

Blockchain technology in electronic voting

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As elections are approaching in a year in central as well as state our focus of attention are shifting towards technology. Its prime responsibility of a citizen to know about the candidate and vote i. e. to check how secure is our voting systems and how technology can be used to secure them. As few months back Election Commission of India conducted Electronic Voting Machine(EVM) hackathon because of rise in allegations of tampering the EVM by political parties have definitely planted the seeds of mistrust among the people. And there are certain studies also which says that the hardware and software of EVM can be manipulated easily. In past 2 years the one word which we are crossing in our daily life is “ BLOCKCHAIN”.

Everyone thinks it will the change the tech world. But everyone is thinking in the aspect of finance only and most of the research also done in the finance field. I accept it has greater advantage in financial sector but other than also it can be used and one such is supply chain management and slowly they are implementing in that field also. Recently a company called de beers has started building supply chain for diamond. For a very long period of time we used paper based voting system and a decade back only we shifted to EVM considering it as a safest one. But it has proved that even that also can manipulated. As we are moving towards Digital India why can't we conduct in digital voting? And this post speaks about the blockchain technology in election.

One of the major concern for going digital voting system is security issues and that too in the current world everything in digital space is at stake. There are numerous example like recently hackers has posted the aadhar no of a bureaucrat in India etc., this is were the idea of using blockchain

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technology in election arises. Blockchain is distributed database where each transactions forms a chain of block. It is difficult to for hackers to hack the block since each of them are interlinked so if someone wants to change the something which is already recorded he has hack the entire millions of block simultaneously which is not possible except in dream.

How Blockchain technology can be used in digital voting: Basically blockchain technology is transparent and distributed where anyone can check the data which is recorded. Usually central authority only will manage the voting process which included recording, checking i. e counting of votes. But in Blockchain based voting all tasks will be done by themselves i. e. by platform and result also will be counted instantly and copy of record will be saved in the database where anyone can access the data. This is the advantage no one can change the registered vote. Illegitimate voters also cannot be added since anytime anyone can check the data. And as usual anonymity is also protected. By casting vote which will be recorded as transactions we can create a separate blockchain platform where we can keep track on the no of id's registered and votes polled. In this way also we can avoid illegal voting. So two separate platform has to be maintained. One is for who has been voted and other is to what has been voted. And moreover it is not a new concept few countries have already done the testing of digital voting through blockchain.

Countries like South Korea, sierra Leone, Virginia etc., have used as a pilot project and succeeded also. If it is possible there then definitely we can also try. That too country like India where using of smartphone is increasing day by day (as per as IAMAI report it is expected to reach 478 million by this <https://assignbuster.com/blockchain-technology-in-electronic-voting/>

year-end) and we all have our Unique Aadhar ID as well it is feasible to use blockchain and it can be tool for fighting against voter fraud and authenticity of voting can also be increased. Already we have e-kyc system where data of most of the people are recorded already and it has become an important also. As the basic infrastructure is already available we can utilize it properly by proper research on the field. Investments in technology is also increasing as of 2016 there are 32 blockchain firms in India as per PwC. Because of the encryption mechanism it is almost impossible to control the network without taking control of entire network. As the threat to current system is also increasing it is good to test the technology.