Digital Voting System Based On BlockChain

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Abstract: The voting system take place in every country every cites and every village every country has the robust and the stable way of organizing the election so that the people can give their vote to A appropriate person, as we talk about the modern technology every thing should be according to the modern world as today we Are Been living in a technology world every day new invention we come to see rather than that in the era we have Saw that the election are taking place in the polling station stations every individual person goes on polling station to give the vote and select their leader But it Consumes large number of time people have stand in a Queue for vote and for those who cannot come due to some work than there vote is empty in order to evolve this system can come across the many ideas which consume less time and people can give their vote at the place where they are it is only the digital voting system in this system one can give the vote there vote where there is net connection or by the smartphone application so on this system is build by using the blockchain technology it can also be replaced by the traditional solution as today the foundation of the blockchain has received the at mentation in present day it can be used in the number of fields such as in ATMs bank security so on however the blockchain has been developed by the many techniques some techniques are mathematics algorithm and the many more techniques this provides the description of digital voting system based on the blockchain.

Keywords: Digital voting system, digital voting system based on block chain, proposed system & architecture working of the system

I. INTRODUCTION

Digital voting system can be seen as tool for increasing trust in the managing system it can increase the security of the ballot and process the result speedily that make easier for the voting ,however the challenge overcomes if it is not planned and designed properly digital voting system uses for casting the vote and also for counting the votes it uses the standard machine where there is net connection the vote can be given by the particular person the vote can also be given by the common connected household devices hence the votes which will be given by the people can be also saved in the database and the result can be occurred within the minutes hours after the completion of the election. Digital voting system is a software platform which allow the groups to conduct the vote in a separable manner in one time it can control the multiple votes if the same person who had already given the vote if tries to give the vote one more time he/she cannot give the vote because the data which has been saved will detect that the person has already given the vote . In very short time period the block has become a very important technology it does also have a future implication in the online system which range from finance to the medical field and also for the security of military purpose the blockchain is composed of structure of data blocks where all the individual blocks hold the data individually. This system is full of trustable it cannot be cheated, and it also plays a very essential role in building the digital voting system in which the blockchain distributes the individual voting information across the hundreds and thousands of computers for making it impossible to delete once caste the vote. The blockchain approach trust between the votes given by the people and the government by keeping securely data of the voters , the main purpose of this system is that it allow every citizen to caste the vote through the web application rather than going on polling station. Individual person can also verify that there vote has been recorded also the whole process of the voting.

II.PROPOSED WORK

For designing the architecture I have tried to create a system that does not replace the current polling station system, but it integrates itself with the current system which we have been using since today. The work which I decided to do as because most of the peoples are familiar with system.

II.I SYSTEM ARCHITECTURE

The first step of the design is the registration and verifying the voter within the security of the system .Taking sure that someone identity has been misused for the fraud purpose it important while the voting takes place. To allow the user to

register the vote the information provides by the user is to check while he belongs to the same identity and also whether he is eligible to vote or not.

The system architecture is given below in the Figure 1. Each block are been describe in this section.
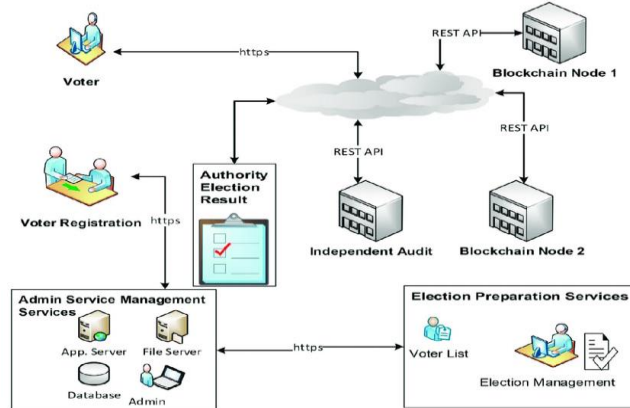

Fig . 1 Proposed System architecture

III. WORKING OF THE SYSTEM

The system work according to the voter identity before the election all the voters should register their identity accordingly with all the required filed the user would also get a login credential by registering in the portal as the figure.2 shown in below.
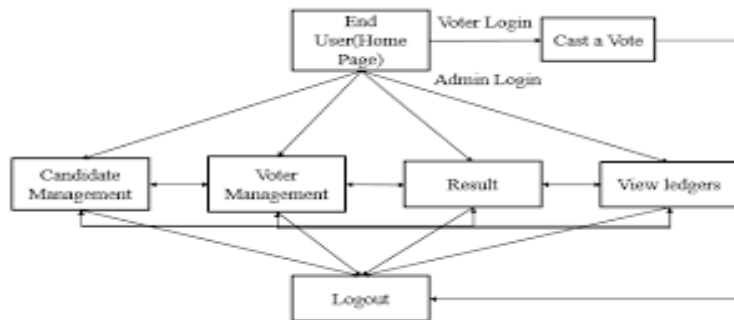

Fig . 2 Working of the block chain

IV. HOW BLOCK CHAIN TRANSFORM THE DIGITAL VOTING SYSTEM

Block chain fixed the short coming in the todays methods of the election it make the polling mechanism clear and accessible it has stopped the illegal voting , strengthened the protection of data. Whereas the implementation of the digital voting method in block chain is very significant thus it has not been adopted for the national scale as today there is a solution to overcome the risk by using the block chain technology int the Figure 3, we can see both the difference of the system , in the traditional system everybody has central authority to caste the vote if some one wants to change or modify the record of the vote they can do it quickly but in the blockchain voting system one does not know that the where is the data has been stored of the votes
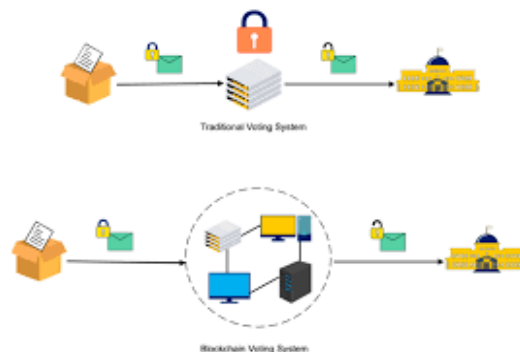

Fig . 3 Traditional vs block chain voting system

If the blockchain technology is being used correctly than it would be the digital , decentralized and transparent ledger that can manipulate the fraud because of the distributed structure of blockchain it reduces the risk which is involved with digital voting and allow the proof for the voting system. Digital voting system work only where the online voting system is fully controlled not even a single body nor even government.

V. CONCLUSION

In this project I had introduced the Digital voting system based on the blockchain also compared with the traditional system blockchain digital voting utilize the smart contracts to enable secure and the cost-efficient election as it is system in which the process are taking place very securely and also one cannot make a misuse as this process are taking place under the every single block ,there are also many aspects of blockchain which can also be used in a great number of ways. The transparency of the blockchain enables to understand the auditing process of the election, as this project export the potential of the blockchain technology and is very useful for the digital voting system it will be publicly so that one can even try to corrupt it.

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