

Advancing Societal Development and Enabling Social Transformation through Blockchain Solutions

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Abstract— Whenever we all are casting a boat how do we make sure that the person or the purpose you vote gets the boat do we have any proof ?From United States to India to many democratic countries people have insecurities after casting their vote.Over here Blockchain technology can be used.

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I. INTRODUCTION

Blockchain is a distributive database which has records and these records are called block. Blockchain was invented in 1991 by some researchers to keep time span for digital documents so that nobody can change the information. In 2009 Satoshi Nakamoto invented a bitcoin which is a digital cryptocurrency.

Method:

A block consists of 3 parts data, unique hash value and previous block address and its hash value changes whenever a new data is added or changed and easily to identify who hacked into the system. Blockchain are of two types:

- ☐ Public blockchain
- ☐ Private blockchain

Public blockchain: Public blockchain is open to all and can be accessed by anyone. Many companies or organizations don't keep public blockchain because anyone can misuse the information.

Private blockchain: It is the opposite of public blockchain and has a private key to access it.

The above image is the architecture of a blockchain.

Proof of work:

If John want to send 50 dollar to Steven so John will go to bank and send the money to his account and it will take 3 days and some transaction fees. Over here blockchain

technology will ease their life as John will create a public block of 50 dollar and he has both public and private key which has a length of 256 bits, due to this John don't need to be any verification from bank because of proof of work which is also known as Distributed Trustless Consensus.

Potential uses of block chain technology:

- ☐ Banking
- ☐ Real Estate
- ☐ Legal contracts
- ☐ Online Voting
- ☐ Stock Traing
- ☐ Food Production
- ☐ Airlines
- ☐ Personal Identification

II. CONCLUSION

Blockchain technology is a decentralized concept where transactions or smart contracts are maintained in a public ledger which is copied all around the world in different nodes. On a single blockchain, every transaction ever made is available. Anybody can check them using blockchain software. Its scope is as wide as internet goes. For any kind of communication, data base, decentralized system will maintain the consistency as well as the verification process, removing the middle men needed for either things.

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