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Cryptocurrency: Evolution in Finance

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Abstract : Cryptocurrency is introduced to overcome drawbacks in conventional payment methods. It is nothing but digital currency. Cryptocurrency is nothing but a hidden form of money. It is not centralized. Cryptocurrency is potentially stable and secure. Nowadays the growth rate of crypto networks is very high. Cryptocurrency is based on blockchain technology in which transaction history is stored in the form of blocks. A cryptocurrency exchange allowed for hundreds of millions of citizens to become part of the crypto economy.

Key Words: Bitcoin, Decentralized, Digital currency, Finance

1. INTRODUCTION

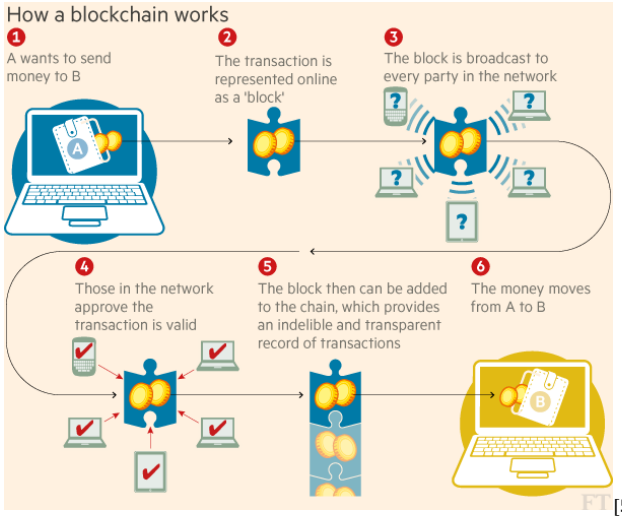
Cryptocurrency is based on three principles: decentralization, pseudo-anonymity and transparency. In 2009 by pseudonymous developer Satoshi Nakamoto was created the first cryptocurrency and bitcoin. Main object of cryptocurrency is to substitute the existing printed currency to give a peer to peer medium of exchange.

1.1 Cryptocurrency

Cryptocurrency operates a peer-to-peer blockchain network .In which information of their transaction gets stored in each block.Every transaction block is protected by hash method so the hash in each block is linked to the block which is previous to it. Because of the nation-wide defense mechanism, any threat may need to involve every parental block, which are hard to detect.By that way Cryptocurrency is often more secure than conventional financial transactions. Also, there are different servers to try and make transactions and all members are considered equal.

1.2 Blockchain:

A blockchain may be a digital record of transactions.Blockchain technology acts as a static spreadsheet that keeps transactions in a long series of hash-connected blockchains[1].The blockchain contains total information about addresses and balances of the block of every first transaction ever executed to the recently completed block. For example, you can see your own wallet address to see all the transactions from which you receive the first bitcoin.



[5]

1.3 Bitcoin:

Bitcoin is a digital currency, where the records of all transactions are in a decentralized system. Its transactions are peer to peer,instant and anonymous. There are many other cryptocurrencies like bitcoin, which have different protocols and different prices. Supply of cryptocurrencies is limited. The price of crypto depends on the market i.e demands and supply.

There are bitcoin nodes, which share new blocks and transactions among themselves through computers in order to keep every node updated. All bitcoin transactions get announced to all nodes every ten minutes. Every computer gets a challenging mathematical problem to solve, the nodes that solve the problem first, get bitcoin as reward. The computer works as miners(generating new bitcoin).

[4] Bitcoin Transaction

[9] Revolutionary possibilities in cryptocurrency

2. Literature Review:

Research Perspectives and Challenges for Bitcoin and Cryptocurrencies proposed in [1] author Muhhamad Ashraf Fauszi et al, due to the nature of Bitcoin fragmentation and its lack of official specifications, this paper deals with the basic systematic exposure of cryptocurrency. In the review, the authors collect and edit all the previous work associated with Bitcoin, and identify three key components of its design that can be categorized.

New way to secure your cryptocurrency is proposed in paper[2] author Muskan khandare et al., tries to clarify that the majority of users will depend upon biometrics for his or her system security and authorization to enhance conventional cryptography. Today's age where authentication matters over ever before, most users will depend on biometrics in matters concerning systems security and authorization to enhance the convention Cryptography. The paper talks about MFA which may be a system that promises the safety and easy use needed for contemporary users while acquiring access to sensitive data.

Cryptocurrency in paper[3] author Varsha Agarwal proposes cryptocurrency and its flaws and challenges in making it mainstream. Nonetheless cryptocurrency involves risks such as price volatility, which can result in significant losses, which are easily exposed to illegal activities and payments are non-refundable. Cryptocurrency combines great potential to be a long-term digital payment model, which can also help grow the economy.

The inefficiency of cryptocurrency and its cross-correlation is proposed in paper[4] author Wei Zhang et al,the paper investigates nine types of cryptocurrencies with battery performance testing, window analysis and performance indicator analysis, and the results show that each of these market currencies are not effective markets.

Persistence in the Cryptocurrency market is proposed in [5] author Guglielmo Maria Caporale et al, One of the main questions to be analyzed is whether the dynamic behavior of cryptocurrencies can be predicted. This article looks at the degree of sustainability of four major cryptocurrencies: BitCoin, LiteCoin, Ripple, and Dash, and their evolution over time. The data presented in the article indicates that the cryptocurrency market remains inefficient. Consistency means predictability and suggests that trend trading strategies can be used to make unusual profits in the cryptocurrency market.

In [6], author Christian Catalini proposes Blockchain technology and its impact on cryptocurrency, digital economy, cybersecurity and government. It helps ensure top-down data integrity across digital marketplaces and services by reducing the value of transactions and their attribute checks. This provides an opportunity for governments to improve economic and operational efficiencies. It also raises many questions about the mix of these new digital assets and their use for criminal activity.

3. CONCLUSIONS

As we've seen before,Cryptocurrency is the future of finance.Cryptocurrency has gained the attention of many speculators for its growth rate.Time taken is less in case of cryptocurrency transactions. Bitcoins have potential for high returns but have high volatility and also in some cases high losses will be there. Cryptocurrency has great potential to become a digital model for payments, governments can make use of cryptocurrency and make the economy rate higher.The biggest disadvantage of cryptocurrency is if you lose your wallet, there is no way to recover it back.

Although cryptocurrency has so many advantages, there is a lack of awareness about it among the public.

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