place through a tough algorithm and there is very less chance to be hacked easily.(Moore, 2013) Cryptography works in a systematic order while transmitting data. Its procedure starts where data has written in plain text and encrypted through public key which means locked through the public key for security purpose then the encrypted data sent to the receiver and receiver can decrypt the data by using the private key and again converted into plaintext. (Bakar)
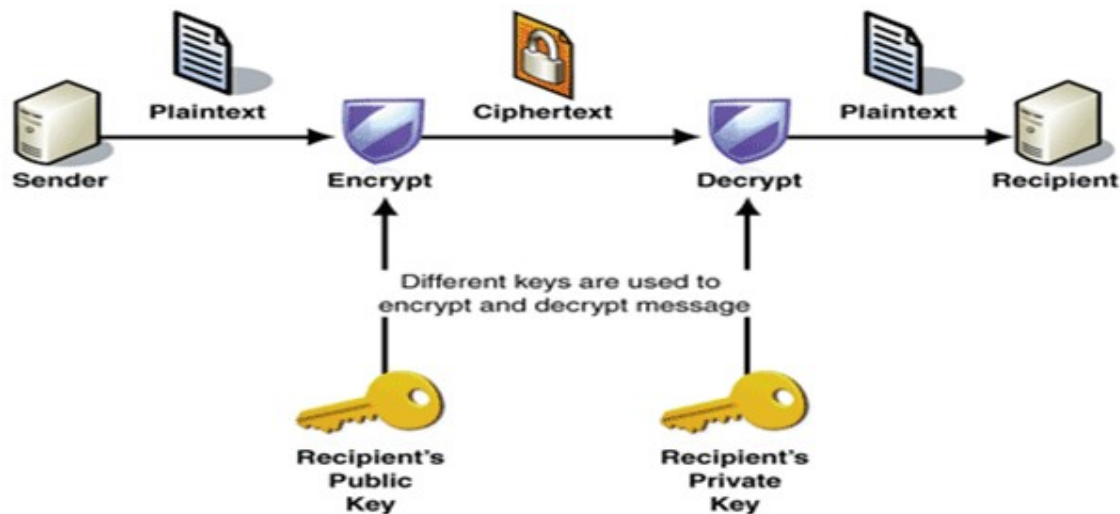

Figure 1Explanation to Bitcoin System(Secretary, 2016)

Bitcoin system

A bitcoin has put a great impact on digital currency as it is made through tight security of algorithms and cannot be hacked easily. Traditional value of Bitcoin was 1lakh rupee which means 1 bitcoin=1,00,000. But unfortunately its value is decreasing day by day.bitcoin can be

purchased and whatever the transactions would be that will be recorded in ledger book in order to remove duplicate .transactions can be publically done but the information of the person is hidden. How bitcoin can be rewarded put a good question among us? the answer to this question is the person who can maintain the lengthy and detailed buying or selling transactions in ledger could reward bitcoin as complementary.(King, 2013)

Till now there are 2.1 crore bitcoin in the whole world but the supply of Bitcoin decreasing day by day .bitcoin has not only put its real impact upon internet apart from this person they are doing transactions in the actual market as well.(Wu, 2017) Due to bitcoin's relatively slow payment verification, it is particularly problematic for business that requires fast payments, such as video on demand services or fast food restaurant .in this kind of business the time needed between payment and delivery is usually too short to wait for a transaction confirmation very first transaction takes place in Indian market just to buy pizza. Not only India but different countries also doing transactions in the same manner as Dell is using its own system of Paypal through bitcoin and one can also purchase Microsoft software through bitcoin. (Tschorsch, 2016)

Bitcoin Transaction

Now in this section, a major question arises that how payments to be done through bitcoin? The answerer to this question is payments are done through bitcoin accounts. Transactions take place one should know the source address and other destination address. Bitcoin transaction works through blockchain.(Bakar)
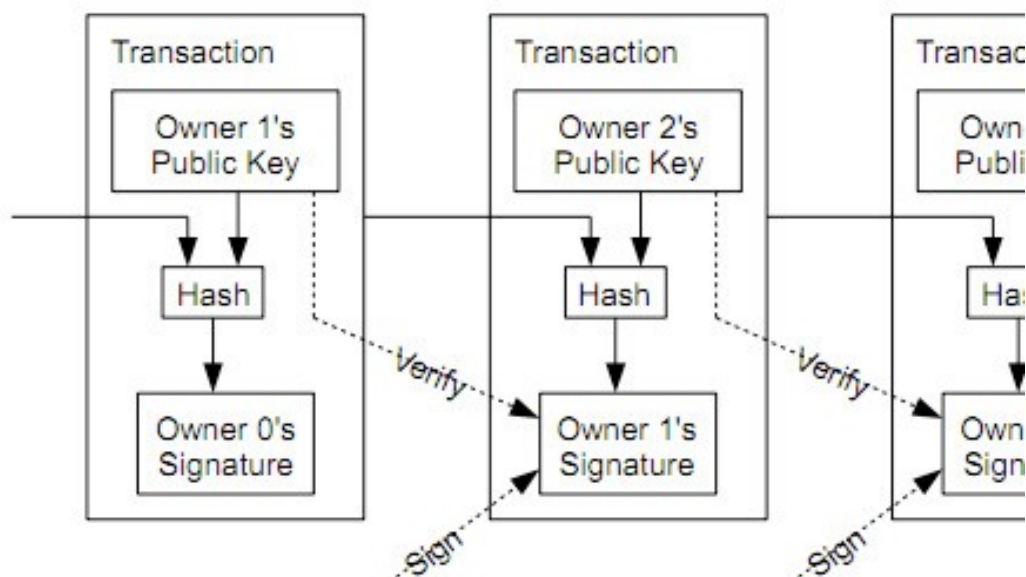

Figure 2 Explanations about chaining of transactions(Satoshi, 2018)

Blockchain network

- The process of blockchain is used across various technologies and trends for different purposes .blockchain introduced in the year 2008. Blockchain became the medium

through which transactions, as well as management, was introduced. Now the purpose of blockchain increasing day by day.(Kumar, 2008) Every blockchain has multiple transactions as a part of it and new block gets created off on regular intervals. All these blocks are interlinked and formed a chain called Blockchain.with increasing every year 500 blocks gets created which means every 10 minutes 1 block gets created.(Rey, 2018)

Blockchain technologies are as:-

• Peer to Peer network

• Harsh Encryption

• Proof of work

• Blockchain Program

Where is Blockchain being basically used? Bitcoin can be used in Bitstrore, Coining,Swiss Pharmacy and all transactions that one is performing. In India the bitcoin is not growing fast .this is because of lack of trust issue among people.(Beck, 2016)

Conclusion

The basic idea or purpose of Blockchain is to make a digital currency one can use currency in a digital way. where transactions are gone through a peer-to-peer network.Every transaction used under Cryptography that ensures tight and heavy security.(Sun, 2017) One of the advantage of using such way is to digitalized all transactions and keeping record of the transaction in ledger form. Apart from this introduction of Blockchain technology seems to be an interesting framework of the network. India is not using Bitcoin because of trust issues but besides that international market is using overall transactions through digital currency. Cryptography is a key element that protect the digital currency and transactions take place safely.(Guo, 2016)

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