GLOBAL WIRELESS E-VOTING SYSTEM

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Abstract: As we are seeing much better growth in technology but we don't see that its level is being properly utilized in the voting system. The present voting system is highly unsecured and it's not efficient in utilizing the current technology i.e., It can't determine that the person who come for voting is eligible or not, it just depends on the voting in-charge officer in the booth. Here there is also a possibility to boost the vote number as the vote count lies within the piece of equipment and if the in-charge officer is corrupted, he has the chance to do it, even while transporting the machines to the strong room. Hence we can't rely on it any more. In the projected system, i.e., "Global wireless e-voting system", machine is made smart that it can find out whether the voter is qualifiedfor voting or not with the help of scanning the eye pattern of the voter and also the vote count is not maintained in the machine itself .Vote count is made to be stored in a remote server by converting them into radio waves. Hence there won't be any scope of escalating the vote count. Even the machine fails; there won't be any problem to the votes that are casted as they are saved in the server. By this we can reduce many problems regarding the present EVM's.

I. INTRODUCTION

India is a Secular, Socialist, Democratic Republic and the largest democracy in the World. Having a constitutional democracy with a parliamentary system of government, and at the centre of the system lays a obligation to hold standard, free and fair elections. The body of voters exceeds 605 million; voting in nearly 800,000 polling booths, extend across extensively varying geographic and climatic zones. Even in the snow-clad mountains in the Himalayas, the deserts of the Rajasthan and in meagerly populated islands in the Indian Ocean also polling stations are available. In democratic countries, voting plays a vital role. Hence we should adopt a perfect voting system , which should be efficient and secured. People now days need more comfort and they need things to be done so easily. They don"t want to go to their respective constituency to cast their vote. They want everything to be done without troubling their comfort. This is also one of the reasons for low polling percentages. Hence with the help of current technology, we can meet their meet their requirements by allowing them to cast their vote in hands with their mobile phone. By this we can also increase the voting strength. To provide solution to all these hurdles we propose "Global Wireless E-Voting System".In India decision has incomparable weight age. So to make it secure and proficient in the vision of current innovation we are "Global Wireless E-Voting". In the time of innovation, the casting a ballot machine, which is available today, is exceptionally unbound. Being in the period of Computers we are trading off the security by selecting Electronic casting a ballot machine in light of the fact that in the present electronic casting a ballot machine isn't clever that is it can't decide the individual sought the casting a ballot is qualified or not . that is why a secure voting technique is required for voting.Global wireless e-voting refers to the use of electronic voting systems that enable people to cast their votes using wireless communication technologies from any location around the world.

This type of voting system utilizes the internet, mobile devices, and other wireless technologies to enable voters to cast their ballots remotely.The concept of global wireless e-voting has gained popularity due to its potential to increase voter participation, improve the accuracy and efficiency of the voting process, and reduce costs associated with traditional voting methods.However, the implementation of global wireless e-voting also raises concerns about security, privacy, and the potential for manipulation or hacking of the voting system. It is important for governments and election officials to ensure that these systems are designed and implemented in a way that protects the integrity of the voting process and ensures that every vote is counted accurately and fairly.Overall, the use of global wireless e-voting has the potential to revolutionize the way we vote and make the democratic process more accessible and convenient for people around the world.Global wireless e-voting refers to the use of wireless technology to facilitate electronic voting on a worldwide scale. This type of voting allows voters to cast their ballots electronically using a variety of devices, including smartphones, tablets, and computers.While global wireless e-voting has the potential to increase accessibility and efficiency in the voting process, it also raises concerns about security and privacy. Critics argue that electronic voting systems may be vulnerable to hacking and other forms of cyber attacks, which could compromise the integrity of the voting process.In addition, there are concerns about the transparency of electronic voting systems and the potential for voter fraud. Without proper safeguards and oversight, it is possible that electronic voting systems could be manipulated or tampered with, Ashok Kumar et al evaluated ,Sometimes called a "document ballot voting system," leading to inaccurate or fraudulent election results.

II.   LITERATURE SURVEY

paper-based voting systems originated as a system where votes are cast and counted by hand, using paper ballots. With the advent of electronic tabulation came systems where paper cards or sheets could be marked by hand, but counted electronically.[1]

Chodhari Pradeep et al evaluated that,Electronic voting systems may use electronic ballot to store votes in computer memory. When electronic ballots are used there is no risk of exhausting the supply of ballots. Additionally, these electronic ballots remove the need for printing of paper ballots, assignificant cost.[2]

In our system we are trying to keep counting of votes in to a remote secured system. In this system we are using a electronic circuit which enable the voter to vote and transfer this vote to the remote system by converting it to radio wave through the mobile towers. The person who came for voting is eligible or not checked by machine itself, Corruption is eliminated by using this process. So automatically corruption may under controlled. This machine totally change the thinking of man. Machine itself can detect the eligibility of candidate. Even if the machine is damaged we need not to go for re election. A person even can vote from INTERNET and also from mobile system. We can vote from anywhere even though being a voter of another region.[3]

RETINA SCANNING: Retina scanning is a biometric technology used for identifying and authenticating individuals based on the unique patterns of blood vessels in their eyes. The retina is the thin layer of tissue at the back of the eye that contains photoreceptor cells that detect light.Retina scanning involves using a specialized camera to capture an image of the unique pattern of blood vessels in a person's retina. This image is then analyzed and compared to a pre-existing database of registered retina patterns to identify the person.Retina scanning is considered a highly accurate and secure form of biometric identification because the pattern of blood vessels in a person's retina is unique and cannot be easily replicated. It is used in a variety of applications, such as airport security, access control systems, and medical diagnosis.

III.   WORKING PRINCIPLE

Whenever voters came for voting booth then he will be suggested to directly look at retina scanning machine at this time the machine scans the retina. Once retina scanning accepted then it sent signal to the voting machine as to accept the vote it will be powered on .then voter is made to vote. Now the whole data including the retina pattern is sent to interfacing device which is convert into radio waves of mobile frequency range and these radio waves are sent to mobile tower and then to the remote server, where the authentication and voters identification is stored into a secured database.

The output data is first converted into digital pattern from the radio waves through the interface device kept the server side, and then retina pattern and vote separated. Next the retina pattern is compare against the existing database. If match is found then flag is check which indicates its voting status i.e. if the voter is not voted yet then positive ask is send to the mobile tower and then to the corresponding voting machine. This ack is recognized by the receiver kept at the voter side and machine is made to scan next retina attern and vote, otherwise if–ve ack then alert alarm is made to ring
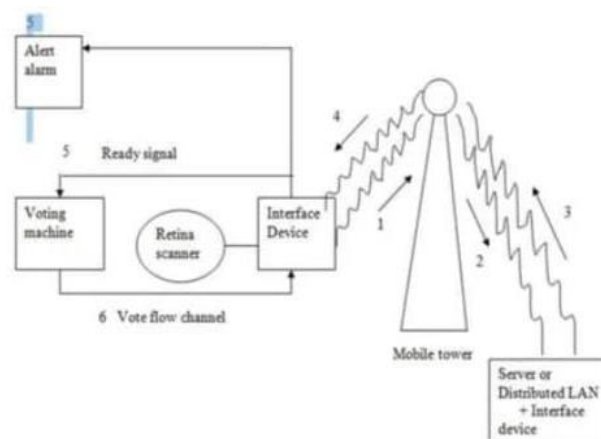

Fig 1 operational block diagram

IV. ADVANTAGES

- Accessibility
- Efficiency
- Cost savings
- Increased Voters turnout

V. APPLICATION

- **Enhanced Security:** With the use of advanced encryption and authentication technologies, global wireless e-voting can provide a high level of security for electronic voting systems. This can help prevent fraud, hacking, and other types of cyber attacks that can compromise the integrity of elections.
- **Faster results**: Global wireless e-voting can speed up the vote counting process, reducing the time it takes to declare the results of an election. This can provide a more timely and accurate outcome, which is important for maintaining public trust in the electoral process.
- **Improved-accessibility:** Improved Accessibility: E-voting can make the voting process more accessible to individuals with disabilities. Electronic voting can provide assistive technologies such as screen readers, which can help blind or visually impaired individuals cast their vote.

CONCLUSION

This process of voting can be done at any place. The machine which we will be going to use in this process will provide higher level of security, authentication, reliability, and corruption-free mechanism. By this we can get the result within minutes after the completion of voting. Smallest amount human resource deployment takes place. It also saves huge amount of materials like papers etc. Hence with the utilization of this process we can increase the polling percentage with the reliable, error free, secured and efficient voting.Thus this machine can be used for any level voting purpose. The machine provides high level of security, authentication, reliability, and corruption free mechanism. By this we can get result with in minute after a completion of voting. Minimum manpower Utilization, hence mechanism.

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