



e-Elections - an alternative to reduce the risk of spread of a pandemic like COVID-19 and also save many resources

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Abstract

In all the republic and democratic countries, elections play a very important role. Elections are considered as the heart of democracy. India being the most populous democracy in the world holds various elections every year. Over millions of people vote actively every year in several elections all over the country. These elections should be conducted fairly, impartially and there should be proper transparency. To ensure fair elections, a whole committee is formed which consists of several officers to keep an eye on the proper and impartial conduction of the elections. Citizens are encouraged to vote and contribute in electing their democratic leaders and advised not to waste their vote. On the polling day, citizens visit the polling booths and responsibly cast their votes. But when contemplated, it comes out that elections cause a lot of issues and disturbance in the society. From extensive use of resources in campaigning for elections to standing for hours in the queue to cast votes, there exist certain problems that are posed by the elections. And during this pandemic of COVID-19, it is better that we find some alternative to the natural way of conducting elections and thus avoid large gatherings of people in election campaigns or at the polling booths.

Keywords: Assembly elections, postal ballots, amendment, e-elections, encryption, unique identification number (UID).

Introduction

The first Indian general election of 1951-1952 was held from October 25th, 1951 to February 21st, 1952. After being independent in August 1947, it was the first election to the Lok Sabha in India¹. There were 173,200,000 eligible voters in India at that time¹. All Indian citizens above the age of 21 were eligible to vote¹. After the Sixty-first Amendment of the Constitution of India known as The Constitution (Sixty-first Amendment) Act, 1988, the voting age of elections to Lok Sabha and Legislative Assemblies of the states was lowered from 21 years to 18 years². Since then, there have been thousands of democratic elections held till date. And the total number of eligible voters has shown a great rise.

In 1952, there were about 50 political parties. This number has risen to 2598 registered political parties, with 8 national parties, 52 state parties and 2538 unrecognized parties⁴. This leads to Election Campaigning at a very large scale. Public Rallies, Public Speeches, gatherings and several such activities are carried out by all the political parties for their election campaigns.

For the upcoming Assembly Elections in Bihar, all the political parties there are conducting elections campaigns and rallies. Most of the people are seen without masks and not following Social distancing⁵. This kind of careless behaviour may lead to a major outbreak in the pandemic spread.

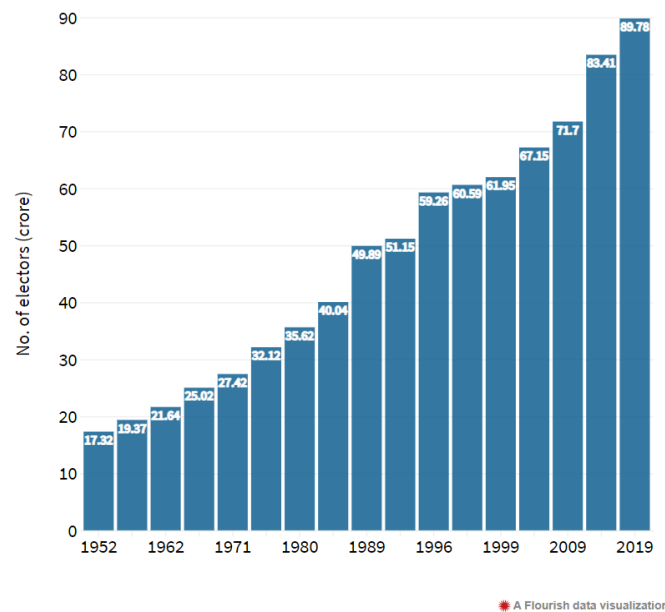


Figure-1³: Graph showing the increase in no. of eligible voters in India over the years 1952-2019.

In India, other than the Bihar Assembly elections, several elections are coming up. Like Assembly elections in Madhya Pradesh, Manipur, Bye-elections in various parts of India and several other elections also⁵. These all elections need to be

conducted with proper guidelines and safety measures to avoid the massive spread of COVID-19 pandemic.



The crowd at a rally addressed by Bihar Deputy Chief Minister Sushil Kumar Modi at Ramgarh in Kaimur district | Twitter: @SushilModi

Figure-2⁶: Crowd at Bihar Elections Campaigns.

The increase in no. of voters also demands a better management of crowd on the day of polling. Amidst the COVID-19 pandemic, it is a great risk to let such a huge number of voters gather at a place. Though most of the people are seen wearing masks and following Social Distancing, many are often found not following the standard guidelines to avoid the pandemic spread.

Several problems like these, keep us thinking whether the COVID-19 pandemic spread will come to a hold or keep spreading massively.

To avoid such issues, there is an idea I came up with which could be an alternative to the election processes. The idea is of conducting e-Elections. Through this, the voters can vote their desired candidates while sitting at home without visiting the polling booths and thus avoiding the risk of being infected with Corona Virus.

Few drawbacks can also be spotted in this system of e-elections. Lack of availability of smart-phones, or devices which can access Internet and the online voting system can be a problem. Lack of knowledge to operate such devices and applications is also an issue. The mobile or web application can also be hacked and manipulated if not provided proper security and encryption.

Upcoming Presidential Elections in the US: In the United States of America, due to the Corona Virus pandemic, it is being made easier for citizens to vote this year by using the Mail ballot system. The citizens can register themselves online and they can mail the votes in the allotted mailing time period. The USA also has a system of Early Voting, if the citizens face certain circumstances that make it difficult to vote on Election Day. Most of the states in the USA follow and allow this method of voting for a long time. The States list time frames and dates for early voting⁷.

But this system of voting is criticized by many, including Mr. Donald Trump. It is said that the method of postal ballots can be time-taking and will require huge amount for proper management⁸. There also can be fraud in using the postal ballot system. If this is infiltrated with fraudulent acts, it can change the whole result of the elections.

Idea of conducting e-Elections: As per my idea, the upcoming elections in India should be conducted online. Whereas the indigenous method of visiting the polling booths for voting should be kept open to the citizens who do not have access to the online voting system.

For e-Elections, a proper Mobile Application or a Website should be designed which will enable the citizens to vote. This will avoid the gathering of people in large numbers for voting and also saving large amount of resources. This will be an ease for citizens to vote while sitting at home rather than standing in the queue for hours to vote.

Opinions of common people over e-Elections: When I presented this idea of mine to some common people and my acquaintances, their response was positive. They said this method would save many resources and also give a relief to people facing problems on the polling day. People face problems in standing for hours in long queues to vote in spite of unsuitable weather conditions and also taking up much of their time⁹. Also it will help in minimizing the risk of Corona Virus spread. Their conclusion was that if this method is adopted carefully and in a serious manner, it will surely help to minimize all these issues.

Methodology

Designing a Mobile Application or a Website is a very easy and common tasks these days. But such a technology for a serious and responsible task like Elections should have proper security to avoid any kind of fraud or scam. Therefore, the main objective will be of providing the online voting platform with strong encryption techniques and security.

As most of the Indian citizens have Aadhar card as the common Identification card, it will be easy to use it as their login credential. Aadhar card has a Unique Identification Number (UID) mentioned on it, which is unique for every Indian citizen. It also has the fingerprint and retina data of the user linked to it. The Unique Identification number mentioned on the Aadhar card and the fingerprint or the retina data of the user could be used to login to the Application. This will be unique to each and every citizen and the Bio-metrics method will also avoid any kind of scam in voting.

After logging-in, the users will be availed options based on their Aadhar card. The options will be their eligible constituencies to vote and the elections being voted on at the real time. When a particular option is selected, they will be able to vote their desired political party or candidate.

The portal for an ongoing election will be open only during the voting time decided by the Election committee.

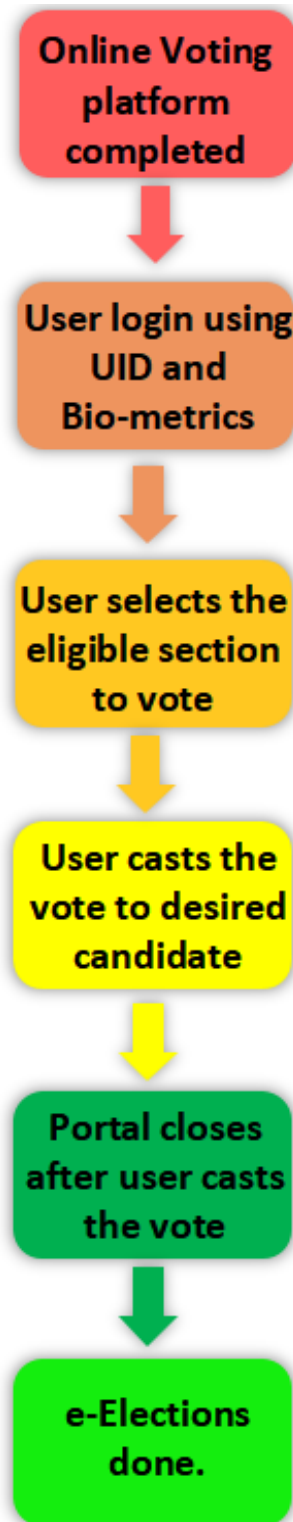


Figure-3: Flowchart describing the functioning of Online voting platform.

The Online voting platform will be set up in such a way that the user will be allowed to vote for an ongoing election only once. After casting the vote, portal for voting will close.

The whole process of conducting the e-elections can be described using the above flowchart. It starts from creating a secure online platform for voting in elections. Then, the user logs in to it using unique credentials. The user votes his/her desired candidate only once before the portal closes. Hence the whole process of e-elections gets completed.

Probable Drawbacks: Along with the positive responses, few drawbacks were also mentioned. They are described as follows:

First issue is, lack of availability of smart-phones, or devices which can access Internet and the online voting system. Lack of knowledge to operate such devices and applications is also an issue.

The platform of e-Elections can be hacked and the votes can be manipulated according to the hacker or the organization operating the hacker. This will lead to the failure of the whole system and it will be of no use.

Solutions to the drawbacks: Citizens who do not have smart-phones or suitable devices or access to the online voting platform can be allowed visit their nearest polling booth and cast their votes. This will solve the first drawback. The online voting platform should be fully controlled by an organization who is completely unbiased. That organisation should pay proper attention to the security and ensure top level encryption methods on the Mobile Application or the website. Using Aadhar card and the fingerprint or retina data as the login credentials also provides a solution to second drawback.

Results and discussion

This method of online voting or e-Elections can prove to be an effective method if launched and followed with proper management. This will help the society in many ways listed as follows :

E-Elections will make it easier for the citizens to vote their desired political parties or candidates by sitting at home rather than spending hours standing in a queue.

Every year thousands of people including migrants, laborers, students and others are not able to cast their votes¹⁰. This is just because it is not possible for them to visit their constituency to vote. The platform of online voting will thus help them to vote from a different city, state or country

E-elections will help save a huge amount of resources being used on the voting day such as: i. Fuel used by all the citizens to visit the pollingbooths and thus helping minimize pollution in a

way. ii. Arrangement of electricity at all the polling booths. iii. Money spent in setting up of the polling booths.

The major benefit of e-elections amidst this COVID-19 pandemic will be avoiding the spread of Corona virus. Online voting system will help the citizens to vote from their homes and thus avoiding crowds at polling booths.

The total process of current voting system includes capturing of public buildings such as schools, colleges and also procuring public vehicles like school buses, transportation vehicles for election purposes¹¹. Thereby causing disturbance in their normal functioning. The Online Voting system will help minimize all these matters.

Conclusion

Lastly, it can be concluded that the idea of e-elections can solve many of the issues faced by the common man due to the current way of elections. If the idea of e-elections is adopted in our country with proper execution and security and the results come out to be successful, it will definitely set an example for the whole world to start adopting this system. This will help everyone to grow with the advancing technologies.

There are certain issues regarding the current voting system going along with the pandemic COVID-19. The Online Voting system will definitely help to prevent the spread of such pandemic.

Surely it takes a lot of time and thinking to take such a big step in such an important matter, so it less likely to see this method implemented soon. But whenever it is adopted in the future, it surely will help the society in many ways. It will make lives simpler and turn the tedious voting system into a easy task which will also be much less time-taking.

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