A Review Blockchain

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ABSTRACT

Begun in the beginning of January 2009, the blockchain technology got oriented in the world and created one of the historical change into what we call network and cyber security till this day. With every block being solved, the computing power to solve the next block of the chain requires exponentially higher power than the previous block.

Keywords : Blockchain, Computing Power

I. INTRODUCTION

Blockchain technology enables decentralised transactions between two people or nodes in general, wherein there is no involvement of a central authority that governs it. The reason behind it's vast success in the past decade is that when a transaction is made under blockchain technology, such as a cryptocurrency transaction, typically a Bitcoin transaction, a verification is to be made for each and every transaction and must be accepted by all clients involved in the transaction, making it secure and unhackable.

Cryptocurrency:- Ever since the rise in the prices and popularity of Bitcoin, people have always kept an eye towards it, may it be seriously or as a side look. The main concept used here is of cryptocurrencies, which is a form of digital cash or credit transactions. Since Bitcoin was the first to be developed, it is widely recognised. Today there are more than a thousand varieties of cryptocurrencies.

Encryption:- Encryption or encrypting information is known as the hiding or capsuling of information so that no one can view it without the right code or password. This helps in keeping sensitive information safe, both online and offline.

Nodes:- The blockchain today is formed by a network of various computers irrespective of their location in the world. These computers are otherwise called as nodes.

Hash:- Hashes are what give the cryptocurrencies their value. The power of mining cryptocurrencies from their block requires power and it is called hash power. Blocks are otherwise called the digital records stored in the chain of network.

In the modern fast moving world, the man requires two factors in any of the things that they look at, reliability and quality. Expense is also a factor which comes after the above mentioned ones but is eradicated due to the requirements and the credibility of people. Under such circumstances, development takes place at a faster pace than usual with no hindrances setting them back.

Blockchain is one of those technologies which is decentralised, meaning that there is no particular authority controlling it. Everybody is their own boss

until the inflow of cash does not stop. Also, the risks come at their own costs. Developing a technology also means that we must find a appropriate security to withstand the current quality.

The brainchild of blockchain is known by the pseudonym, Satoshi Nakamoto. It records everything that is of any value virtually. Also the transactions made under this do not have any hidden charges. They are visible to everybody across the world who still are defied from being able to do anything about it.

Multiple computers are used as nodes from all across the world in order to multiply the hash power acquired to improve the speed of the mining of cryptocurrencies. These currencies are later utilised to transact all across the world. Certain blockchain technologies, such as DASH (name of a cryptocurrency), are also used so that there is complete anonymity of the transaction that you make. The future of blockchain technology lies majorly into two fields:-

Banking

Modern banking technologies lack the required security such as vulnerability to password hackers, and in certain countries such as the USA, the popular AMEx cards do not have an OTP (one time password) security system. They depend upon trust and casualties are frequent, with the modern carding (cracking credit cards) technology has come up.

Ethical hacking and Social networking

With the increase in your profile to the outer world, exploitation is a common threat. A minute (incredibly small) upgrade in the hacker's network needs an exponentially higher securing systems and software development to counter in order to prevent the wrong happenings. While blockchain is mainly financial, peer-to-peer networking is very crucial in this field. The word blockchain itself is just as impossible to hack,

by which it means that developing a technology to penetrate the walls of blockchain is an absolute dream as of today. They use a cryptographic fingerprint unique to each block.

While it's yet to be put into a full fledged use, considering the options for dependability on blockchain technology is higher. The ratio of risk to reward is way higher than what humans rely upon this day on antivirus softwares, automated testings and many similar defence systems. When human error comes into play or an insider manipulates information or systems in the supply chain, the blockchain could resolve issues by automatically sharing any suspicious activity down the line.

Vulnerability is often an issue in any networking sector. Blockchain fulfills the requirement by encrypting the data, where you have no particular access to any document on the network without a proper access code.

With all these factors to consider, blockchain is a promising technology for the future which is believed to achieve wonders when placed in the right hands. It lies in the future to accumulate the resources and comprehensively understand the technical and oriental usage of it.

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