

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Global Wireless E-Voting

Sri Vani E N¹, Trupthi S²

Professor¹, BE, E&C Engineering, SJC Insitute of Technology, Chikkaballapur

ABSTRACT

Technology is developing far more quickly than it used to, but the voting system doesn't seem to be making the most of it. As it relies solely on the voting in-charge officer in the booth, the current voting system is extremely unsafe and inefficient in making use of available technology. That is, it cannot identify whether the individual who comes to vote is eligible or not. If the officer in charge is corrupt, he has the opportunity to manipulate the vote total even while moving the machines to the secure room. This is because the vote count is located within the apparatus. We are thus unable to depend on it. For the system that is being planned, can learn can determine if a voter is eligible to vote by looking at their eye pattern; also, the system does not keep track of the number of votes cast. Vote counts are converted into radio waves and stored on a distant server. Hence there won't be any scope of escalating the vote count. Votes cast won't be affected even if the computer malfunctions because they are stored on the server. This will help us to lessen a lot of the issues with EVMs.

Keywords: Retina pattern, technology, secure, efficient, remote server, etc.

1.INTRODUCTION

India is a Secular, Socialist, Democratic Republic and the largest democracy in the World. possessing a parliamentary system of government and a constitutional democracy, where the duty to organize regular, free, and fair elections is central to the system. More than 605 million people cast ballots, using about 800,000 polling places spread over widely disparate geographic and climate zones. Even in the mountains covered in snow. There are voting places in the Himalayas, Rajasthan's deserts, and numerous inhabited Indian

Ocean islands. In democracies, voting is very important. As a result, we ought to implement an ideal voting system that is safe and effective. These days, people want things to be easier and more comfortable. They are unwilling to travel to their separate constituencies in order to vote. They desire everything completed without interfering with their comfort. Additionally, this is among the explanations for the low survey rates. Therefore, we can satisfy their needs with the aid of modern technology by enabling them to cast their ballots in person using a smartphone. We can also strengthen the vote by doing this. In order to address each of these obstacles, we suggest the "Global Wireless E-Voting System."

2.EVM SYSTEM AND CONVENTIONAL SYSTEM

2.1VotingviaBallot

A ballot voting system was employed in the past and is still in use in a very small number of locations now. Voting papers with the list of candidates, party names, and symbols were distributed to the public. Voters only needed to place the candidate's Swastika symbol on the ballot to indicate which one they supported. It had a lot of drawbacks. There was no security on this system. It wasn't a financially sensible one either.

2.2 EVMs, or electronic voting machines

The Electronic Voting Machine (EVM) is the current voting system. Both a control unit and a balloting unit are part of this system. Voting is accomplished by balloting, which allows us to select a candidate by hitting the symbol next to their name. Every vote is stored within the control unit. The control unit is separated from the balloting unit once the voting is over. Following that, no one is able to cast a vote and no one is able to raise the number of votes. The person who validates a voter's eligibility and directs them to the voting machine is known as the booth in-charge officer. To cast their ballot, voters must push the button next to the

2.3 Drawbacks Of The Current Framework

Because the cast votes are stored on the machine itself under the current approach, any votes cast up until that point will be lost if the machine is broken. Since the machine was not made to do so, it will not verify the candidate's eligibility. These kinds of matters will be handled by the voting in-charge officer. In addition to increasing the number of votes cast, a compromised officer has the potential to destroy the voting apparatus. This approach is also costly because it requires officers and a secure location to conduct the election and count votes. In India, conducting elections requires the labor of around 5 million people. The voter is unable to cast his ballot from where he

3. SYSTEM PROPOSED

The votes cast in the Global Wireless Electronic Voting Machine will be saved on a different remote, secure server. Voters use an electronic system to cast their ballots, and this ballot is converted into radio waves and sent to a remote, secure system. Our method is able to scan a voter's retinal pattern in order to verify that they are literate, unlike earlier technologies. We can vote from anywhere and the vote count will not be lost even if the machine breaks. Voting via a mobile device or the internet will only be possible if the voter has a retina scanner.

4. OBSTACLES ON THE IMPLEMENTATION PATH

We've discovered that using this voting approach actually saves time and requires less work from the voter. However, when we put it into practice, we could run across some issues with Security Efficiency. Geographic Issue

5. UPCOMING IMPROVEMENTS

The project can be improved so that SMS can be used on mobile devices. We can raise the percentage of votes cast by using this strategy. However, when it comes to implementation, security becomes a challenge that needs to be solved with the right secure techniques. As the voter casts his ballot in this instance, we can provide him a printed paper with the specifics of his vote. We can lessen the likelihood of fraudulent acts by using this printed paper.

6. SUMMARY

Voting on this matter can take place anywhere. The device that we'll be using Higher levels of security, authenticity, dependability, and a mechanism free from corruption will be made available for use in this process. This allows us to receive the results minutes after the polls close. The least quantity of human resources are deployed. Additionally, it saves a ton of resources, including paper. Therefore, by using this procedure, we can raise the polling % while ensuring secure, effective, error-free voting.

REFERENCES

[1] T. Koho, A. Stubblefield, A.D. Rubin, and D.S.Wallach: Analysis of an electronic voting system, 2022.

[2] Ashok Kumar D., Ummal Sariba Begum T: "A Novel design of Electronic Voting System Using Fingerprint", International Journal of Innovative Technology & Creative Engineering (ISSN:2045-8711), Vol.1, No.1. pp: 12 19, January 2022.

[3]Benjamin B., Bederson, Bongshin Lee., Robert M. Sherman., Paul S., Herrnson, and Richard

G. Niemi: "Electronic Voting System Usability Issues", In Proceedings of the SIGCHI conference on Human factors in computing systems, 2023.

[4]California Internet Voting Task Force: "A Report on the Feasibility of Internet Voting", Jan.2023.

[5] Chaum D: "Secret-ballot receipts- True voter-verifiable elections", IEEE Security and Privacy, 2023.

ONLINE REFERENCES

[6] http://www.ifet.ac.in/pages/intsymp14/ TechnoVision%20'14/papers/IT/IT02.pdf [7]https://en.wikipedia.org/wiki/ Elections_in_India. [8]https://en.wikipedia.org/wiki/ Indian_voting_machines

[9]http://www.seminarsonly.com/Labels/Global-Wireless E-Voting-PDF-Abstract.php