

The Compendium of ICT Applications for the Conduct of Elections



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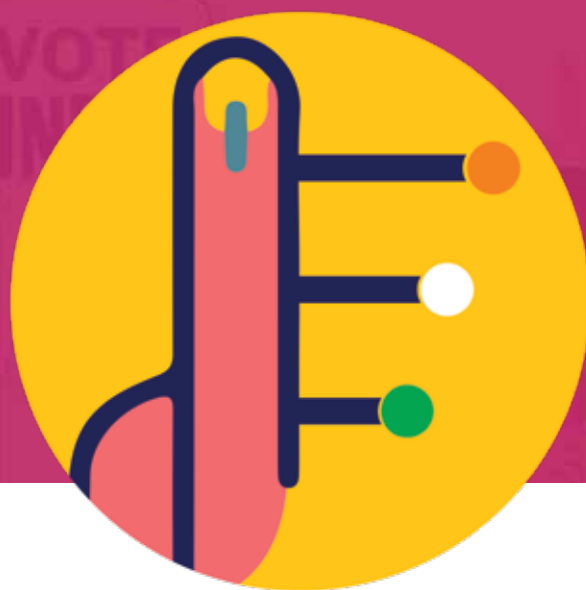


Candidate Nomination Application

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Candidate Nomination is the feeder application on which Candidate Scrutiny and Counting of results depend upon

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Candidate Nomination Application

Background

The Election Commission of India has traditionally been using paper method for receiving the Candidate Nominations. These nominations were then digitized and uploaded. This created several errors in data entry and uploads. Further, each application like that meant for counting will have to again capture the names of the candidates on the application.

Introduction

Candidate Nomination is part of the umbrella app called ENCORE (Enabling Communications on Real-time Environment). The application is the first input module which feeds into Candidate Affidavit Portal, Voter Helpline Portal, EVM stock requirement, counting data and results display.

Once digitised the application displays candidate related information like the basic profile, party name and their original affidavit. The Returning Officer uses the application for Candidate Scrutiny and finalising the list of contesting candidates.

Once the nomination is finalised, the total number of contesting candidate details are utilised by the EVM Management Software for finalising the requirements of the number of EVM / VVPAT machines.

The information of the candidates is then published on the dedicated candidate portal including their affidavit. Similarly, the information punched into Candidate Nomination is also made available through the Voter Helpline and Pwd Mobile App.

The inputs of this module are used during the counting process. The Returning Officer uses the data to enter table-wise entries for each round of declaration. All the reports of candidate declaration, statutory reports and result declaration are all handled, using the base information obtained from Candidate Nomination.

Finally, the results published on the ECI website as also on the Voter Helpline app use information about the candidates from this application.

Functionality

Returning officer digitizes the complete candidate profile (Name, Father's Name, Address, Age Photo), Party details and affidavits that will be available for public and the same information will be used to generate FORM 7A.

The system also allows the Returning Officer to manage multiple nominations applied by the same candidate.

Along with the Nomination details, the Returning Officer needs to upload the scanned copy of Candidate affidavit that will also be available in the public domain for purposes of view and download.

Once the candidate Nomination details are entered in the ENCORE, a unique system-generated Candidate ID and Nomination ID is assigned to each nomination applied.

Different types of Nomination reports are available for the officers such as;

- Date wise report
- Category wise report
- Candidate wise report
- Gender wise report
- Party wise report

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

OS: Linux

Encryption Algorithm: AES-256

Notifications: Pusher, sms and email integration

Outcome

As this is the initial feeder module on which all other modules are dependent, it is of high importance and dependence. Correct data entry at the initial stage in the application ensures that all other applications utilise the correct data. From the starting of the application 40,858 candidates nominations have been digitized which include various State Elections and most importantly the Parliamentary elections of 2019.

The simple interface of the application results in faster and error-free feeding of the Candidate information and uploading of affidavits in the system. The candidate related information is made available in the public domain through Affidavit Portal and Voter Helpline App on the same day when the nomination was applied for.

This application framework will be utilised in future for allowing candidates to file e-nomination directly, thus making the entire nomination process online.



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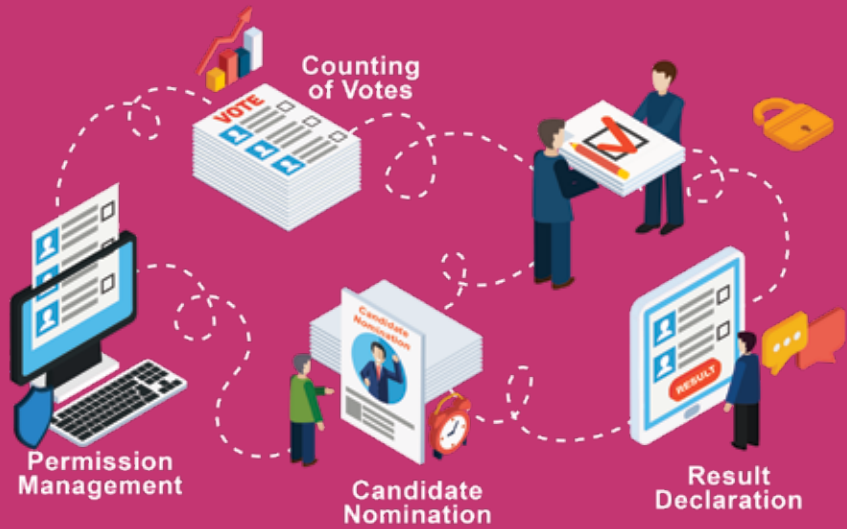


Candidate Scrutiny Application

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*Each Candidate nomination
is verified and the status
is marked as 'Accepted',
'Rejected' or 'Withdrawn'*

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Candidate Scrutiny Application

Background

The Election Commission did not have any application for online scrutiny of the application. Therefore the citizens do not get to know the status of their candidate's application nor were the candidates aware of the status of their applications.

Introduction

It is a part of ENCORE that allows Returning Officers to do the scrutiny of the Nomination filed by the Candidate. Each nomination is verified and the status is marked as 'Accepted' or 'Rejected' and 'Withdrawn' if the Candidate has withdrawn his candidature. This helps the Returning Officer to prepare the final list of contesting candidates and assigning symbols.

While the Returning Officer is scrutinizing the candidate application, the output of this application is displayed to the candidate via Candidate app, to citizens via Voter Helpline and PwD App. Thus both the candidate as well as citizens can follow the acceptance or rejection status of Nomination. The application was launched on 10 March 2019.

Functionality

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Scrutiny of Nominations A simple interface is provided to RO for marking the scrutiny status for each and every nomination received. This is to be done on the day of scrutiny where the Nomination papers and supporting documents are scrutinized and marked as either 'Accepted' or 'Rejected'
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Withdrawal of Nominations After Scrutiny the option is available to mark a candidate as 'Withdrawn' if the candidate has withdrawn the nominations. The Returning officer is provided with an interactive interface with search and filter facility to sort the list of applications and view the complete candidate profile and documents if required.
- 

Assign Symbol Then the list of contesting candidates is prepared and the symbols are assigned to the candidates as per FORM 7A. At any time Returning Officer has the option to view or download the reports to see the list of Nominations applied and the status marked.





[List of Contesting Candidates](#) As and when the Returning Officer marks the status of the Nomination and a final list is serialized and verified with FORM 7A. The Returning Officer has the option to generate FORM 7A in English, Hindi and Regional language through ENCORE.

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

Notifications: Pusher, sms and email integration

Outcome

This module of ENCORE has directly connected to Affidavit Portal and Voter Helpline App and complete information with candidate profile and status of nomination is available in the public domain on a real-time basis as and when updated in ENCORE, by the authorized officer.

The application has removed the scope of any middle man to modify any data. The connection between the Returning Officer and Citizen is direct.

This has established a greater trust among the Candidate and Citizens on the electoral system which is now transparent and widely available.

As of now 40,858 Candidates nomination has been processed through the application across India from its day of launch.



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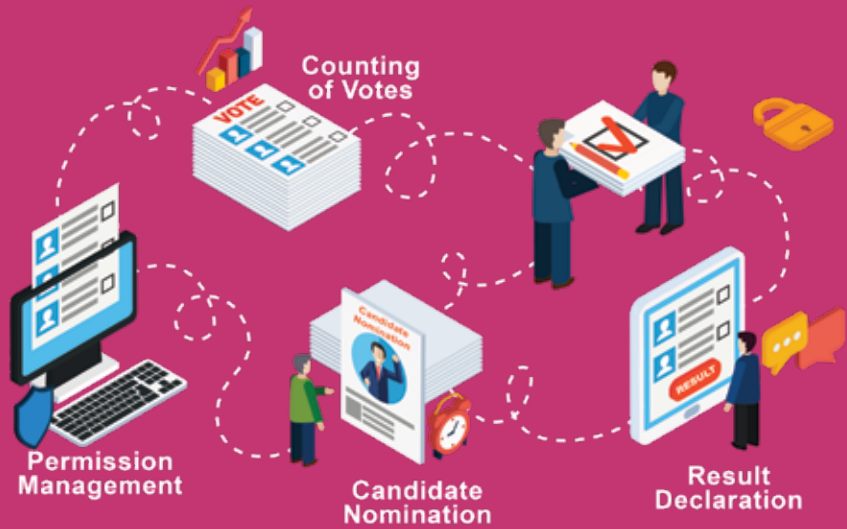


Election Permission Application

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*Election Permission
Application enables fast
disposal of meetings, rallies,
loudspeakers and online
generation of permissions*

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Election Permission Application

Background

The Election Commission of India used an application called 'Suvidha' for giving permissions during the elections. This application was prepared for each state and had limited functionality. The State-specific requirements were not factored into the application. The application was web-only and there was no mobile application to update the status to the candidate / political parties. There had been a persistent demand for state-specific customisation and common login.

Introduction

Political Parties or any individual candidate can apply permissions in online or offline mode during elections using Encore Web Application. Permission module allows the candidates, political parties or any representatives of the candidate to apply for the permission for meetings, rallies, temporary offices, and others. The app goes live after the election dates are announced. Candidates can also track its application status through Encore Web Application and also by using Candidate App from Google Play Store. This application replaced the old 'Suvidha' App and integrated into ENCORE application. It was launched on 10 March 2019.

The valid permissions can be now checked by the citizens using cVIGIL app also. The app

Technology

Web/API Development : PHP-Laravel
framework(LAMP)

Database: MariaDB

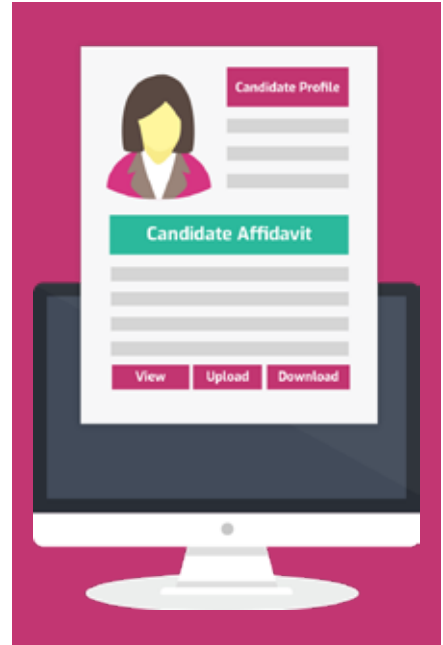
Security protocols: SSL, AES-256 encryption

Notifications: Sms and email integration

Cloud Load Balancer.

Outcome

The Encore Permissions platform has been widely used by candidates in both national and state elections. In 2019 general elections, a total number of permissions were 2,48,737, while on the other hand 77,093 candidates' permissions were received in 2019 state elections.





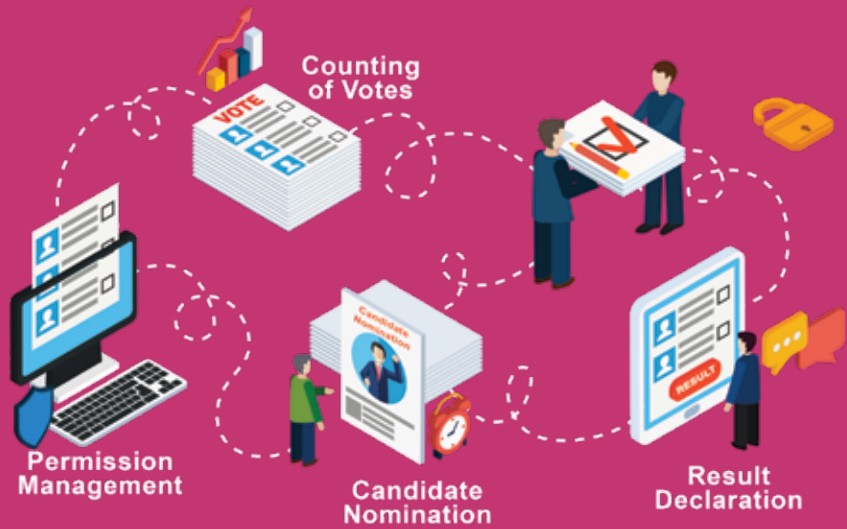


Candidate App

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Contesting Candidates can monitor the status of their nomination and permission status by using Candidate mobile app

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Candidate App

Background

Earlier candidates and political parties were informed about their candidature and permissions status only by way of paper. There was no online method for intimation and the candidate had to visit the office to get the details of their permissions.

Introduction

Presently nomination and permission is filed through a web application namely ENCORE. To make it accessible for candidates so as to check the status and get the updates of his application, the android app can be downloaded from the Google Play Store called 'Candidate App'. The link to download the application is https://play.google.com/store/apps/details?id=suvidha.eci.gov.in.candidateapp&hl=en_IN. This mobile app allows candidates to check the status of their nominations and permissions filed via ENCORE.

This application was launched by ECI on 13 March 2019.

Functionality/ Features of the application

Candidate App is used to track the nomination/ permission application status. Once the application is registered in ENCORE by the Returning Officer, the periodic status updates are available via notifications.



**Application
Status**

**Permission
Rejected**

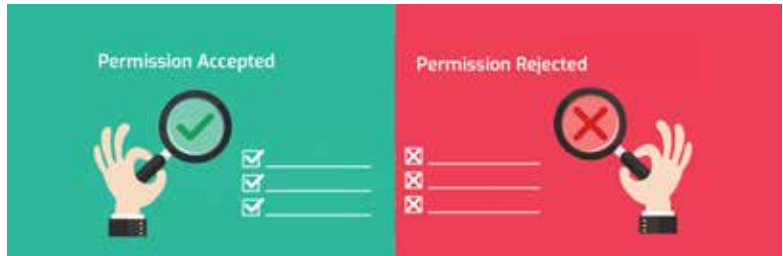
**Permission
Accepted**

Process Flow

User authentication through mobile number and OTP.
Track nomination permission application status.

Technology

Programming Language:
Core-Java
System Software:
Android Studio



Outcome

Candidates can now get the live status of submitted applications, candidates can check and track their submitted applications status using the mobile app which is very helpful in application processing.

The application boosts the transparency initiatives of the ECI. The candidate gets to know on a real time basis whether their application has been rejected or accepted.

In future, the candidate can fill in the nomination and receive permission directly from the mobile app.



ENCORE

**NODAL OFFICER
APP**



भारत निर्वाचन आयोग
Election Commission of India

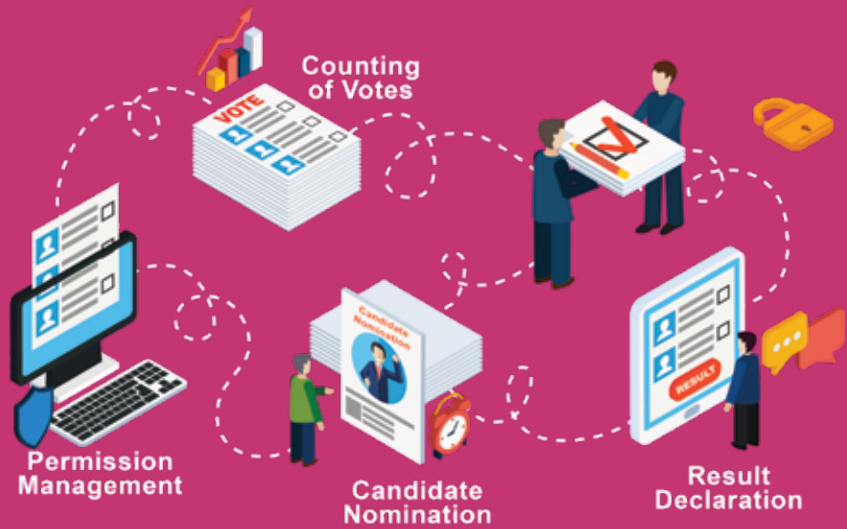


Nodal App

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Nodal app provide flexible ways to Fire, Revenue, Police Departments to give their 'No Objections' for Candidate/ Political parties request for permissions. Returning officer gets aggregated status for early disposal

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Nodal App

Background

Before the latest infusion of technology, each permission required that Nodal Officers of various departments issue No-Objections, before the permission applied for by the Political party / Candidate was accepted by the Returning Officer. The practice in vogue was to call all the nodal officers at one designated place and summarily issue the permissions.

Introduction

Technology has now enabled an integrated app for election permissions. Once the permission is sought from the Returning Officer, then there is no need to seek individual No-Objection from various departments like Fire, Revenue, PWD, Police etc. With the launch of Nodal App, it is no longer binding for officials to sit at one place. All Nodal Officers are registered as part of the ENCORE and they receive notifications on the mobile app, as and when a request for permission arrives. They can accept/reject permissions and upload their status by using the App. Nodal officers can automatically assign and get push notification as the permission is applied for. The Nodal App allows officers to take immediate action i.e. whether Objection or No- Objection is to be granted to the candidate along with reasons for the same.

This application was launched on 13 March 2019.

Functionality/ Features of the application

Nodal Officer will receive a push notification on each permission request. Nodal Officer has to reply within 24hrs and in case the same are not replied to then those permissions will be bypassed to a higher level implying that these can then be replied at RO, ARO, CEO or DEO level.



Process Flow

- 1) User authentication through mobile number and OTP.
- 2) All new applications will be visible in the Open Tab.
- 3) Take action (Objection/ No Objection).



Nodal App login is based on OTP. All new applications will be visible in the Open section. Nodal officers have to take action (Objection/ No Objection) within 24 hrs else that permission will display in overdue section.

Technology

Programming Language: Core-Java
System Software: Android Studio

Outcome

This application has improved the efficiency of the Nodal and Returning Officers for granting permissions during elections. It has greatly reduced the time and clutter.

Secondly, it has provided mobility to Nodal Officers. By using the mobile app, they can transact all the work assigned to them.

A total number of 1,31,355 applications have been processed through the Nodal Mobile app.



Name : xyz
Party Name : pqr
Assembly constituency : abc
State : abc
Application Date: 01-02-19
Current status : **Accepted**

Candidate Personal Details :

Father's / Husband's Name : pqr
Name : xyz
Address : abc pqr xyz 12345
Gender : Male
Age : 37

Bank Details :

Bank Name : abc
IFSC : 1234



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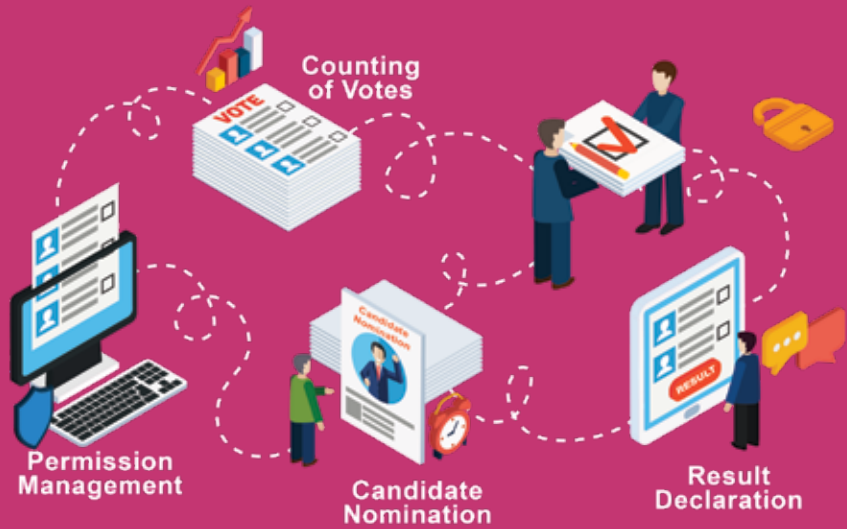


Candidate Affidavit Portal

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*Candidate Affidavit Portal
has facilitated democracy
by allowing voters to make
informed choices about their
contesting candidates*

”



Candidate Affidavit Portal

Background

The affidavit used to be displayed at the ECI website on a separate server. This was a separate exercise to upload the document. There was no link between the affidavit and the candidate profile. Thus finding the name and affidavit of the contesting candidate was difficult.

Introduction

Candidate Affidavit portal is a part of ENCORE that allows citizens to view the complete list of Candidate Nominations who have applied for the elections. To help the citizen to know the candidates, a complete candidate profile with photo and affidavit is made public as and when the Returning Officer enters the data.

Earlier, the affidavit was uploaded separately and there was no link between the affidavit and the candidate profile. With the integration of Affidavit portal in the ENCORE, the process has been simplified and the errors are reduced. This portal was launched on 10 March 2019.

Functionality

For ease of citizens, the information on this portal is under categories as -

Nominations Applied, Accepted, Rejected, Withdrawn and Contesting. Interactive interface features are also provided like filter and search to drill down from state level to Constituency level and Candidate level.



Enter the following URL <https://affidavit.eci.gov.in/>



Latest election is already displayed



Select the type of election Parliamentary/ Assembly election



Select State



Select Constituency



Click on Filter

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

Load balancer



Filing Nomination



Permission

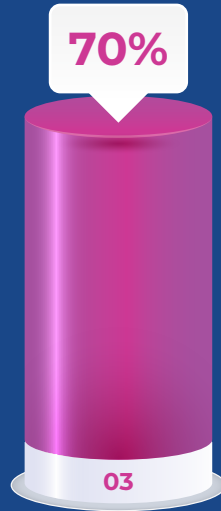
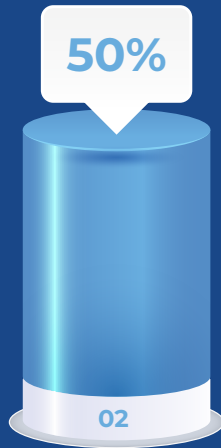


Media Certification

Outcome

It displays the complete list of Contesting Candidates in the sequence as per FORM 7A which is the same as on the EVM machine. The Affidavits and counter-affidavits are available for citizens to view and download. Information such as the size of the affidavit and total download counts is also available on the Portal.

Affidavit Portal has improved the transparency to a large extent by making the original affidavit online. These affidavit are also available from the Voter Helpline Mobile App. Thus citizens are able to read about their candidates at the convenience of their mobile or desktop and make an informed choice.

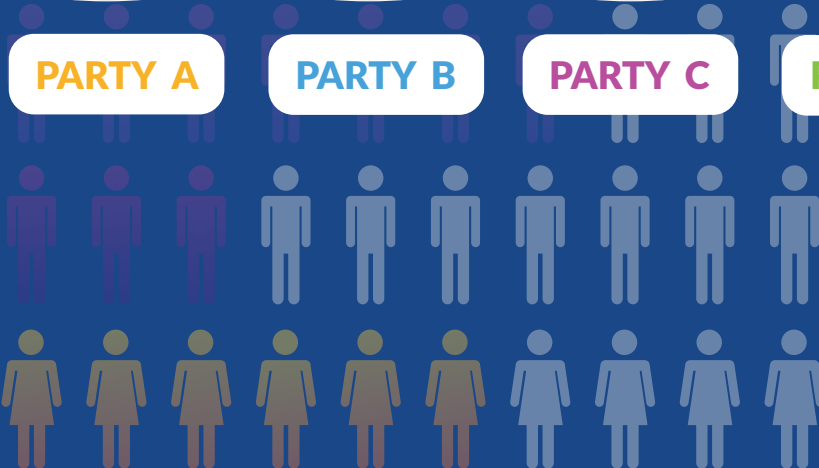


PARTY A

PARTY B

PARTY C

PARTY D



25%

55%

5

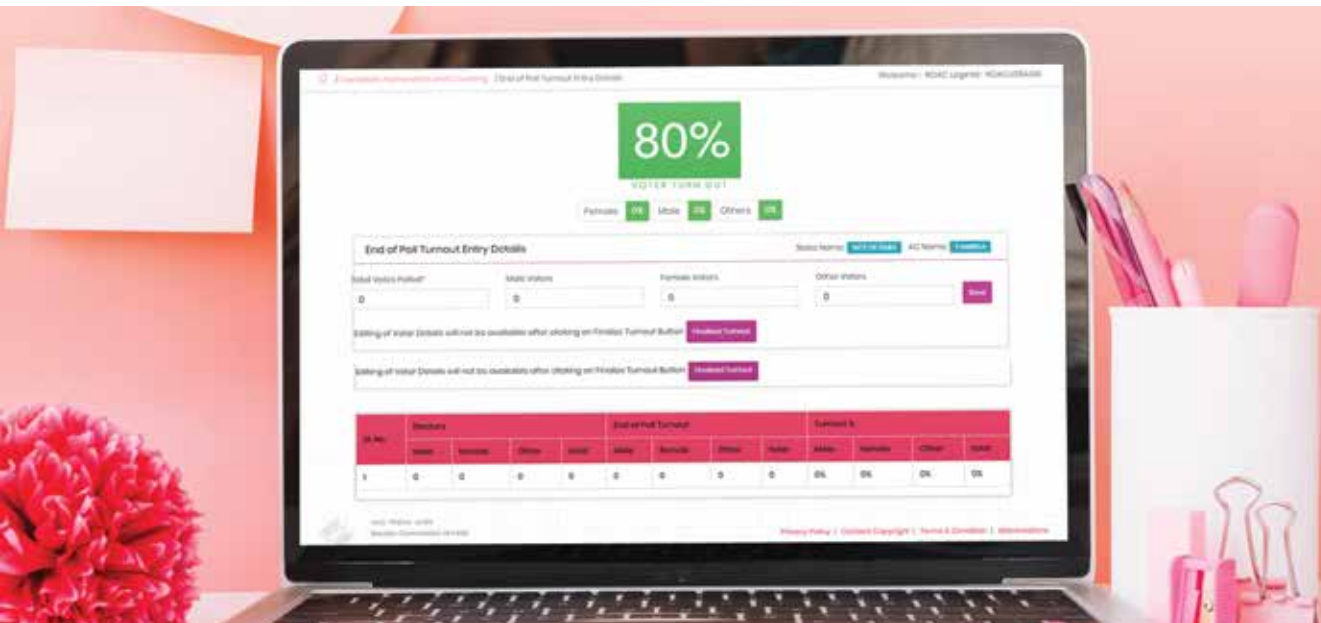


Voter Turnout Application

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*Voter Turnout displays
estimated live date from
polling station about male,
female & others turnout*

”



Voter Turnout Application

Background

Earlier, the 2 hourly voter turnout used to be captured by Returning Officers from Polling Station, thereafter the report used to be sent to District and then to Chief Electoral Officers. The CEO would then compile and send the report to ECI. The media, however, would get the voter turnout only at the end of the day.

Introduction

Voter Turnout was launched mid-way during the Parliamentary Elections of 2019 and it completely transformed the way the voter turnout was shared with the media and citizens. With the launch of the Voter turnout, the turnout is auto-compiled as and when the Returning Officers enter the data. During the day, only percentage voter turnout is entered by the respective Returning Officers. Once the polling party reaches back to the reception centre, a detailed voter turnout consisting of male, female and others are then entered into the system. The Voter turnout app is available both as an android mobile app and also on the desktop.

The Desktop link is here: <https://eci.gov.in/voter-turnout/>

It also helps the officers to analyze the voting trends and take action if any exceptional behaviour is noticed.

Functionality

The mechanism involves simple entry of estimated cumulative percentage turnout through the web or mobile app during the currency of the poll. These entries are to be done without fail in a designated time slot by the Returning Officer /Assistant Returning Officers into the ENCORE Portal.

After the end of the Poll, System allows entry of detailed turnout reports - Constituency wise and Polling Station wise which includes Male, Female, Others gender number against the total number of electors.

This new mechanism simplifies the data entry of two-hourly voter turnout and helps in timely dissemination of the information on a real-time basis.

To ensure timely entries for each Constituency, Returning officers are provided with the option to enter the Poll percentage through ENCORE Web Portal or ENCORE Admin App

The entries to be made

- Estimated Voter Turnout 2 hourly
- Detailed Voter Turnout after End of Poll

Process Flow

Following are the roles and responsibilities:

Official	Role
Returning Officer/ Assistant Returning Officer	Data entry as per the time slot
District Election Officer	Ensuring data entry on allotted time slot And Generation of Report
Chief Electoral Officer	Monitoring and Generation of Reports
Election Commission of India	Monitoring and Generation of Reports

Each Returning Officer is required to make the entries of estimated Voter Turnout in the following time slots:

Poll Turnout Report Timings	Data entry time slot	End Time of Allowed time slot (Entry is frozen after this time)
9 AM Report	7.30 AM to 9.30 AM	9.30 AM
11 AM Report	9.30 AM to 11.30 AM	11.30 AM
1 PM Report	11.30 AM to 1.30 PM	1.30 PM
3 PM Report	01.30 PM to 3.30 PM	03.30 PM
5 PM Report	04.30 PM to 5.30 PM	05.30 PM
CLOSE OF POLL	Anytime after 3 PM	Not Frozen

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

Notifications: Sms and email integration

Load balancer



Outcome

This simple and time-bound mechanism of Voter turnout entries by Returning Officers ensures error-free and real-time dissemination of Voter Turnout trends to Election officers and Citizens directly through ECI website and Voter Turnout App. The Process is incorporated in the workflow of the Returning officers and the alert system of the application itself ensures 100% entries to be done on time.

The media houses get the turnout result in real-time and are now officially used by the News Portal to display the voter turnout. This has removed the guesstimates and has established a single-source of truth.

Similarly, nobody has to wait to know the turnout results until the end of the day.





Voter Turnout App

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*Voter Turnout App provides
real-time voters turnout to
citizens and media*

”



Voter Turnout App

Background

The display of the voter turnout has been very limited and was only by way of press releases. The voters did not come to know about the voter turnout on a real-time basis.

Introduction

Voter Turnout App made it easy for the users to view the real-time information about the estimated voter turnout on their mobile phones during the General Election 2019. Voter Turnout App is used to display real-time voter turnout details of each Assembly Constituency/ Parliamentary Constituency including the number of men, women and third gender. Not only citizens but the application can also be used by media houses to capture live voter turnout data.

The Voter Turnout application allows citizens to access the cumulative voter turnout percentage overall as well as for each state separately. The app also allows the user to share the poll percentage with their contact via Facebook, Twitter, Gmail, and Whatsapp. The application was launched on 18 April 2019.

The application is available from google play store here: https://play.google.com/store/apps/details?id=in.gov.eci.pollturnout&hl=en_IN

Functionality

The application is designed to show the Estimated Voter Turnout for each state which can be drilled down to District and Constituency level.

The information is displayed in real-time from the Voter Turnout ENCORE Server. There is no data entry provision in Voter Turnout App, as it is only meant for the dissemination of the estimated Voter turnout percentages.

The main features of the App are:

-  Estimated Voter Turnout live poll percentage (Poll Day)
-  Share poll percentage (Via Facebook, Twitter, Whatsapp, Gmail etc.)
-  Filter Election type (to view Election wise, State-wise, District wise, Constituency wise)



Technology

Programming Language: Core-Java

System Software: Android Studio

Outcome

The application has been used extensively by the media and other users ever since it was launched. During the poll days this application was used by 2,08,602 users to view the turnout. A sharing option was introduced where a user can share turnout directly from the app to social media.



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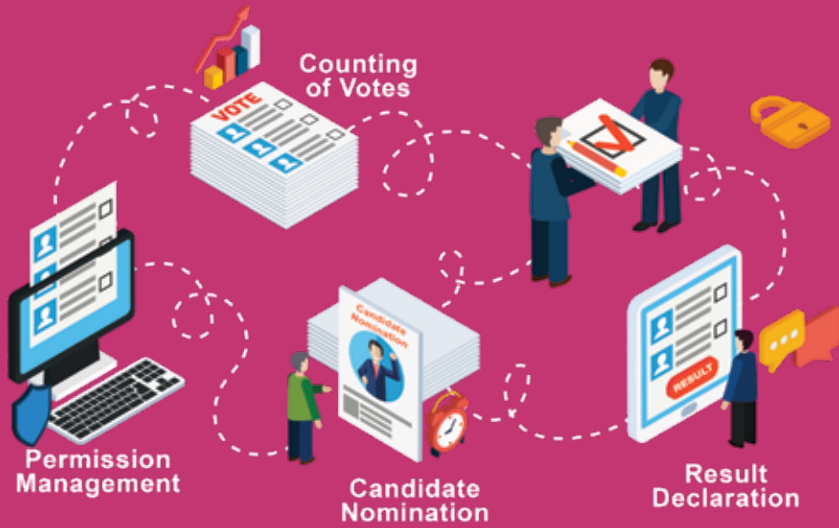


Election Counting Application

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Nowhere in the world, the results are as big but as fast and authentic as that of Indian Election Commission, clearly aided by the Counting Application of ECI

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Election Counting Application

Background

Earlier, the returning officer would compile the report on paper, excel sheet or state-specific application. Thereafter the data used to be inputted into the ECI main website for display of results. This caused delays, errors in data entry and most importantly added up work of the returning officer.

Introduction

ENCORE Counting is the most vital and robust module that has been developed to run on the Counting day for counting of votes, monitoring of end to end process and declaration of Results by the Returning officer.

The ENCORE counting application is an end-to-end application for returning officers to digitize the votes polled, tabulate the data each round-wise and then take out various statutory reports of counting. The application was launched on 10 March 2019 and has now been evolved into a complete counting application wherein the returning officer can now enter the votes polled each table-wise.

Functionality and Process flow

Counting Application has been deployed for entry of counting data on the results day. This module uses the same data of Contesting candidates that are finalized by the Returning Officer after scrutiny of the candidates.

The Application is designed in a way that the series of work to be done by the Returning Officer in the System will automatically be popped up one after another. This actually helps the Officers to do the work in a systematic way and bounds them to follow the procedure.

Returning Officer is the key person for the counting software but for the help in the data entry part, additional Returning Officer- Computer Agents can be created. These additional users only help in data punching, all the decisive powers are with the Returning Officer Login only.

On the Counting day once the pre-check of data is completed, the Returning Officer starts the counting module by setting up of No. of Rounds scheduled and then as per the counting start time the entry of EVM Votes counted on each Table is entered for Polling station wise. After entering this data, it is mandatory to take the printout of TRV (Table-wise Recording of Votes) to verify and sign it. Similarly, the data for all tables in that Round is entered and verified. Returning Officer then verifies the completed Round data through RDF (Round Declaration Form) and publishes it for public view. Returning Officer also enters Postal / ETPBS Votes for the respective Constituency which is also verified and signed before publishing.

To ensure faster dissemination of authentic information, the data is first entered in ENCORE before the round results are announced at the counting. The timely publication of the round-wise information is vital for establishing a single source of authentic data.

Features



Fast and Robust



Secure with 2 step User Authentication



Simple and Interactive Interface



Facility to save data as draft till publishing



Editing of data based on user role



Download and Print option available for data verification



Various Forms like FORM 21C, FORM 21E and FORM 20 generated directly from the system



Audit and Transaction Logs are maintained.

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

Notification: SMS and email integration

Load balancer

Outcome

Declaring results in Indian Elections with data of 8026 candidates and 61,36,56,298 voters is a herculean task. Nowhere in the world the results are displayed as fast and in as authentic a manner as has been done in India. The application is hardened for cyber safety so that the results published by the Election Commission of India are authentic and are always available. Similarly, it has aided the Returning Officer in the computation of the votes.

The Timely and Accurate Round-wise Trends and Results are widely published through ECI Results Portal, Voter Helpline App and Election Trends TV which is playing a vital role for establishing a single source of truth. Simplified process and validation checks at various levels has made the system more effective and Robust.



Various essential Forms at the level of Returning Officer are generated from the system itself like: FORM 21C (Formal Declaration of Result), FORM 21E (Certificate of Return of Elections), FORM 20 (Final Result Sheet).



7



Results Trends TV

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The results are shown with the Infographics and displayed with auto-scroll panels through large display screens outside counting hall or any public place

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Results Trends TV

Background

Earlier the results were primarily displayed only through the website which used to get updated at certain intervals. There had been minimal interactive platform for direct citizen engagement.

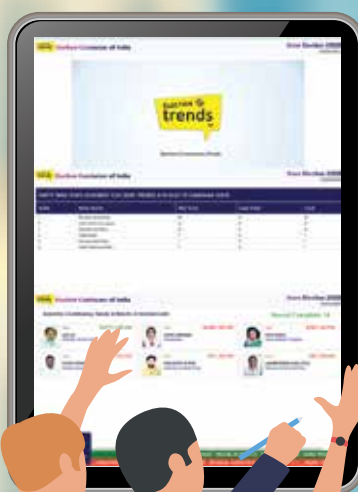
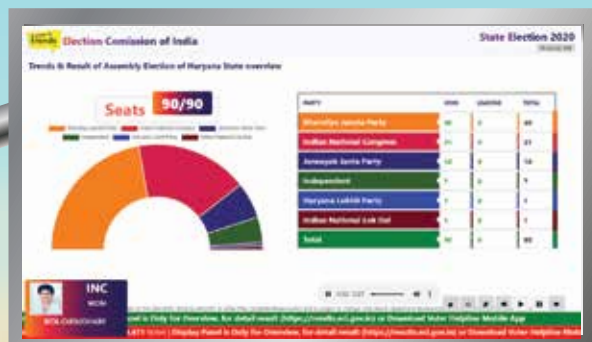
Introduction

Election Commission of India has launched Election Trends TV, on which the graphically-rich micro-details of trends & results are published in real-time. As and when the counting data for each round is entered after officially it's been declared by the Returning Officers, the data is displayed on the Election Trends TV, without any manual intervention using advanced secured technologies. These panels can be customized and configured, for display automatically in public places using large TV Panels by Returning Officers & Chief Electoral Officers.

Functionality

The counting software developed by ECI i.e. ENCORE (Enabling Communications on Real-time Environment) allows Returning Officers to enter counting data which is available through Election Trends TV. Only the Officers involved in Elections and registered in

RESULTS TRENDS TV



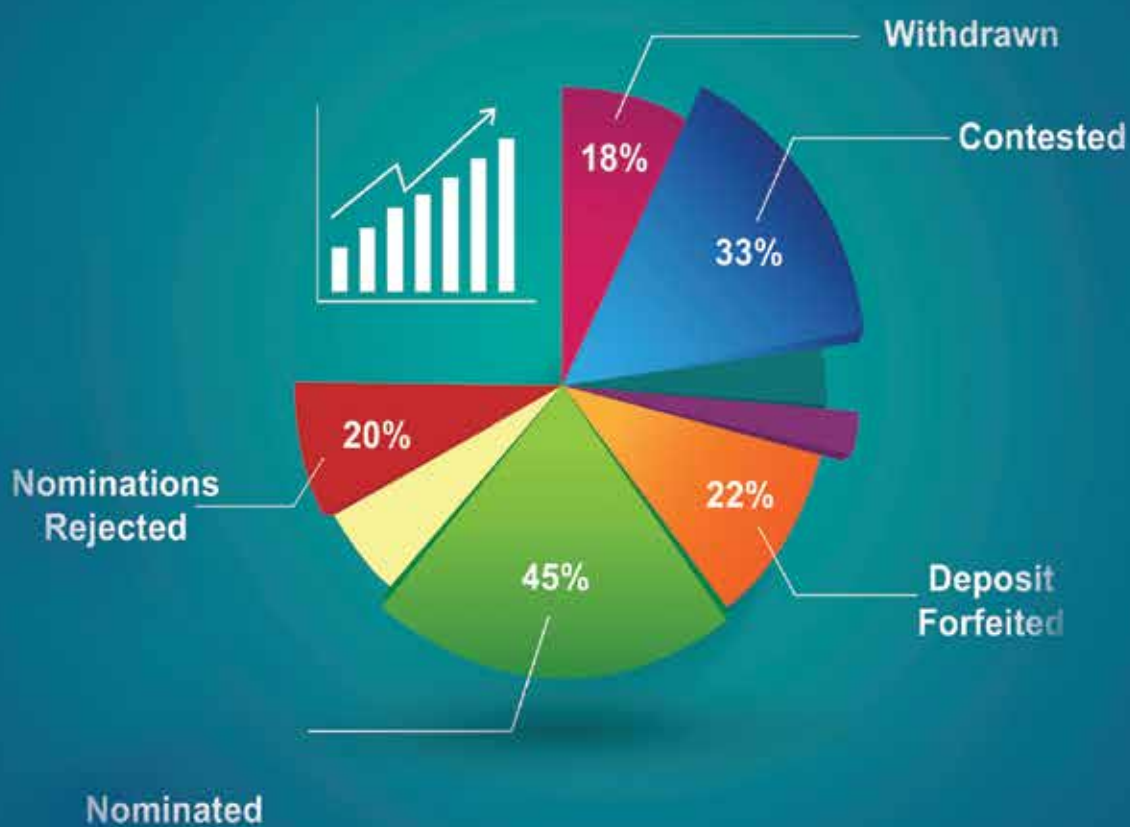
ENCORE for their respective State, District and Constituency and can customize this through their authorized login.

The customization can be done to view the results of a complete state or selected Constituencies.

The results are shown with the Infographics and displayed with auto-scroll panels through large display screens outside the counting hall or any public place.

Outcome

This new Arrangement made by Election Commission of India for prompt and accurate dissemination of results has created a milestone in the way of displaying the Election Results in Public places on larger screens. The media houses can now get the results in real-time by viewing the results through the Results Trends TV.



8



Index Card & Statistical Reporting Application

“

*34 types of statistical reports
after the elections are
automated and published on
the ECI website*

”



Index Card & Statistical Reporting

Background

Earlier, there was a separate Index card application which has to be entered by each of the returning officers. The data from the counting table had to be first migrated into a separate Index card application, and thereafter the data would be edited and corrected to generate the print copy of the index cards.

Introduction

Index card module of ENCORE allows the Returning Officer to fill the Index card online after counting that contains each and every detail of elections from the schedule of elections to the declaration of results. This module helps the Election Commission to generate different statistical reports that are then published on the ECI website for Public view and analysis.

Upon the successful launch of Index Card Application, the process of publication and verification has been simplified. The application was launched on 24 May 2019.

Functionality

 **Online Index Card:** Once the counting is completed, each Returning officer fills the

Index card online for their respective constituency that contains the complete information of elections like Electors, Voters, Candidates, Party, Votes, Results and Returned candidate etc.

Verification of Data: The data entered online by Returning officers for their constituency is verified by Chief Electoral Officer and then by the Statistical Division of ECI. The system is designed in such a way that it provides a great help to the verifying officers by showing the exceptions where the data is not entered correctly.

Generation of Statistical Reports: Different Statistical reports are generated on the verified data of Index card entered in the system. An additional feature is provided where the reports are first generated as a draft to get it verified by the senior officers of ECI and then final Reports are generated and the complete data is frozen and made non-editable.

The Reports like Highlights of Elections, Party performance, Constituency wise Voter turnout, List of Participated and Successful Candidates, Party wise seats won etc. are published on ECI website.



Technology

Web/API Development : PHP-Laravel framework(LAMP)

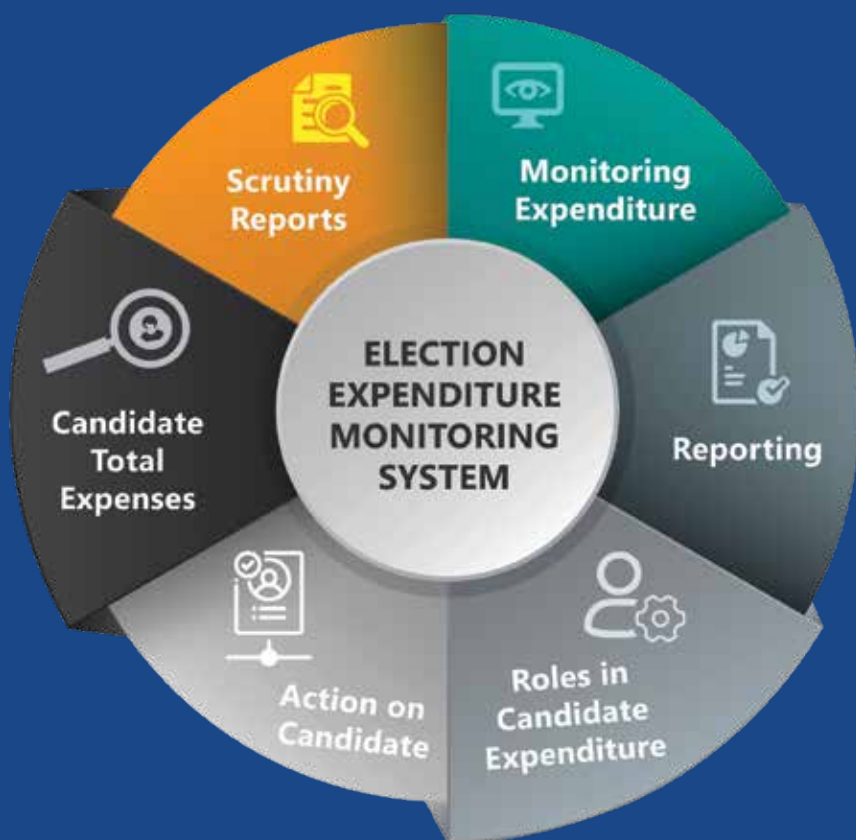
Database: MariaDB

Security protocols: SSL, AES-256 encryption

Load balancer

Outcome

The integration of Index card into ENCORE has brought consistency in the publication of final results data. 34 types of statistical reports are generated from the system which is all automated. The Statistical Division gets the portal to cross-check and validate the data before publication.



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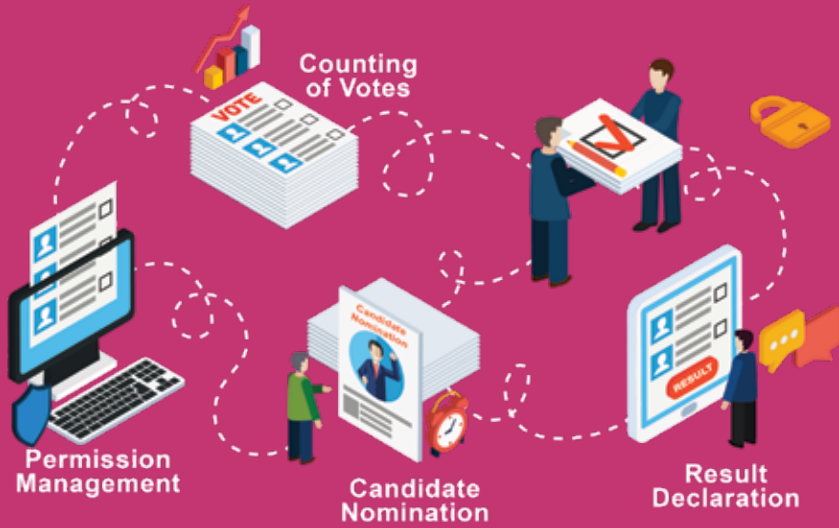


Expenditure Monitoring Application

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Candidate Expenditure application monitors the day to day expenditure and comprehensive reports are available to the decision makers

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Expenditure Monitoring Application

Background

There has been no ICT initiative for the digitisation of the expenditure monitoring system and all the work was previously done manually.

Introduction

For monitoring day to day election expenditure incurred by the candidates, the election expenditure monitoring mechanism has been put in place in each constituency. Maintenance of the day to day account of election expenditure by the candidate is mandatory. Though the account of election expenditure is required to be submitted within 30 days from the date of the declaration of the result, monitoring has to be done on a regular basis during the campaign period so as to properly and correctly account every election expenditure incurred by the candidates and political parties during this period.

The Online application of Expenditure provides for capturing of expense by candidate over public meetings, posters, banners, vehicle, and ceiling for candidate expenditure. The application was launched on 24 May 2019.



Process Flow

- 1) Monitor expenditure of candidates/political parties incurred during the election
- 2) Assessment of abstract statements and the expenditure as shown by the candidate and political parties
- 3) Verification at District Election Officer (DEO) Level

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

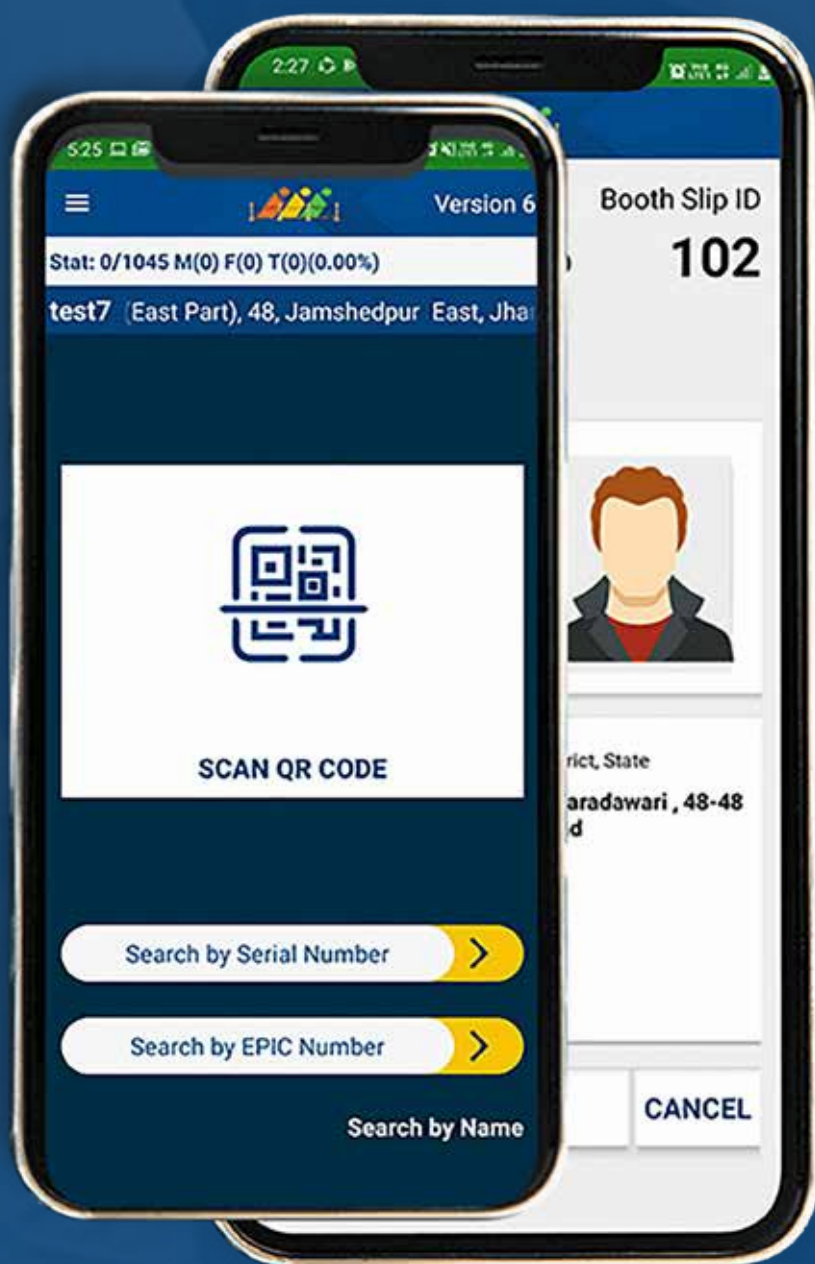
Notifications: Pusher, sms and email integration

Load Balancer

Outcome

The application has brought in online mechanism to monitor the funds given by the political party to the candidate, Funds were given by others to the candidate, Expense understated or not, Candidate expenses exceed ceiling amount or not. All the reports are compiled and presented to the officials at ECI for closer monitoring.





10



Booth App

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*QR code-based Voter Search
for faster polling and Real-
time Voter turnout*

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Booth App

Background

The polling process requires manual search of the name of the electors from the book. The majority of the time in the polling station is spent on performing the search. Similarly, as per the Commission prescription, every 2 hour report needs to be sent regarding poll turnout. There are multiple errors due to incorrect entries and manual entries. Later on, there is a lot of hassle on reconciliation of the figures from EVM Votes to the voter turnout. The Voters rarely get to know the queue at the polling station and young voters get dissuaded due to the long queue.

Introduction

Booth App is an integrated app of the ENCORE application, which facilitates in faster identification of voters using encrypted QR code from the digital marked copy of the electors. This reduces the queue, helps in faster polling and allows error-free recording of two hourly poll turnout with minimal intervention.

Booth App was piloted in Hamirpur (Uttar Pradesh) in 5 polling stations, 3 assembly constituencies (Samastipur, Kasba Peth and Phagwara) of the three states (Maharashtra, Bihar and Punjab) and thereafter launched in 10 ACs of Jharkhand in November 2019.

The whole process consists of the creation of encrypted QR code which is printed in the Photo Voter Slips. The Citizens can alternatively download the digital photo voter slips from the Voter Helpline App. The voter presents with the QR coded slips at the reception of the polling centre. The Booth level officer scans the QR code and allows entry of the voters whose names are listed. Inside the Polling Station, the polling official again scans the QR code to verify the identity of the voter before allowing the voter to poll. Polling Official marks the entry of the voter inside the polling station using the booth app in the mobile phone.

The recorded entries are then transmitted back to the central server of the ECI. The Returning Officer gets to view the information rich dashboard in a real-time voter turnout, events and incidences and various poll events.

On the other hand the Presiding Officer enters and records all the ancillary activities like dispatch details, mock poll, poll start and poll end. All types of incidents and events are also recorded from the mobile app.

The sector magistrate monitors the poll turnout in all his allocated Polling Stations and does the EVM replacement through the mobile app. He uses the reserve machines from his stock and replaces the deployed one due to malfunction/replacement requests. The website of the booth app is available here:

<https://boothapp.eci.gov.in>

Functionality/ Features of the application

- 1) Fast electors search in the polling station using QR code
- 2) Advance Queue information to Voters used Artificial Intelligence
- 3) Real-time Voter turnout information to Voters and Officials
- 4) Assist Polling Official in the detection of duplicate voting



Fast electors search: The Voters have distributed QR code-based Photo Voter slips. The voters present with QR code enabled slips at the Polling station. Alternatively, a Voter can carry a Digital Photo Voter slip for paperless entry. Without the use of the internet, the voter is searched from the mobile app. In case of absence of QR code-based Photo Voter slip, the voter is still identified through EPIC or Name search.



Authentic Identification: Once the QR code is scanned, the mobile app correctly and instantly identifies the Voter and presents to him the coloured photograph along with the complete elector's details. Marking attendance

is instantly done through the booth app. The process is simplified and adds to the authenticity. In future, the Polling Official will not require to carry bulky paper documents containing the Voter list.



Advance Queue Information: Using Artificial Intelligence and advanced mathematical models, the booth app calculates the queue at the polling station. This information is then pushed to the Voter Helpline Mobile app. The Voter using their mobile phone can check the current queue and plan their visit accordingly.



Real-time Voter turnout: The booth app is configured to connect to the central ECI server in a minimalistic way and transmits the data in an encrypted manner. This helps in giving meaningful information about gender-wise polling, age-wise polling, speed of polling, traffic during the day and other poll-related events and incidences. This helps the Election officers in making the right decision at the right time.



No Duplicate Entries: The Booth app auto-detects the duplicate entries and prevents repeat voters from entering the polling station. The Polling Official gets a loud sound on his mobile phone. The duplicate voter cannot be allowed to be entered into the Polling station as the booth app will not accept it.



Real-Time Event and Incidence: The Presiding officer also uses the booth app to record poll incidences and events. The PRO can register any poll incidence like a riot, Fraudulent defacing, destroying or removal of the list of notice or other documents at the polling station, Natural calamity, Booth capturing, Failure of voting machine. The incidence reported by PRO is flashed to the Sector Magistrate, District Election officer as a red alarm.



EVM / VVPAT inventory Management: The booth app has a module for sector magistrate who is responsible for carrying reserve EVM/ VVPAT machines. Upon reporting by the Presiding Officer through the booth app itself, the sector magistrate gets an alert and the inventory replacement is recorded on the app. This way the decision-makers get to know the statistical report and the reason for replacement instantly compiled on the dashboard.



Presiding Officer Diary: From Voter turnout to incidences the PRO records all the data in the booth app to generate a digital PRO diary. PRO also

receives the poll material and record in the app. He reports his arrival in the polling station through the app and also the poll start and end time. This minimises the paperwork, speeds up reporting mechanisms and provides assimilated reports in the dashboard to senior officers.



Real-time information of Polling party through GIS: The polling party location is also tracked on the map view. This helps in correctly locating the polling parties. The Presiding officer is also tracked from the booth app and thus immediate intervention is provided. The sector magistrate location is also visualised on the GIS dashboard, thus in future the last mile information about reserve machines will be available for decision-makers.

Process Flow

- 1) Booth Level Officer scans the QR code-based physical / digital photo voter slip at the entry gate
- 2) Inside polling station, first polling official scans again and mark the attendance of voter
- 3) You can now vote

Step 1: Presentation of Printed Booth Slip / Voter Helpline digital vault with QR CODE at Help desk (BLO)

Step 2: Polling officials scan the QR code of Printed booth slip/Voter Helpline digital vault with QR CODE and verify the voter details through Booth App.

All four types of users (BLO/PO/PRO/SM) use Booth App to Login, features of each user are listed below

BLO Booth App

- 1) Login in Booth App using Mobile number and OTP (registered by RO in ENCORE)
- 2) Perform Device compatibility check
- 3) Scan every voter who come to Polling Station (No skipping)
- 4) Ensure data sync to server using view status screen

Polling Official Booth App

- 1) Login in Booth App using Mobile number and OTP
- 2) Perform Device compatibility check
- 3) Mock Poll activity
- 4) Start Poll

- 5) Scan and identify the voter by matching the details and mark attendance
- 6) Ensure data sync to server using view status screen
- 7) Poll End

Presiding Officer Booth App

- 1) Login in Booth App using Mobile number and OTP
- 2) Perform Pre-Poll activity like Infra check
- 3) Report at Polling stations with GIS capture
- 4) Feedback for Polling Stations
- 5) Entry PRO Diary
- 6) Report EVM malfunction and incidence



BOOTH APP

Sector Magistrate Booth App

- 1) Login in Booth App using Mobile number and OTP
- 2) Review received notification in App for EVM malfunction and interruptions.
- 3) EVM replacement if required with reserve machines
- 4) View Voter turnout Polling station wise and monitor
- 5) View Polling station details and contact details of Polling parties

Technology

Core-Java for Android app development

Web Dashboard/API : REST Based API using Laravel framework(LAMP)

Database : Maria DB

Encryption : AES 256 CBC

Outcome

The booth app has been used in 4709 total polling stations. A total of 19288 number of officials which include Polling Officials, Presiding Officers, Booth level Officers, and Sector Magistrate have used the booth app as of now.

Identification of Voters through Mobile App: Instead of searching from the physical list of electors, Polling officials were able to instantly search the voters by using booth app. 1818923 number of identifications have been done through booth app

Faster Polling: As the voters are identified from the QR code instantly, the majority of the time is saved for the polling official. The mobile app displays the coloured photograph along with complete details of the voter, the Polling staff are instantly able to identify the voter.

Preventing duplicate voting: The inherent feature of the application is to prevent duplicate voting. If the voter again enters with the same Slip, the booth app instantly displays and make a sound that the voter has already voted. As and when the connectivity improves, the duplicate voters can be identified across the polling stations too.

Queue Information through Voter Helpline App: By using Artificial intelligence, the voters could see for the first time the queue in their polling station. Thus voters were able to plan their visit in advance to the polling station

Token Number for queue management: The BLO app gives the token number to voter which is generated from the booth app. This aids in queue management.

Online Submission of PRO diary: The Presiding Officers are now able to fill in their statutory diary online including turnout, events and incidences.

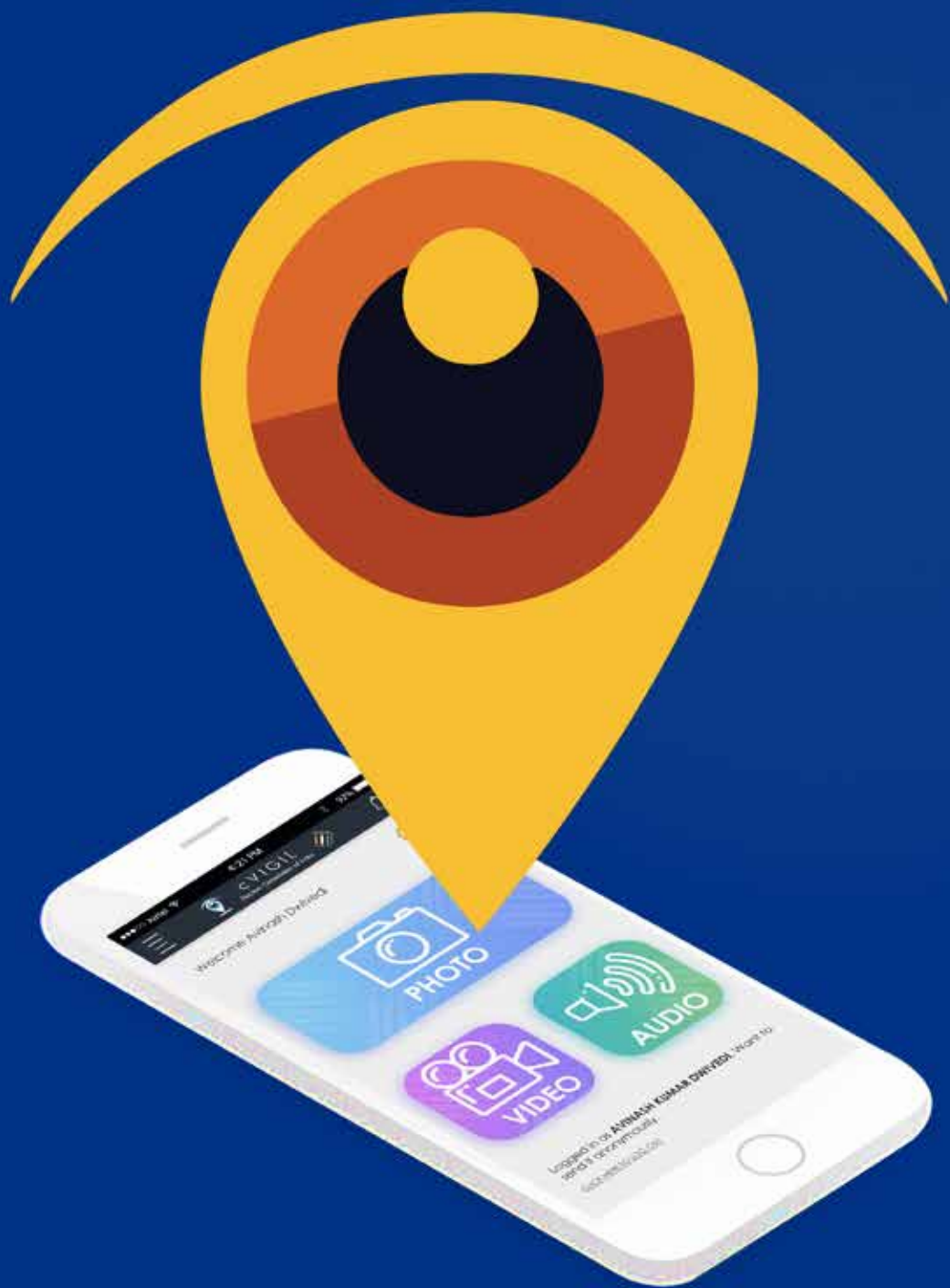
Real-time updates on Poll incidences and Violations: PRO can now directly send SOS messages informing about any poll violation and incidences to Sector Magistrate and Returning Officers.

EVM Replacement through the Mobile app: Sector Magistrate for the first time are able to do the EVM reserve machine replacement from the mobile app. Upon receipt of the message from PRO, the Sector Magistrate allocates the reserve machines and takes back the defective machines through the mobile app.

Real-time Voter turnout: Instead of manual feeding which has so much data entry and calculations errors, Polling Officials were able to send the real-time report directly. There has not been any manual intervention in the entry or sending the 2 hourly turnout report.

Detailed Poll Events reports: Returning Officers are now able to get the report such as time of polling party dispatch, arrival, mock poll start, poll start and poll end reports on the dashboard.

Rich poll dashboard: The dashboard now shows the reports such as gender distribution of voters in real-time, male/female/others distribution, queue at the polling station, speed of the poll, the busiest hour of the polling station, events and incidences and voter turnout in the real-time.



11



cVIGIL 

“

*cVIGIL is a success story
made by those who sought
and those who sighted, those
who mentored and those who
mentioned, those who cared
and those who dared*

”



cVIGIL

Award of Excellence' for eGovernance 2019

Background

India being the largest democracy requires strict enforcement of Model Code Conduct (MCC) to ensure free and fair elections. From past many elections, the enforcement machinery has been brought into place which used to identify and take appropriate action against violators. So far, the complaints about violations of Model Code of Conduct often could not be followed instantly, leading to the violators escaping detection from the action squads. Also, due to lack of any documented evidence in the form of pictures, audios or videos it was seen as a hurdle in verifying a complaint. Further, the absence of a robust response system to quickly and accurately identify the scene of occurrence of violations with the help of geographical location details hampered election officers' ability to apprehend the violators.

Introduction

cVIGIL empowers Citizens to report Model Code of Conduct Violations such as bribery, free gift, liquor distribution, playing loudspeakers beyond the permissible time during the elections. By using a simple mobile app, the citizen captures the live photo or video. The Election machinery comes into action immediately as they get the evidentiary proof of the violation. Every cVIGIL case is acted upon and replied back with the action taken in

the 100-minute timeline. The cVIGIL is now being used in Delhi elections. Since its first pilot in five states' Assembly General elections during October- December 2018 till the Jharkhand State Assembly General elections during November-December 2019, a total number of 1,71,745 cases have been filled through cVIGIL and from which 1,27,567 (74%) of the cases have been found correct.

The mobile app is available at Google Play store here: https://play.google.com/store/apps/details?id=in.nic.eci.cvigil&hl=en_IN and in Apple Store here: <https://apps.apple.com/in/app/cvigil/id1455719541>

The Election Commission of India designed and developed a simple yet effective mobile app called cVIGIL. At its core, cVIGIL draws on the idea of community policing. It spurs citizen engagement, and participation in the enforcement process. It assumes officials need citizens, and a trust-based partnership to properly conduct elections. And the mobile application facilitates that partnership by creating awareness, building trust, and confidence.

cVIGIL has firmly taken root in the Electoral System of India. The initiative of the Election Commission of India will go meaningfully a long way in engaging Citizens in the electoral process but also meaningfully bringing in a level playing field. In coming times, cVIGIL will become the linchpin of democracy. However, there are many things that need to be done. The first thing is about its reach. A lot of efforts need to be done for its availability to the common man.

cVIGIL is a major transformative application which has simplified the recording, reporting and resolving the complex model code of conduct violations during the elections period. By use of this technology, Election Commission of India has ushered in an era of greater transparency and involvement of common man in the electoral process. As citizens become more aware about it, the more they will feel part of the elections and better will be the participation in democracy.

cVIGIL has won the 'best Excellence Award' for the year 2019 given by Computer Society of India. The award was given on 17th January 2019 at KiiT Bhubaneswar.

Functionality/ Features of the application

cVIGIL Citizen Mobile App

cVIGIL was built to report Model Code of Conduct violations during elections. The app prioritized the speedy and effective actions by authorities and promised users status reports within 100 minutes. This "100-minute" rule made the app a reliable way to report

violations. The 100-minute time-lines infused the energy into the enforcement staff and a sense of urgency prevailed.



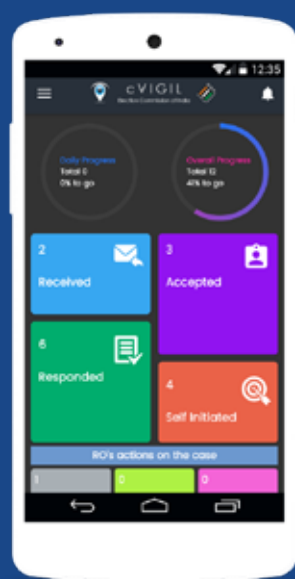
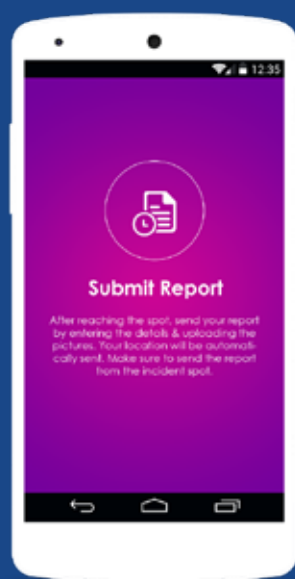
Register Complaints: The app allows every citizen within the election boundaries to report the Model Code of Conduct / Expenditure Violations by taking photo/audio/video through their mobile phones by signing into the application.



Anonymous User: The app also allows the citizen to complain anonymously, without revealing their personal details/ identity.



Geotagging: The app automatically enables a geo-tagging feature when users switched on their camera in the cVIGIL to report a violation, which helps the field unit to know the precise location of the incident.





cVIGIL Investigator App

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Flying squads receives the violation cases reported from cVIGIL app on their mobile app. The investigation happens through the app and report is also sent through the app

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cVIGIL Investigator App

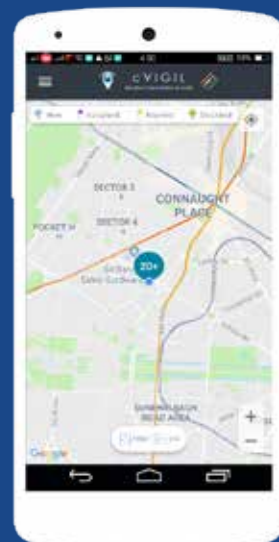
cVIGIL Investigator app has been made for the Field units like Flying Squads & Static Surveillance Team to investigate the cVIGIL Citizen cases and conduct Suo-Moto case reporting.



Instant Action on incidents: The application forced the Field Unit to reach the spot of the incidence within 15 mins and only then they could upload their report.



Suo Moto: One of the important byproducts of the cVIGIL was the use of cVIGIL by Field Units themselves to file suo-moto cases.





cVIGIL Monitor App

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Chief Electoral Officer & District Election Officers get all the cVIGIL cases in their jurisdiction for monitoring. Based upon the sensitivity, any case can be emphasized or highlighted for deep investigation

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cVIGIL Monitor App

cVIGIL Monitor App provides access to all cases filed in the jurisdiction to Chief Electoral Officers (CEOs) and ECI Officials from where they can emphasize and highlight important cases for speedy investigation and redressal.

- 
Monitor Live Case: This technology was used for live case monitoring of all the violation complaints directly through mobile devices.
- 
Emphasize/ Highlight cases: Officers can highlight/ Emphasize the cases for prompt resolution and enforce the time-bound pressure on flying squads.
- 
Live Status of complaint: Real-time tracking allows citizens and other officials, to check the progress of complaints.





cVIGIL Decider App

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The returning officer has the vital role in deciding a cVIGIL case within 50 minutes. The decider App provides all information and investigation reports for the returning officer to decide the case

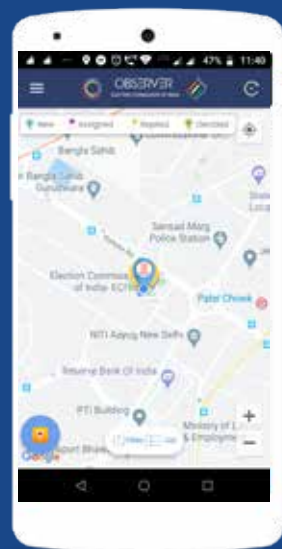
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cVIGIL Decider App

cVIGIL Decider App/ Dashboard enables the District Electoral Officer (DEO) / Returning Officers (ROs) to decide upon the cases which are sent by the Investigator at the convenience of their mobile phones or system.

-  **View Live cases:** Decider can access all MCC Violation complaints and check real-time progress.
-  **Action on Cases:** Decider/ Returning Officer can take actions such as Drop, Decide, and Escalate on cVIGIL cases after the report submitted by the Field Unit.





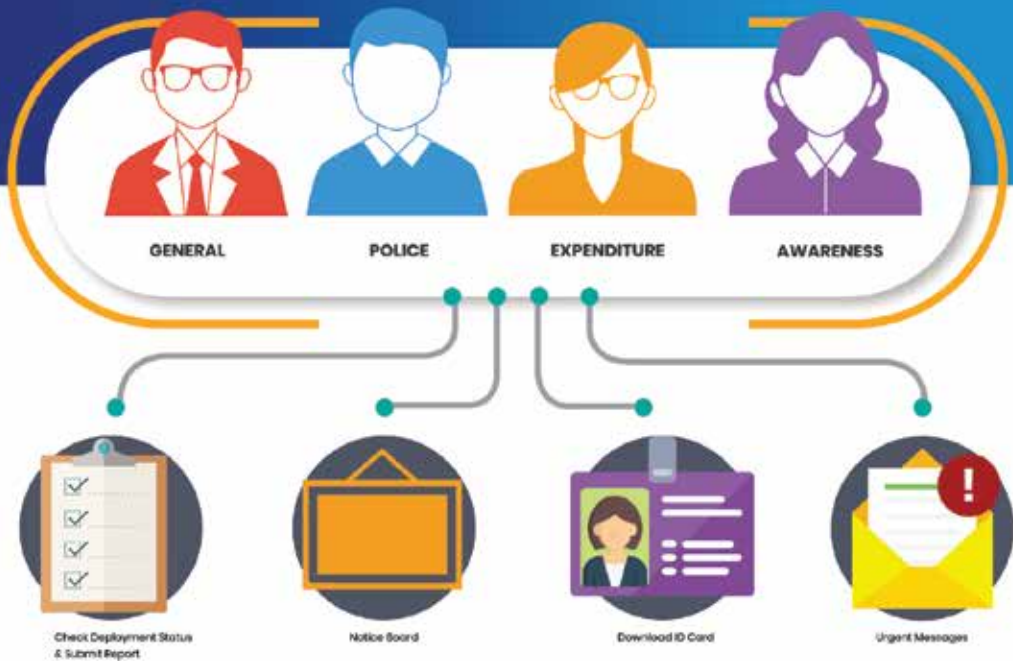
cVIGIL Observer App

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The General observers monitors both cVIGIL model code of conduct violations and flying squads position. He can call or approach from within the app to any field unit by using in-built GIS maps

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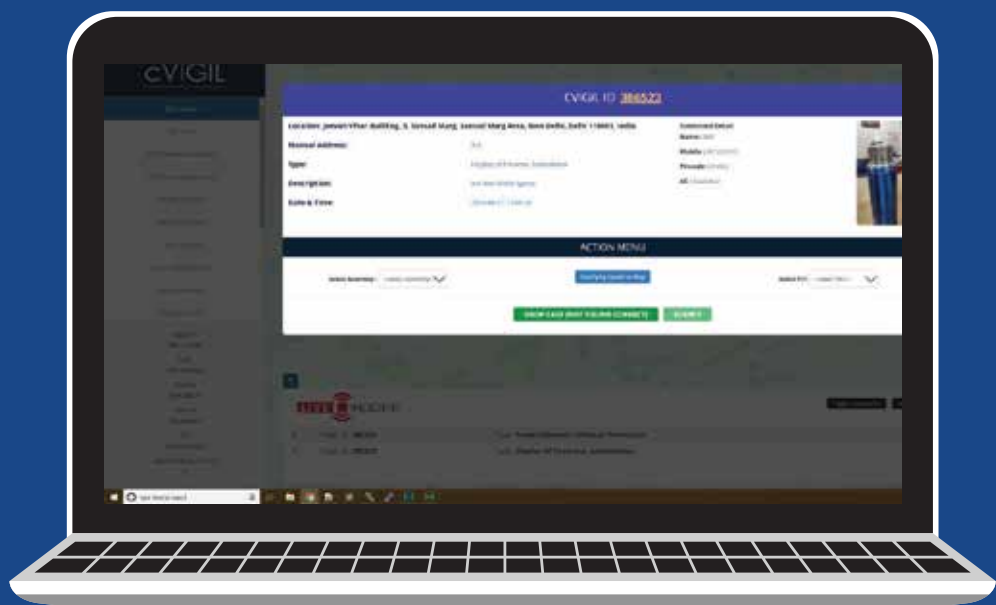
WE ARE OBSERVERS



cVIGIL Observer App

cVIGIL Observer App allows Observers and other staff authorized by ECI, to see MCC/ expenditure violation, Appointed for general observers, expenditure observers, police observers may login with Observer ID and Password and avail below features

- 1) Observers can view the cases falling under their jurisdictions
- 2) Highlight the cases if urgent attention required
- 3) Give observation after the investigation is complete by FST.
- 4) Observers can comment only, after a Field Unit has submitted 'action taken' reports on them.





cVIGIL Portal

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The GIS based dashboard provides the District officer the real time cVIGIL cases. The allocation to flying squads happen in the fly. All cases are managed & monitored through the dashboard

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cVIGIL Portal

Robust monitoring of cases using the cVIGIL portal allowed the Chief Electoral Officers, Returning Officers and the Commission to investigate delays, incorrect decisions, and recurring instances of lethargy.

Assignments of cases: The vigorous case allocation using cVIGIL portal allowed the officers to create a robust response/ redressal system.

📊 **Real-time status Tracking of field units:** Real-time tracking of the field units enforced the time-bound pressure on them, but on the other hand, making sure that they actually reach the location of incidence.

One of the fundamental shifts the cVIGIL brought in its 77% success was the GIS based location tagging. For example, the app automatically enabled a geo-tagging feature when users switched on their camera in the cVIGIL to report a violation. This meant that Flying Squads could know the precise location of a reported violation, and the image could be used as evidence in a court of law. Here then is a case where the First Information Report also becomes critical evidence, should a legal process unfold. And, technology-enabled enforcement mechanisms ensured that flying squads were at the site of a reported transgression.

Technology

Core-Java for Android app development & Swift for iOS App

Google Map API for GIS capture

Open source Maps for boundaries

Web Dashboard/API: PHP-Laravel framework(LAMP)

Database : Maria DB

Third Party integration for App notification: Pusher, SMS & Email

SSL, AES-256 CBC encryption

Outcome of the application

In election management terms, cVIGIL achieved three things: bottom-up enforcement of laws, timely and effective enforcement of those laws, and a preventive rather than reactive enforcement regime.

At its core, cVIGIL draws on the idea of community policing encouraging citizens to participate in the enforcement process. It assumes officials need citizens, and a trust-based partnership to properly conduct elections. A mobile application facilitates that partnership by creating awareness, building trust, and confidence. For example, this election saw district election officers publicizing the application, and encouraging its use. Countless reports suggest that this spurred citizens to rethink their role in the electoral process, stay vigilant, and know about what is permissible as part of a campaign, and what is not.

From the Commission's perspective, the application generated invaluable data that draws on embedded actors - people who know their local environment, its most pressing problems and forms of violations, and can accurately report these to officials. Tapping into "local wisdom" and "information pools" has the potential to significantly shape the Commission's activities, particularly drawing up a priority

Moreover, such applications build trust and confidence. As our data suggest, a large proportion of users were willing to file non-anonymous complaints; and re-usage rates indicate they felt their complaints were being acted on. In fact, encouraged by the initial response, the Commission started a "leaderboard" in the app, to identify and reward the most proactive citizens. In a way, this created an incentive for others to also actively use the platform; besides creating reputational benefits for civic-minded users. It is also worth noting that in many cases, ordinary voters raised their voice against local strongmen or influential persons who were flouting the law. Put together, citizens were more aware, had greater trust in institutions, and self-confidence.

Not only does cVIGIL act as a potent decision support system tool for election machinery but also ensures participation of common man in conducting free and fair elections. 92% of cases were registered through cVIGIL mode in comparison to other modes such as letters, phone calls or by post. A whopping 99 % of cases were resolved during the 2019 Lok Sabha phase and every case which was resolved through the cVIGIL was informed to the complainant.

The application cVIGIL bonded together all election machinery in enforcing Model Code of Conduct violations. The Election Commission was able to directly drill down upto the level of field units. This brought in alertness and quality in disposal of cases. The timelines were enforced by a seamless information technology interface.

During the assembly election held at Chhattisgarh, Madhya Pradesh, Mizoram, Rajasthan, Telangana 19,050 total cases were reported and 13,252 total cases were found correct and addressed.

During the Lok sabha election 2019, 1,42,270 total cases were reported and 1,10,030 number of total cases were found correct and addressed.

During the assembly election held in Maharashtra and Haryana, 9,902 total cases were reported and 7,650 total cases were found correct and addressed.



12



**MCC Relaxation
& Violation
Portal**

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The urgent need of Central & State Government Ministries requesting for MCC relaxation is now through an online portal

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MCC Relaxation & Violation Portal

Background

The usual process for seeking relaxation under Model Code of Conduct has been a manual process. The Ministries / Departments keep on requesting the status of their relaxation requests from the ECI. This creates a disturbance in the processing of the application.

While ECI regularly issues notices to MCC violators, there has not been any central database for publications of all such cases.

Introduction

One unified portal for Model Code of Conduct Relaxation Request and Violations publication. The Central Government Ministries / State Government Ministries/ departments can directly lodge the Model Code of Conduct relaxation requests online and receive their clearance online.

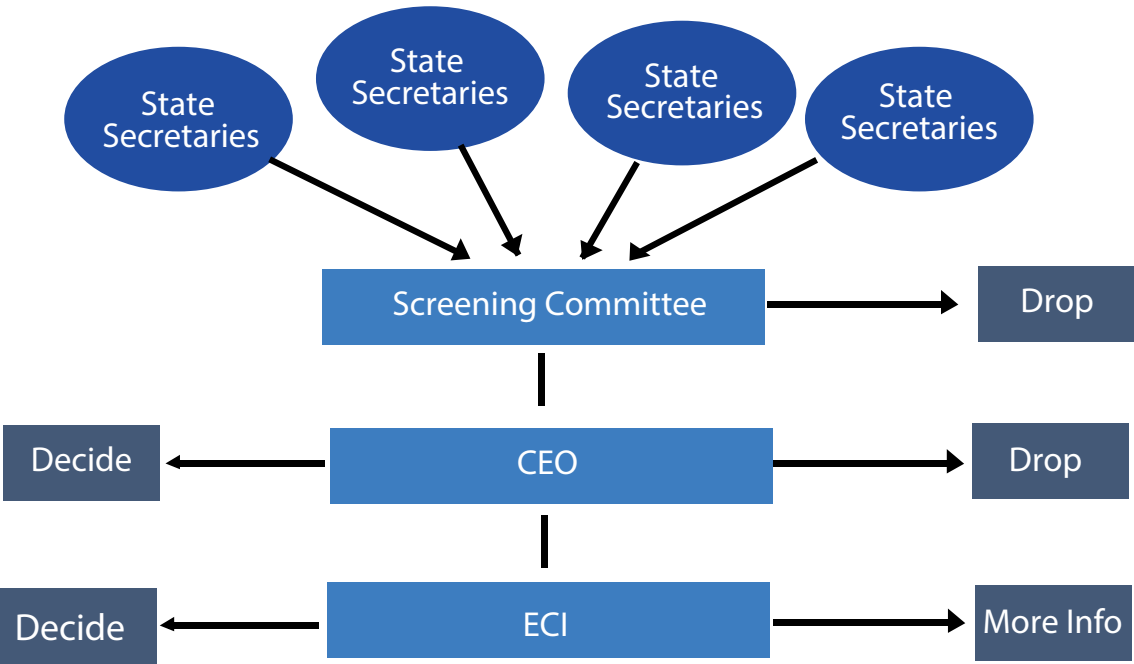
Similarly, the Chief Electoral Officer using the MCC Violation Reporting Portal can digitize the cases of the violations and make it online for public viewing.

The application was launched on 3rd April 2019 during Parliamentary Elections of 2019. The MCC portal can be accessed by visiting this portal <https://cvigil.eci.gov.in/>

Functionality/ Features of the application

MCC Relaxations:

Users	Actions/Responsibilities
State Secretaries	Case initiator
Screening Committee	- Review the Relaxation cases - Drop or Recommend to CEO
CEO	- A/C setup for State Secretaries/ Department and screening committee (Chief Secretary) - Drop, Decide, Escalate to ECI
ECI	Decide, Ask for More Information



MCC Violations

Category	Initiated and CEO and Decided at CEO	Initiated at CEO and Decided at ECI	Initiated at ECI, remarks at CEO and Decided at ECI	Initiated and Decided at ECI
Initiated	CEO	CEO	ECI (Zonal / MCC)	ECI (MCC)
Remarks	CEO	CEO	CEO	ECI (MCC)
Decided	CEO	ECI (Zonal / MCC)	ECI (Zonal / MCC)	ECI (MCC)
Portal Visibility	ECI, CEO	ECI, CEO	ECI (Zonal / MCC)	ECI (MCC)

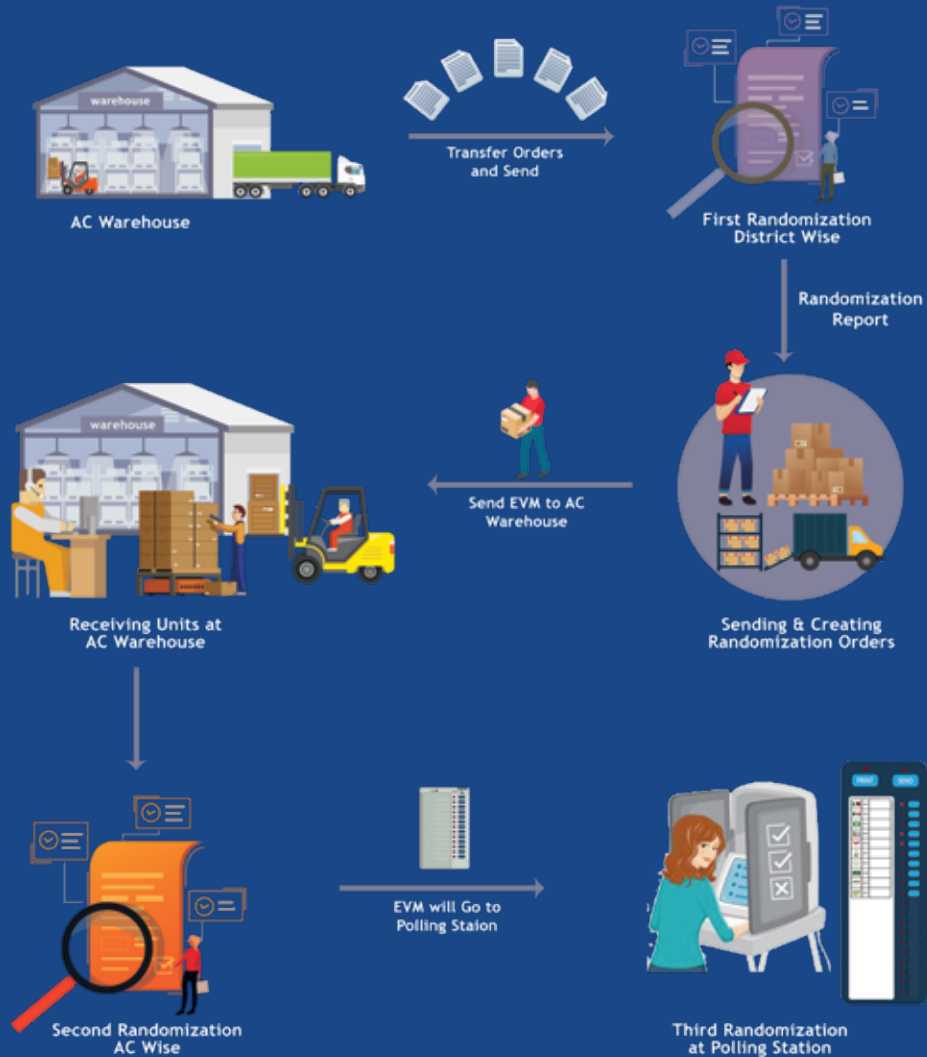
Technology

Web Dashboard: PHP-Laravel framework(LAMP)
Third Party integration for App notification: SMS & Email
SSL, AES-256 CBC encryption
Database : Maria DB

Outcome

In Earlier elections, all relaxations and violation cases were handled manually and it was very time-consuming. This portal was introduced during Lok Sabha election 2019. Since inception states secretaries logged 889 relaxation request and central ministries logged total 131 cases so far. Portal received a total of 512 cases for MCC violations since inception and are made available online through the portal

RANDOMIZATION



13



EVM Management System

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EVM Management System is a centralized online tracking system, which keeps track of movement and placement of each machine from its production to its destruction

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EVM Management System

Background

The Election Commission had been using an outsourced application for the management of EVM machines which was called ETS. This software catered for EVM inventory management and also for randomisation. However, it was not able to cater to the Lok Sabha elections for the randomisation of the machines.

Introduction

EVM Management System is designed to manage inventory of EVM units. Tracking of units from manufacturer to state, state to state, district to district. It handles the whole election processes like marking FLC (First Level Check) OK and Not OK, Randomization (First and Second), Marking and unmarking Election Petition and receiving back units in the system after counting. This application was launched on 25 Feb 2019.

Feature

EVM Management System is a centralized online tracking system, which keeps track of movement and placement of each machine from its production to its destruction.

This application is supplemented by a mobile application, which allows for scanning of the permanently encoded barcode of each machine. Once the machine is manufactured, then

it's digitized into EMS for every entry and all its exit point accounted through barcode.

EMS ensures scientific and random allocation of EVMs through the Randomization of the machines first at the Assembly Constituency level and other at the Polling Station level.

First Randomization: During the first Randomization, it is decided as to which place a particular set of the machine will go at assembly constituency level. This is done at the DEO level in the presence of political parties. Before finalization of Randomization, Randomization can be done multiple times to ensure the satisfaction of representatives of the political parties.

Second Randomization: Similarly, the second Randomization happens after the finalization of candidates. This Randomization is done for each polling station. This also happens in the presence of candidates/ representatives/ political parties.

Thus, first & second, both Randomization ensures that there is complete transparency and trust about the machines which are going to be used for polling.

The software also helps in tracking all the replacements of units which are allocated for conducting the poll. This helps in keeping records of machines that went in the second Randomization and which actually used in poll, in extend application is maintaining records of replacement at the level of commissioning, dispersal, mock and actual poll.

Process Flow

- 1) Order Generation
 - i) Manufacturer order
 - ii) Scan process before sending units
 - iii) Scan process before receiving units
 - iv) Order receiving at District Warehouse
- 2) First Level Check
 - i) FLC announce by Manufacturer/DEO
 - ii) FLC carries out through temp user
 - iii) FLC ok units will be transferred to Strong room
 - iv) Not ok units will be transferred to the Repair room
- 3) Randomization
- 4) Scheduling of the Randomization
- 5) First Randomization
- 6) Second Randomization
- 7) Supplementary Randomization
- 8) Replacement
- 9) Replacement of the units during the poll at different levels

- 10) Undo of the replacement, if required
- 11) Election Petition
- 12) Mark EP
- 13) Unmark EP

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Security protocols: SSL, AES-256 encryption

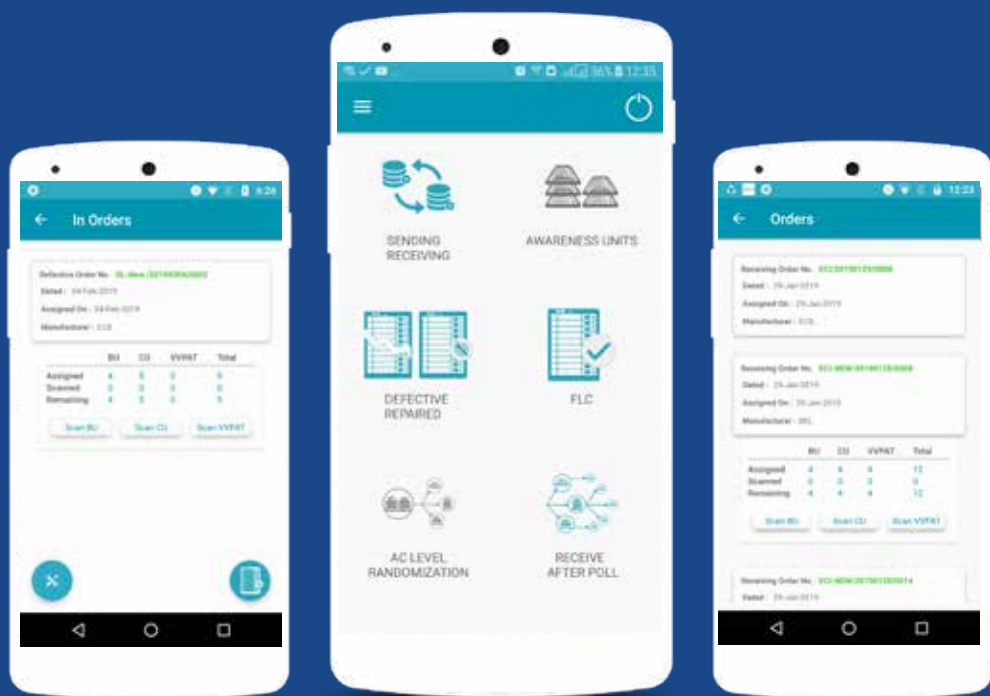
Notifications: Sms and Email integration

Load Balancer.

Outcome

The EMS Application had successfully been used for handling complete end to end movement of EVM/VVPAT during the election process of Lok Sabha-2019 and after that continuously being used in all the Assembly elections and bye-elections. The application was customized based on the states/ UTs requirements. It was successfully used for complete first and second Randomization in Lok Sabha-2019, Maharashtra Assembly Election, Haryana Assembly Election, Jharkhand Assembly Election and all the Bye Elections. This has resulted in a redundant process, improved the transaction time and has re-built the confidence of the candidates and political parties and the process of administrative procedure of EVM.

Statically application had handled 84,34,422 numbers of transactions in the short duration of 90 days during Lok Sabha Election-19 along with the handling of 70,01,489 machines. The application was successfully used in for 838 numbers of first Randomization and 4,549 numbers of the second Randomization in Lok Sabha-19.





EMS Mobile App

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*The EMS App is the
fundamental link between the
machines and its trackability
in the system*

”



EMS Mobile App

Background

The erstwhile desktop-based mobile application for scanning the EVM machines was very limited in its use and not well integrated with the core inventory software. This created trouble in integration and scanning.

Introduction

EMS Mobile App is a core application of EMS, which allows users to scan the permanently encoded barcode of each machine (EVM/VVPAT) while they are in movement. It is used to scan the barcode on EVM/VVPAT at every entry and exit point before movement of these units.

This is a vital application which ensures that the EVM machines record are kept up to date, each machine is trackable, any replacement, training and repair are handled securely. This application was launched on 07-March-2019.



Sending/ Receiving of units via scanning in EMS app

Features:

Scanning of Units at Warehouse level to perform below activities:

- 1) Sending/ Receiving
- 2) Awareness Units
- 3) Defective Repaired
- 4) First Level Check (FLC)
- 5) AC Level Randomization (First Randomization)
- 6) PS Level Randomization (Second Randomization)
- 7) Stock Entry
- 8) Receive After Poll
- 9) Loan to SEC

Process Flow

- 1) The task is assigned to send & receive units at sender and receiver's location
- 2) Log-in by Temp User after OTP verification
- 3) The dashboard contains assigned order
- 4) User clicks on an enabled module to scan units and allocated Units will be shown
- 5) One by One Scanning of units will decrease the number of units to be scanned

Technology

Programming Language: Core-Java

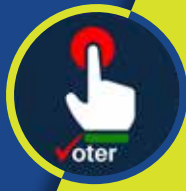
System Software: Android Studio

Outcome

The EMS Mobile App had successfully been used for tracking complete end to end movement of EVM/VVPAT during election process of Lok Sabha-2019 and after that continuously being used in all the Assembly elections and bye-elections.



14



Voter 🏆
Helpline
App

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Voter Helpline is an umbrella app for all voters from Registration to Results and from Candidate to Counting

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Voter Helpline App

Best Excellence Award for 2019

Background

The Voters never had the convenience of voter centric features delivered through the mobile app. All the services were available either in the physical format or were scattered in various websites and applications. The Voter had to either fill in the physical form or visit the website. Similarly, making the complaint had been an arduous task. As the ECI main website contains the information for all stakeholders, a normal voter had great difficulty in navigation and finding the content.

Introduction

Voter Helpline App is the comprehensive app for Indian Voters to search their name in the electoral roll, submit forms for voter registration & modification, download their digital photo voter slips, make complaints, find details about the contesting candidates and most importantly see the real-time results of the elections.

19 Million (1.9 Crore) users used the Voter Helpline Mobile Application to search their names in the Electoral Roll till date.

With 2,16,81,289 (2.16 Crore or 21 Million) downloads and 1,53,604 (1.53 lac or 153K) user feedback, this national award-winning application has taken roots as a major tool for citizen empowerment. The seed for the Voter Helpline was sown in the year 2016, when



a new website for Election Commission was envisaged. In the process of designing the new website, the concept of Voter Helpline took its humble beginnings. At that stage, the Project was codenamed as 'ECI Citizen App' and the initial objective was to display on the mobile app, the main ECI Website content.

However, soon we identified 5 core but disparate applications which perfectly made sense for all of us in ECI but hardly made any sense to the voter. For us in the ECI every application was as important as the other and every application justified its independent existence. But in-turn we were sending our hapless voters to five different websites to do the transactions.

First, of course, was the ECI Main Website, which contains gargantuan sized data starting from the year 1951. It had everything from History, Elections, Statistics, Photo Gallery, Current News, Press Release and what not. So why don't we provide this information in the hands of every citizen?

The second was the budding new website; ECI SVEEP Portal. When we designed this site, we realised the immense potential it had for Voter Education. States started posting pictures of their campaign, success stories and innovative ideas. So why don't we give wider access to the audience directly? And allow them to dip into such success stories and creative ideas!

The third was, of course, our Citizen Grievance Portal. It had existed for many years and had been very successful for redressing grievances. All States' Chief Electoral Officers, District Election Officers and Electoral Roll Officers are connected and interwoven to receive and respond to grievances. So why don't we bring the functionality of lodging the complaints on the mobile? Why not provide the facility for tracking the complaint and the forward response of their grievance on their mobile?

The fourth was Electoral Search website. This has been a very successful website for searching one's name in the electoral roll. Why not provide an option for electoral search from the mobile app? Why not give the option of downloading the Voter details directly on mobile? Why not link Contact details of the Booth Level Officer, Electoral Roll Officer, District Election Officer and Chief Electoral officers customised to voter area?

The fifth was the submission of Forms. nvsp.in has been in existence for many years providing the facility for anybody to register online, request for transfer, request for a change in details and request for duplicate EPIC Card. Why not provide all the forms in the mobile app? Why not provide the option to upload the required documents directly from mobile gallery or by clicking a picture from a mobile phone? Why not give an option for form tracking? This long chain of questions got us to the drawing board.



It was a mammoth task as always is the case, when we work on integration. Stitching them all together was a delicate and arduous task for my handpicked core team of engineers. They built, they dismantled, structured again but they never stopped.

When the Voter Helpline App was presented before the Commission, it was instantly approved for launch but with a caveat for pre-trials and feedbacks before we launched for the wider public. The app received a hugely positive response and more than 99% of people liked the Voter Helpline App during an anonymous survey.

That momentous day was 8th February 2019, when the app was formally launched. The application came live with 5 disparate technologies into one: Main website, SVEEP website, Electoral Search Website, nvsp forms, and complaint website.

Instantly, it had forms pouring in, complaints getting resolved, voters getting aware about EVM, downloading the latest ECI news and most importantly searching their name on the electoral roll. As we go into print almost 35,59,206 forms have been submitted through the mobile app alone, and we haven't heard the last word on the app's success yet!

It took its shape as 'Voter Helpline', when Hon'ble Commission directed to setup '1950' as universal call centre number and to launch Voter Verification and Identification, (VVIP) Programme. When '1950' was named 'Voter Helpline', the ECI Citizen App became 'Voter Helpline App'.

The Voter Helpline app has been the most important Mobile app of the Election Commission of India. 53 Million electoral searches have been performed through the mobile app.

With the advent of Booth App, the polling station searches have become very easy and fast by the use of QR code. The Photo Voter slip contains the QR code which is scanned by the Polling Officials in the polling station. Now the Voters can also download their digital photo voter slip from the Voter Helpline Mobile App. The process involves linking up their mobile phone with that of EPIC card. The Digital Photo Voter slips can be shown at the polling station instead of physical photo voter slip.

The Voter Helpline Mobile application is available on both the Google Play Store: https://play.google.com/store/apps/details?id=com.eci.citizen&hl=en_IN and Apple App Store: <https://apps.apple.com/us/app/voter-helpline/id1456535004>

Features

- 1) Electoral Search is the paramount feature of Voter Helpline Application, which allows voters to search their electoral roll by entering personal Details, EPIC, or by scanning Barcode. The information can be saved by the voter/ elector to use it as voter slip. He/ she can share this information to their contact list also.
- 2) Forms (NVSP): Submitting the online forms such as New Voter Registration,



SEARCH YOUR NAME, FILL ONLINE FORMS



voter
HELPLINE



Update in Details and others, became very easy by the use of Voter Helpline Application.

i) Types of Forms

- a) Apply Online (New): It allows the new users (Overseas also) to fill the application to register themselves as a Voter.
- b) Transfer/ Shifting: It allows swift transfer/ shifting from one constituency to another to the users.
- c) Deletion: This form helps the users for objecting inclusion or seeking deletion of name in the electoral roll.
- d) Correction Of entries: It allows the voters to change electoral particular through their mobile phone only.
- e) Transposition: It allows the convenience of the relocation of habitation in one constituency from one place to another.
- f) Duplicate Epic
In case of correction in electors details or change in address the user can request to issue a duplicate Photo identity card (EPIC) with his/ her new details.
- g) Status
Real time status of the application can also be viewed by the users on their phone by entering the application id. Each and every step is shown to provide transparency.
- h) Save Form
An option to save the form is also available in the application, to allow ease of access to the users on the later date.

3) Complaints (NGSP)

The facility of lodging the Grievances online makes the Voter Helpline application more viable and imitating. A Universal Helpline Number 1950 has also been included in the app for those users, who prefer to call and register their complaints.

i) File Complaints

Registering a complaint has never been this easy, but the Voter Helpline App made it a piece of cake for its users. With the convenience of simple clicks, users can file all the Elections or Non- Elections related complaints.

ii) Status

The real-time status of the complaints gives transparency.

4) Candidate

In order to facilitate the voters/ electors, the application has been

expanded and now offers the facility to view all the details of candidates such as Profile, Affidavits, and others. The user can bookmark their favourite candidate to see the step-by-step progress.

i) Candidate Profile

It allows the user to view and download the profile of the contesting candidates in their mobile phones.

ii) Affidavit

Original Affidavits can also be downloaded by the users, which have been uploaded by the candidates.

iii) Bookmark

App allowed the user to bookmark their favourite candidates to track their progress and get personalized results.

iv) Share

The voters can download the profile of the candidate and share the details to their contact list.

5) Result

Displaying the real-time result on the mobile phone for the first time, was one of the crucial features of this application. It allowed the users to see the authentic results directly on their phone from anywhere. The user can also view the real-time results of his/ her constituency by scanning the barcode of the EPIC card.

6) Search your Polling Officer

The application also has an option to search the Booth Level officer, Electoral Roll Officer, District Election Officer, and the Chief Electoral Officer and can make a direct call to them from the app

i) Call Directly

ii) Schedule of Elections

iii) Navigate Polling Station

7) Selfie Campaign

The Selfie campaign has been introduced this time to encourage the voters to go and vote. ECI used the social media platform to spread awareness and made it a full-blown phenomenon.

8) Elector Verification Programme(EVP) Campaign
Electors verification Programme allows electors to verify their details, family tagging and collect feedback on polling stations using Voter Helpline App and Electors



need to link their mobile number.

9) Personal Vault

The Voter Vault facility was provided in the Voter Helpline mobile application by which QR code-based booth slips were available digitally. The voter could display the digital QR code in the polling station and cast the vote.

Process Flow

To use the features of the Voter HelpLine mobile app, voters open the app in mobile and login in the app using mobile number and OTP functionality. The voter can select the feature by clicking on the Home screen as mentioned below -

- | | |
|---|--|
| <p>1) Electoral Search</p> <ul style="list-style-type: none"> By Barcode By Personal Details By EPIC id <p>2) Forms(NVSP)</p> <ul style="list-style-type: none"> New Registration Transfer Shifting Deletion Correction of Entries Transposition <p>3) Forms(NGSP)</p> <ul style="list-style-type: none"> File Complaints Track Status of Complaint <p>4) Results</p> <ul style="list-style-type: none"> Party-wise Results Constituency wise Constituency wise trends | <p>5) Electoral Verification Programme</p> <ul style="list-style-type: none"> Linking of Mobile with EPIC Mobile number verification Search your details Correction of entries & Verification Build family Tree <p>6) Candidate Nomination Status</p> <ul style="list-style-type: none"> Parliamentary Constituency/ Assembly Constituency Contested Accepted/ Rejected Withdrawn <p>7) Selfie Campaign</p> <p>8) Personal Vault</p> |
|---|--|

Technology

Core-Java for Android app development & Swift for iOS App

REST API: Laravel framework(LAMP)

Database: Maria DB

Third Party integration for App notification: Pusher, SMS & Email

SSL, AES-256 CBC encryption

Outcome

The two innovative ICT applications of Election Commission of India i.e. 'cVIGIL' and 'Voter

Helpline App' developed in-house have won the eGovernance 'Award of Excellence' for the year 2019. The award was presented at KiiT, Bhubaneswar. Dr. Kushal Pathak, Director ICT & CISO, ECI and Chief Electoral Officer of Odisha, Sh. Sushil Kumar Lohani received the award on behalf of ECI. These awards were given by Computer Society of India (CSI), Special Interest Group on e-Governance (CSI SIG e-Gov) at KiiT, Bhubaneswar on 17th January 2020.

The statistics speak of its volume and success. Recently, the Election Commission of India solicited voters to actively verify their name in the Electoral Roll and get it corrected. This program was a major success with the following statistics

Electoral Verification Program through Voter Helpline App

Status of EVP program is as follows from 1st September 2019 to 1st December 2019
(*For states excluding J&K, Maharashtra, Haryana & Jharkhand)

Number of days for which the EVP Program was implemented	91 days
Total Number of electors	77,07,90,304
Total Number of requests received	76,22,95,111
Average Requests received per day	83,76,869
Percentage of request received (%) vs Total Electors	98.90%
Number of correct entries reported	73,00,50,926
Percentage of correct entries	95.77%
Number of incorrect entries reported	3,23,19,692
Percentage of incorrect entries	4.23%
Number of form 8 received	2,05,24,549
Number of Unenrolled electors reported	7,31,213
Number of prospective electors reported	6,24,581
Number of Form-6 received	4,926,961
Number of Form-7 received	6,881,784
Number of Form-8 received	41,077,979
Number of Form-8A received	497,243

The Voter Helpline app is a single-stop solution for Voters in India and will grow further with more such voter centric features being added in the app.



15



PwD App

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PwD users with minimal technical knowledge can easily use the app to claim all the benefits like the request for a wheelchair, mark as PwD, etc

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THIS TIME TO VOTE. WITH PWD APPLICATION



PwD App

Background

Election Commission of India has been constantly focussing on providing better services to Persons with Disabilities through various mediu. In the world of technology innovation, the mobile application has taken a front seat. Many of the PwD effectively use the mobile application for day to day living.

Introduction

In order to facilitate the Persons with Disability, the Election commission of India developed an android based mobile application, the PwD App. An eligible person with a disability or reduced mobility / physical functions can get enrolled in electoral roll by declaring themselves as a person with a disability. Upon receiving the request from PwD electors/ voters, the election commission will ensure that the booth level officer will reach the doorstep delivery of electoral services.

The PwD app facilitates PwD Voters in verifying their names in the electoral roll, enrolling

them, getting their name, address and photograph corrected. To do this, mobile accessibility features like voice-over prompts, high contrasting interface, and easy navigation features were developed in the app. The user interface was kept very simple. The PwD user enters the mobile number and address and the information travels down to Electoral Registration Officer (ERO) in minutes and ERO in-turn allocate the case to Booth Level Officer to visit the home of the PwD user to get the form filled up. During the whole process, PwD App user can use the reference number to track their application status.

Features



Inform About Your Disability: The App allows the person with disabilities to mark themselves as PwD voter by entering their EPIC number only and it will automatically fetch their details. Voice Access and select to speak features are also available for the visually impaired person.



Request For New Voter ID Registration: This allows the PwDs to register as a new voter with the minimal information. Registration will only require the name and address of the person and the rest of the work would be done by the Election Commission by providing doorstep facility, i.e. BLO would be assigned and visit the home of the PwD user to get the form filled up.



Request For Transfer: When a voter relocates from one geographical location or one constituency to another, their voting districts or state also changes, to handle the transfer process, PwD app provides the option to the user to raise the transfer request.



Request For Updation: Any correction, addition, or deletion in voter ID card can be done using a “Request for Updation” feature.



Request For Wheelchair: The PwD user can raise the request for wheelchair-using this feature of the mobile app by clicking the option after login using the mobile number.



Find Polling Booth: The booth locator feature incorporated and integrated Google Maps, to ease the PwD voters to reach polling stations. It helps the voters to find the polling booth location and directs them to the booth location from the current location.



Interaction Controls: The TalkBack feature allows interaction using speech, vibration, and audible feedback for users who are unable to operate smartphones. The enlarged graphics like text and icons, High contrast

themes, Structured headlines, and better typography enhances the readability of the content.



Easy To Use: This App has been designed keeping easy and interactive user interface in view. The content has been classified based upon the user's disability. PwD users with minimal technical knowledge can easily use the app to claim all the benefits like the request for a wheelchair, mark as PwD, etc.



Candidate List: One of the important features of the app is the availability of the contesting candidate list on the app. The PwD voter can find the list of their candidates. Once the list is finalised, the PwD voter can know the list which is exactly as per the ballot paper. The blind user can hear the candidate list along with the position in the list.

Process Flow

To use the features of the PwD mobile app, voter opens the app in mobile and login in the app using mobile number and OTP functionality. A voter can select the feature by clicking on the Home screen as mentioned below -

- 1) Login
Launch Mobile App
Enter Mobile Number
Enter OTP received
Submit



- | | |
|--|--|
| <p>2) PwD Home
Request for Marking as PwD
Enter EPIC Number
Search
BLO Contact Details displayed</p> <p>3) Request for New Voter Registration
Enter Voter details
Submit</p> <p>4) Request for Transfer
Select Current AC, Transfer AC
Submit</p> <p>5) Request for Change (Correction, Deletion)
Enter EPIC Number
Search
Enter Voter details to be changed</p> <p>6) Request for wheelchair
Enter EPIC Number
Search
User details fetched
Submit</p> | <p>7) Candidate
Candidate List displayed
Filter details election wise</p> <p>8) Register Complaints
Select relevant details
Enter Complaint
Submit</p> <p>9) Search Polling Official
Enter EPIC Number
Search
BLO, ERO, DEO details fetched based on EPIC number</p> <p>10) Booth Locator
Enter EPIC Number
Search
Navigate to the polling station</p> <p>11) Check Status
Enter Complaint Id
Submit</p> <p>12) Read/ View Articles
Articles are displayed</p> |
|--|--|



Technology used

Java is used as a platform to develop the android application.

Outcome

In order to facilitate voting by PwDs electors, Commission has started some critical and focused initiatives like providing wheelchair facilities during elections, volunteer assistance in the booth, and transport to the polling station. Further, to facilitate visually impaired people, the Commission has introduced a very important feature in the PwD application, which reads out the full candidate list with name and serial number to the voter. In addition, the voter can select the desired number from the ballot list and cast their vote with ease. 47,727 requests for marking themselves as PwD have been received from the app. Till today 3,105,355 user has viewed their PwD status.

The Application is available on the Google Play Store and can be downloaded using the given link: https://play.google.com/store/apps/details?id=pwd.eci.com.pwdapp&hl=en_IN.



**INFORMATION OF
cVIGIL CASES**



**VIEW PROFILE
& FILL REPORTS**



**INFORMATION OF
FLYING SQUAD**



16



Observer App

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*The App aids observers in
observation of elections more
effectively*

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Observer App

Background

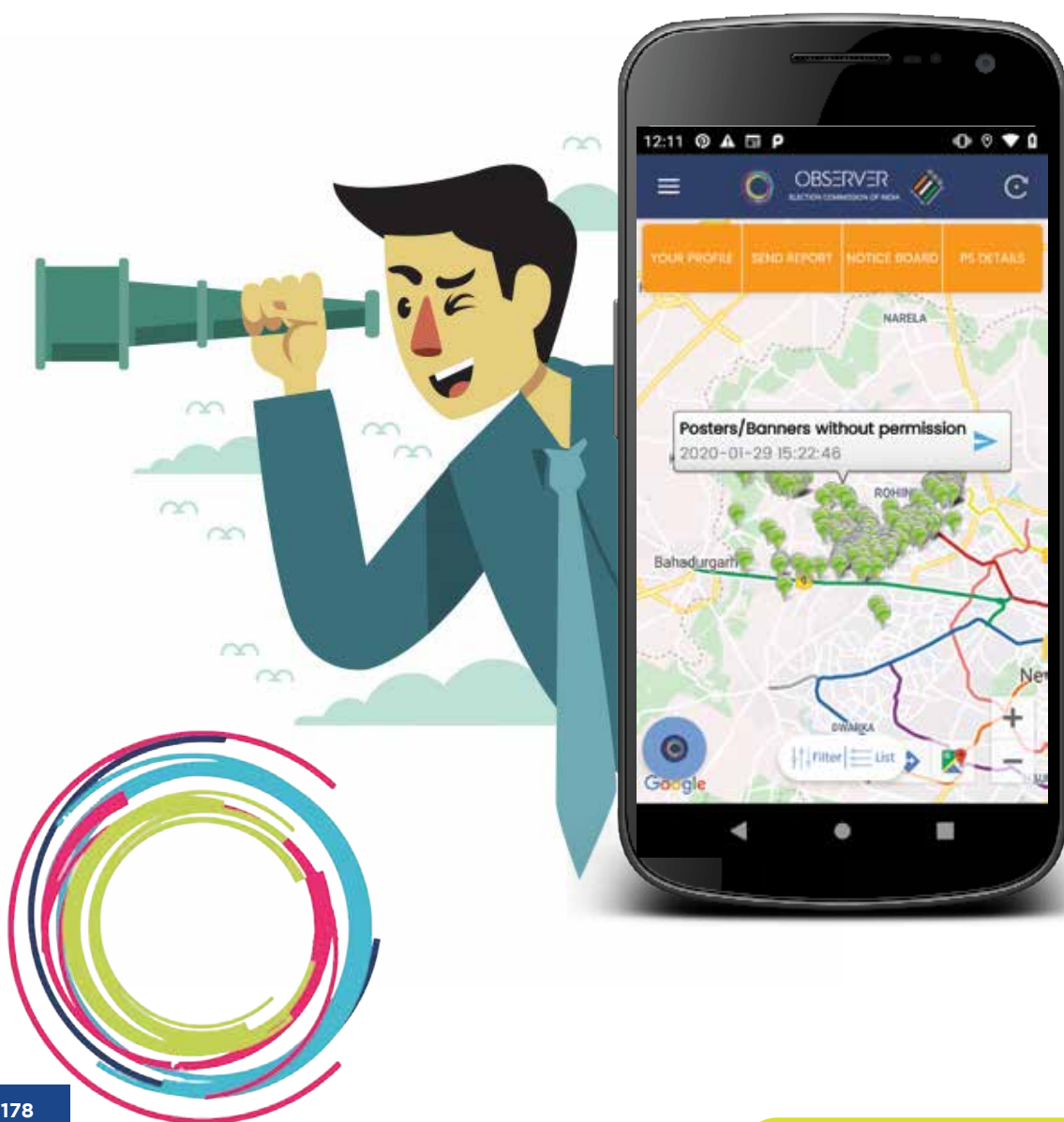
General Observers are deployed by the Election Commission of India in the election going states and ACs. However, establishing a two-way communication mechanism had been sporadic and informal.

Introduction

Observer App allows the General observers, Police Observers and Expenditure observers to file their statutory report like their arrival, departure etc. Upon deployment to a constituency, the Observer gets the complete deployment schedule in their mobile. Similarly, all notices, meeting invites, constituency details are available on the observer app.

One of the important features of the app is the visibility of the cVIGIL cases directly on the observer app. The Observer can view all the cases and give his observatory remarks. This helps the Returning Officer in deciding the case.

A SURVEILLANCE FOR POLLING PARTIES & MCC CASES



Similarly, all the flying squad locations are visible on the mobile app. This an observer can find them on the map, click to see the work being performed, and finally call them directly without the need of separately approaching them.

Observers can also keep track of the complaints cases being filed in the Assembly constituency and monitor their disposal.

The Observer app is available from the Google Play store here: <https://play.google.com/store/apps/details?id=in.gov.eci.observer>

The application was launched on Mar 14, 2019.

Features

The features provided in Observer app enables the observer to :

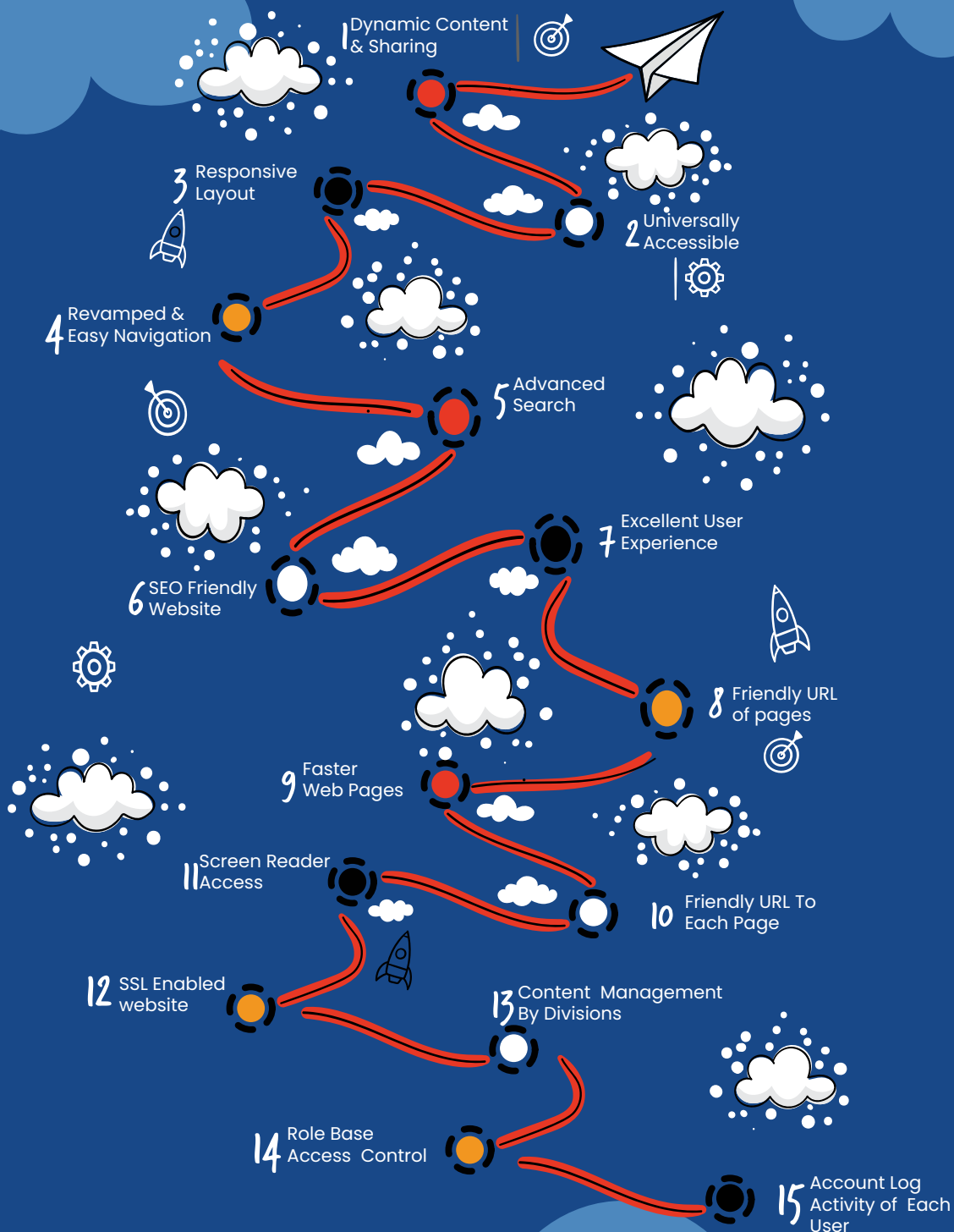
- 1) Information of cVIGIL cases
- 2) Information of Flying Squad
- 3) Observers can view profile, notice board and fill reports via options available on the dashboard

Technology

Sqlserver 2008R2, .net 4.5 Framework technology was used to develop Observer Mobile app.

Outcome

The Observer Mobile app provides better personalisation and ease of sending the notifications. The mobile-specific features such as a mobile device like camera, contact list, GPS, phone calls, accelerometer, the compass can be used, the mobile allows working offline and most importantly a user tends to spend more time on apps.



17



ECI Main Website

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*Surface the most compelling
content*

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ECI Main Website

Background

The Election Commission of India has been focussing on providing relevant content to all the stakeholders through various measures. ECI main website is the first contact point for any citizen who is able to use the internet. The ECI Main website is also the platform which is used by Election Officials from ECI, States and Districts extensively use it for retrieving relevant information. Similarly, the main site is used by Media and Statisticians. The challenge is to bring all the content in a readable manner for all stakeholders.

Introduction

The new website of Election Commission of India (<https://eci.gov.in>) is completely revamped website featuring a streamlined and simplified design, improved functionality, and enriched content areas which will help visitors to make well-informed decisions regarding their election-related matters.

The new website has been built keeping users in mind. The streamlined user interface provides a more interactive experience, allowing users to easily find the information they are looking for. Visitors can browse the website based on their own interests and learn more about Election Process in a more engaging way.

The ECI Main website contains an enormous amount of data including everything from history, elections, statistics, photo gallery, current news, press releases, and others. The mobile-optimized ECI site is a far more advanced website which can reformat itself for handheld or tablet devices without the need to be re-written for each. Also, a combination of reformatting and re-optimizing the site as a whole provides practical flexibility beyond imagination.

The main website of the ECI was made more accessible with features such as Screen Reader Access, Table Headers, Structured Headings, Friendly URLs, and Alternate Text etc. This made the website content available to persons with disabilities in a very friendly manner.

With a number of powerful tools to help users to discover new content, the new website decreases the time users spend searching for relevant content of his choice. A full search engine is included with precise controls for finding.

Dynamic Content and Sharing: The new ECI website provides extensive sharing feature through modes such as Email, Facebook, Twitter, and others. Also, the decentralized content deployment ensures accurate and fast dissemination of news, circulars, as well as messages uploaded by each division.

The website was launched on 12 November 2018

Features include



Responsive Design: The New Website is fully mobile optimized. The mobile-optimized ECI site is a far more advanced website. Mobile optimized means that the ECI site will reformat itself for handheld or tablet devices. Larger navigation buttons, the reformatted content, and differently optimized images appear when the user is on an iPhone/ Android or another device. Not only is the new ECI website mobile optimized, but it is also with a fully responsive design. Responsive design means that the ECI site is completely flexible regardless of device. Rather than detecting a specific browser type or device type, the website automatically orients itself based on the screen size of the device. A combination of reformatting and re-optimizing the site as a whole provides practical flexibility beyond imagination.



Revamped and easy navigation: The site has been primarily designed keeping in view Citizens, Electors, Candidates, Political party, Researchers, Media, and ECI Officials. The categorization has also been kept in mind for purposes of easy navigation and role-based access control. The new website has further enhanced the security features keeping in view the Cyber Security Regulations of ECI



Advanced search: With a number of powerful tools to help users to discover new content, the new website decreases the time users spend searching for relevant content of his choice. A full search engine is included with precise controls for finding content. With a wide range of filters available and the ability to drill down by content type, finding relevant content is simple. It's convenient too - the quick search box is available on every page.



Universally Accessible: The site has been made accessible for Persons with Disabilities (PwDs). The newly designed website has accessible features like screen reader access, high contrast, structured headings e.t.c



Dynamic Content & Sharing: One of the paramount requirements of the modern world is faster information sharing through various social media platforms. The new ECI website provides extensive sharing features through modes such as Email, Facebook, Twitter, and others. The decentralized content deployment will ensure accurate and fast dissemination of news, circulars, and messages.

Technology

Web Development: PHP, JQuery

Database: Maria DB

OS: Linux

Markup Language: HTML5

Structured Data Formats: JSON-LD

Outcome

The Election Commission of India website is the anchor website catering to all the requirements of all the stakeholders. With the advent of the new website, there has been a better engagement with the voters, easy access to its contents, forms, publications, statistical reports, and integration with various web and mobile applications.

The content is uploaded dynamically by the respective divisions of the ECI and has made the information publication much simplified and fast. As of now 10,197 documents are available for downloads and from its launch, it has witnessed 4,255,656 downloads.

Spreading Voting Awareness

WHY YOUR VOTE MATTERS?



18



SVEEP WEBSITE

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*SVEEP Portal has emerged
as a new digital tool for voter
awareness and participation.*

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Sveep Website

Background

The Election Commission of India has put a lot of focus on engaging citizens and voters in an online platform. A requirement was felt for a dynamic website where documents, images, papers and initiatives can be shared by various stakeholders.

Introduction

Election Commission has always placed voter awareness as the primary goal and extensive focus on voter education, enrolment of young voters, promotion of gender equality, and facilitation to Person with Disabilities. By doing so, the use of the new ECI SVEEP (Systematic Voter's Education and Electoral Participation) portal, dedicated efforts have been made to provide a platform for interaction or participation in a more constructive manner which includes quizzes, club, forum, gallery, events, and resources along with sharing of success stories. The Portal <https://ecisveep.nic.in/> was launched on 3 July 2018. Simultaneously the new SVEEP logo was designed which has been now used for all SVEEP activities across India.

SVEEP Portal is committed to the virtue of “No Voter to be Left Behind” and helps the citizens to learn about the election process, besides allowing them to engage with their peer groups.

The main features it covers, are

- 1) Content Management System
- 2) File sharing Management
- 3) Discussions Forums (restricted to registered users)
- 4) Events Management
- 5) Photo Gallery Management
- 6) Banner Management across site
- 7) News Management
- 8) FAQ Management
- 9) Newsletter Subscription and Delivery Management
- 10) Cross Browser Compatibility



- 11) Restricted Access to Discussion Forums
- 12) Role based administration
- 13) WYSIWYG editor
- 14) Insert media files (files, audio, video) in page content
- 15) Ability to create unlimited pages
- 16) Categorisation of pages
- 17) Page assignment to multiple categories
- 18) Content scheduling
- 19) Integrated with Social Media/platforms

Technology

Web Development: PHP, JQuery

Database: Maria DB

OS: Linux

Markup Language: HTML5

Structured Data Formats: JSON-LD

Outcome

The new portal for SVEEP has brought in the era of digital Voter awareness to the forefront. Similarly, various Chief Electoral Officers use this portal for reporting and uploading of content. All the events especially which are held during National Voters Day are recorded and uploaded to the gallery of the SVEEP portal.

Electoral Literacy Clubs are being set up in the country to promote electoral literacy in all age groups of the Indian citizens through engaging and interesting activities and hands-on experience but in an apolitical, neutral and non-partisan manner. 110700 ELC Ids were generated by SNO/DNOs during 2018-2019.

The portal has direct interaction with citizens, more than 70000 selfie images were posted during the Lok Sabha Election 2019.



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**RTI Online
Portal**

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*ECI RTI Online Portal is a step
for greater transparency and
accountability in the Election
Commission Processes*

”



RTI Online Portal

Background

The Department of Personnel & Training has developed the online RTI portal. However, ECI has a unique position where even though the Chief Electoral officers, District Election officers and Electoral Registration Officers are under the State Information Commission, ECI itself is under the Central Information Commission. The fee structure of each State is different and the RTI rules are prescribed separately. Most of the cases from ECI are regarding CEO which need to be transferred. Due to this unique position, there was a need which was felt to have ECI own RTI online portal.

Introduction

Election Commission of India (ECI) had envisaged an Online Portal where Indian citizens can file RTI applications and appeals directly to ECI under Right to Information ACT, 2005.

RTI Online Portal is facilitating citizens of India to obtain the information they want from ECI as per the Act. RTI Online Portal allows Indian citizens to pay RTI fees online through a payment gateway by Net Banking via associate banks, Debit/Credit cards of Master/Visa and RuPay cards.

This application was launched by ECI on 6 June 2018 and was perhaps the first application which was developed in ECI as part of the 2020 plan.

ECI is in a unique position where Chief Electoral officer to whom maximum RTI pertains have State RTI rules but are covered under ECI. Thus having a separate online RTI Portal was a necessity.

The backend of handline the RTI application is completed only. The CPIO and First Appellate Authority has the login for disposing the RTI application online without the use of manual disposal. App the type of reports are available from the portal for ECI RTI Nodal Officers, CPIO and First Appellate Authority.

The RTI Online Portal is available here: <https://rti.eci.nic.in/>

Feature

- 1) Login:- OTP authentication required for login and registration.
- 2) Profile update:- Profile update is the next step after login on the portal.
- 3) New RTI:- New RTI tab contains guidelines with mandatory fields. Need to follow the instructions to create a new RTI.
- 4) RTI Status:- RTI status contains all the RTI status of the logged-in user.
- 5) First Appeal:- If the applicant has not gotten any response from CPIO, the applicant will get the option to file the first appeal after 30 days from filling date of RTI Application.
- 6) If CPIO has taken any action then immediate first appeal window will enable however in case of transfer, the third party will get the next 30 days to respond on RTI Application.
- 7) First appeal window will be activated next 30 days from the day of activation of the first appeal.
- 8) First Appeal status:- First Appeal status contains the status of RTI which was submitted for the First Appeal.



**RIGHT TO
INFORMATION ACT**
How Does it work?

<https://rti.eci.nic.in/>

Login

Technology

Web Development : PHP-Laravel framework(LAMP)

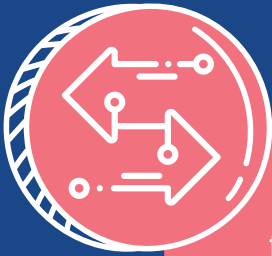
Database: MariaDB

Security protocols: SSL

Notifications: Sms and Email integration

Outcome

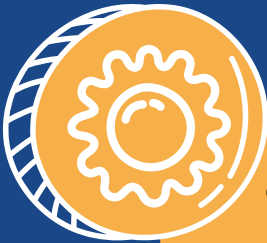
The RTI online portal of ECI brought in the era of transparency to the next level. As of now 11326 application and 1045 appeals have been filed from the RTI Online Portal.



ECI's real-time
tracking platform
for political parties



Secure and dual
verification login for
political Parties
applicant



Non-accessible to
other than political
parties Applicants.



Real-time status of
each action taken by
ECI Officials.

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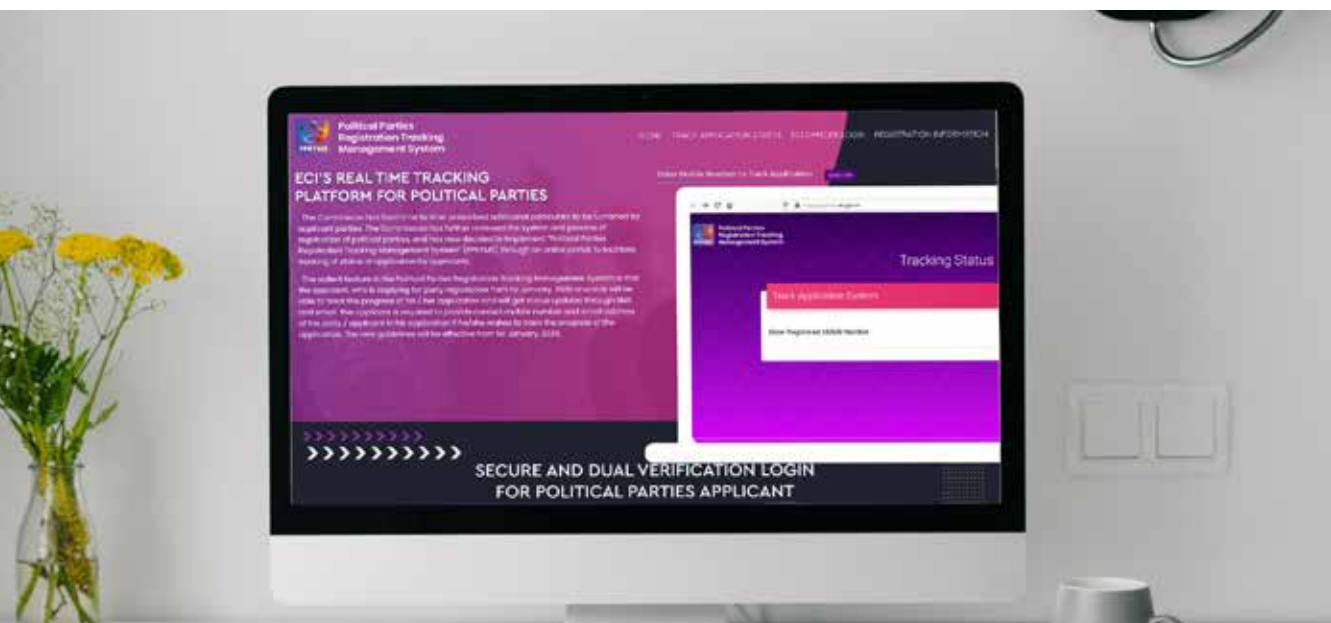


Political Parties Registration Tracking Management System

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*Commission reaches out to
New Political Party registrant
for convenience and
transparency*

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Political Parties Registration Tracking Management System

Background

In the earlier scenario the registration process for the political party was completely offline with little visibility for the applicants.

Introduction

The Election Commission of India has reviewed the system and process of registration of political parties and decided to implement “Political Parties Registration Tracking Management System” (PPRTMS) through an online portal, to facilitate tracking of the status of the application by applicants.

In this Political Parties Registration Tracking Management System the applicant, who is applying for party registration from 1st January 2020 onwards can track the progress of his / her application and get status updates through SMS and email. The URL for tracking the Political party is here: <https://pprtms.eci.gov.in/>

This application was launched by ECI on 1st January, 2020.

Feature

- 1) **ECI's real-time tracking platform for political parties:-** The applicant is required to provide a mobile number and email address of the party/ applicant personal information in his application, Applicant can also track the progress of application against their application number and receive the “ status through SMS and email.
- 2) **Secure and dual verification login for political Parties applicant:-**
Political Party Applicant can view their application status after two-factor verification
 - i) OTP verification
 - ii) Application number
- 3) **Non-accessible to other than political parties Applicants.**
It can be accessed only by the authenticated user and dual verification required for application tracking status.
- 4) **Real-time status of each action taken by ECI Officials.**
ECI receives the application and converts into digital form through PPRTMS application and thereafter applicant will receive application number through SMS and email during application digitization.

Process Flow

- 1) User authentication through OTP.
- 2) Track the status of the application on the website.
 - i) Received in ECI
 - ii) Acknowledgement of Application
 - iii) Time-Barred
- 3) Next to tracking status of the application.
 - i) Shortcoming/Defect
 - ii) Communication received
 - iii) Publish Public Notices in Newspapers
 - iv) Hearing Scheduled
 - v) Name change
 - vi) After Hearing Defect
- 4) Final status of the application.
 - i) Registered
 - ii) Rejected
 - iii) Closed

Technology

Web Development : PHP-Laravel framework(LAMP)

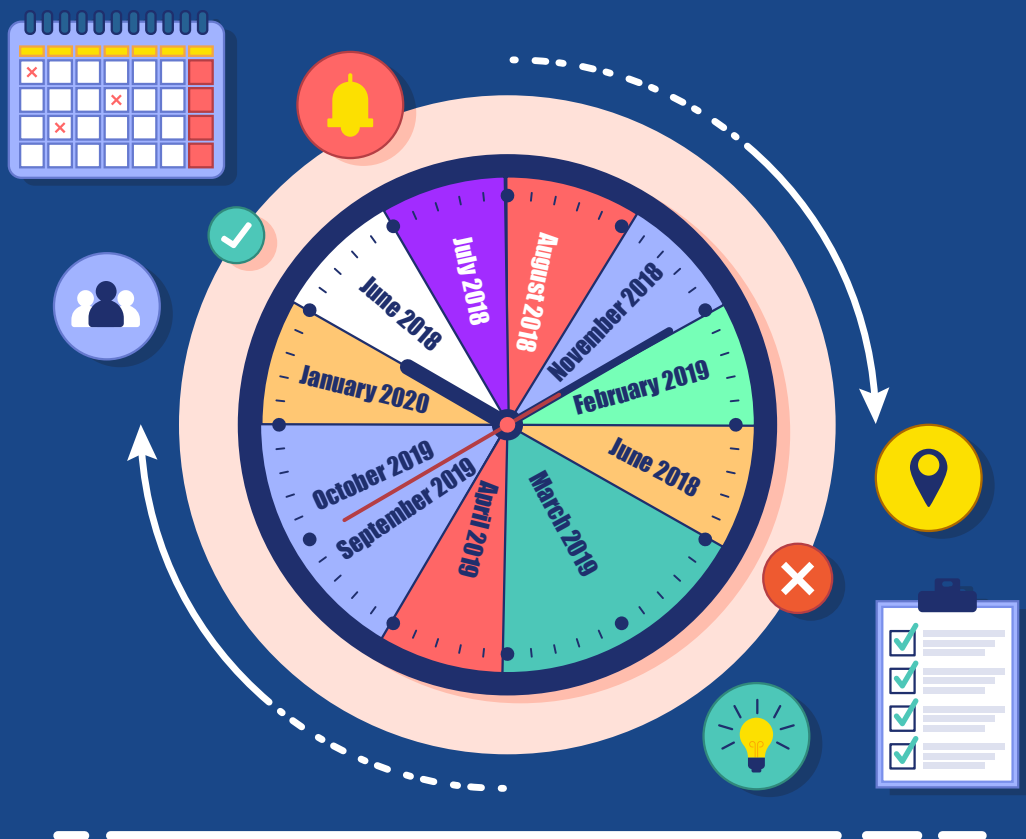
Database: MariaDB

Security protocols: SSL

Notifications: Sms and Email integration

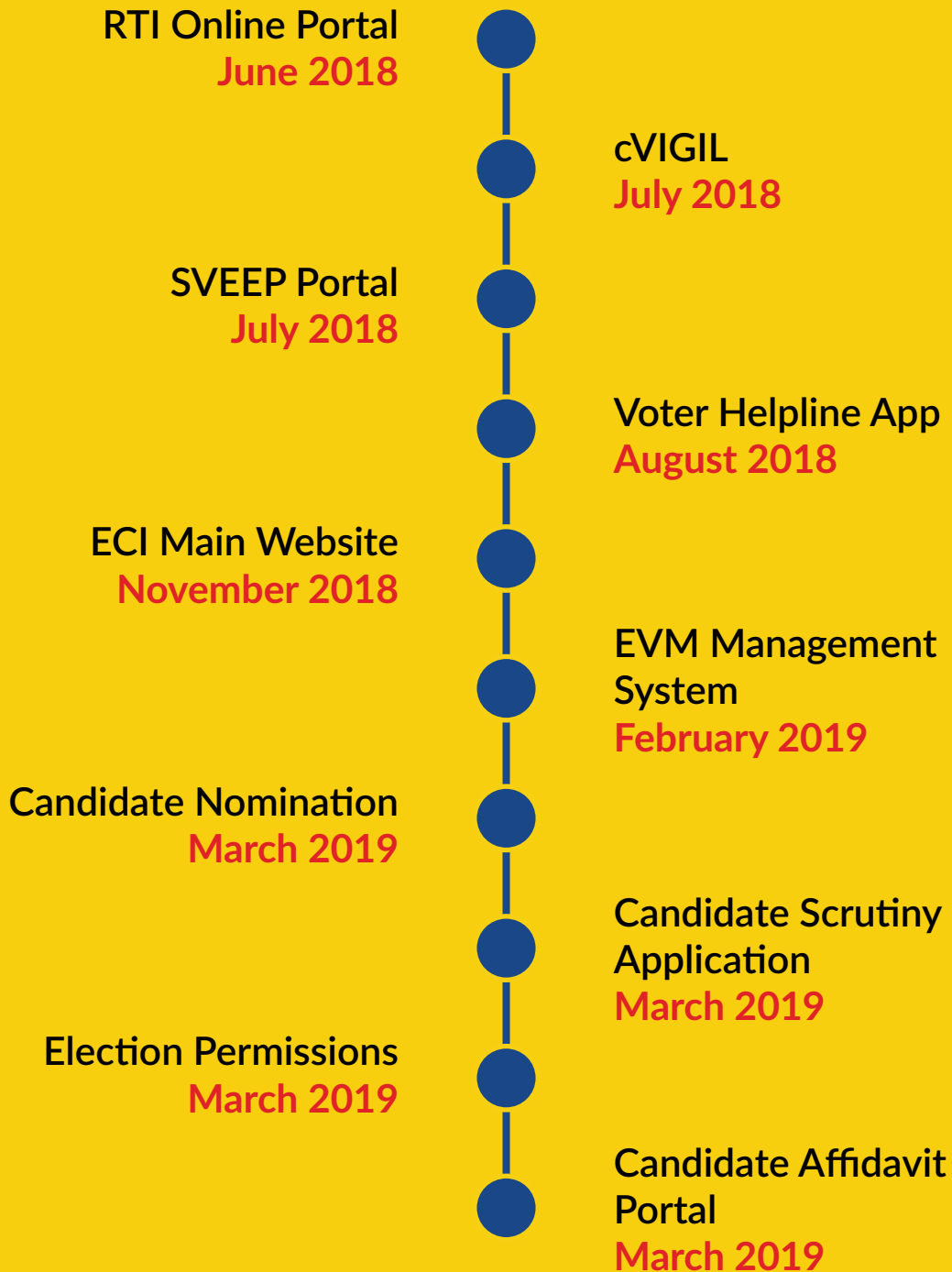
Outcome

Political Party application status is the first step towards an online application management system, where the user may know the application status through web application after authentication of mobile number and input of application number. Later full-fledged application will come into force so that political parties can apply directly online.



Time Series of 20 Apps

TIME SERIES OF 20 APPS



Index Card & Statistical
Reporting
March 2019

Expenditure
Monitoring
March 2019

Model Code of
Conduct Relaxation &
Violation Portal
April 2019

Booth App
September 2019

Expenditure
Monitoring
March 2019

Counting Application
March 2019

PwD App
March 2019

Voter Turnout
April 2019

Results Trends Tv
October 2019

Political Party
Registration Tracking
Management System
January 2020



Mobile Apps of ECI

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*The ecosystem of 11 mobile
applications of ECI*

”

1. Voter Helpline App



Voter Helpline App

This is a one-stop solution for voters. It helps in Voter Registration, Contesting Candidate profiles, and live Election Results. The Voters can search their name & find the polling station located in the electoral roll by simply scanning their Voter ID card.

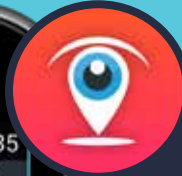
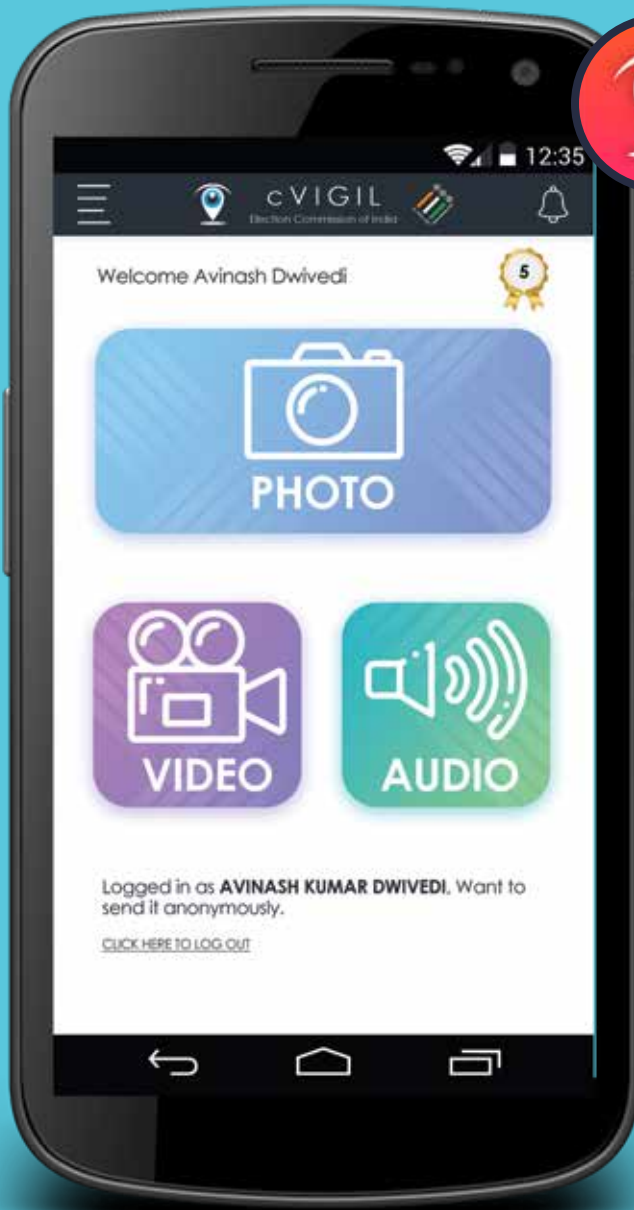
2. PWD App

Pwd App

As the name implies, PwD app is meant for Person with Disabilities. The PwD elector can request for enrolment assistance, search for their name, navigate to the polling station and see the list of contesting candidates for their election. It utilises the Accessibility features of mobile phones for voters with blindness and hearing disabilities.



3. cVIGIL



Cvigil App

Citizen Vigilance. The citizens can report the Model Code of Conduct Violations during the election period for prompt action by the enforcement agencies. The app provides clicking of live photo/video/audio from the app along with the Geo-tagging & time stamping. This provides evidentiary proof for taking prompt action.

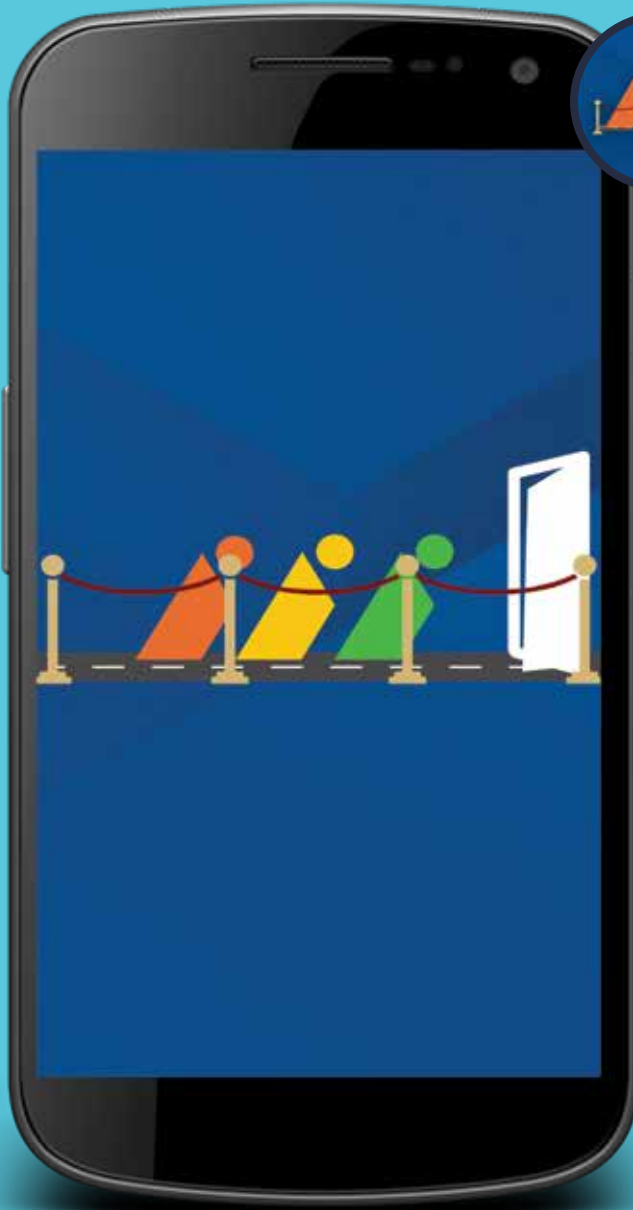
4. Voter Turnout App

Voter Turnout App

During the poll day, it captures the live voter turnout data as recorded by polling stations and displays in the mobile app. This is a very popular app for contesting candidates and Media to know the real-time voter turnout in the polling stations Assembly constituency-wise.



5. Booth App



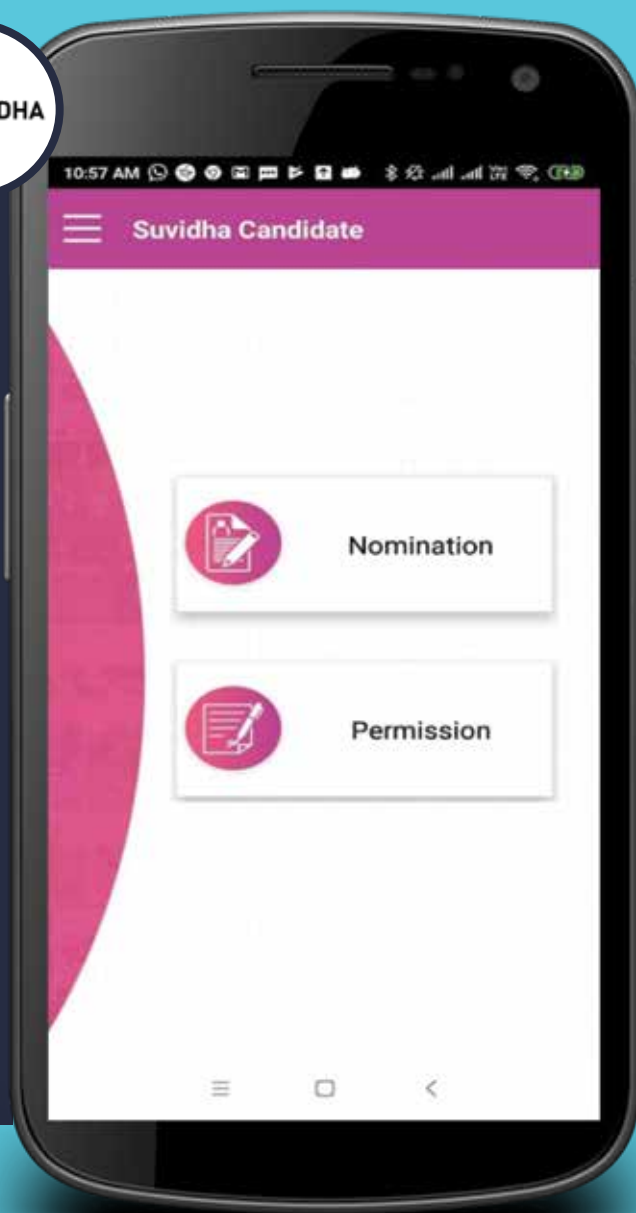
Booth App

This app provides the facility of identifying the voter in the electoral roll by simply scanning the QR code in the voter slips which are distributed before the elections. This helps in faster identification, faster polling, real-time automated turnout information and advance queue information in their polling station to voters.

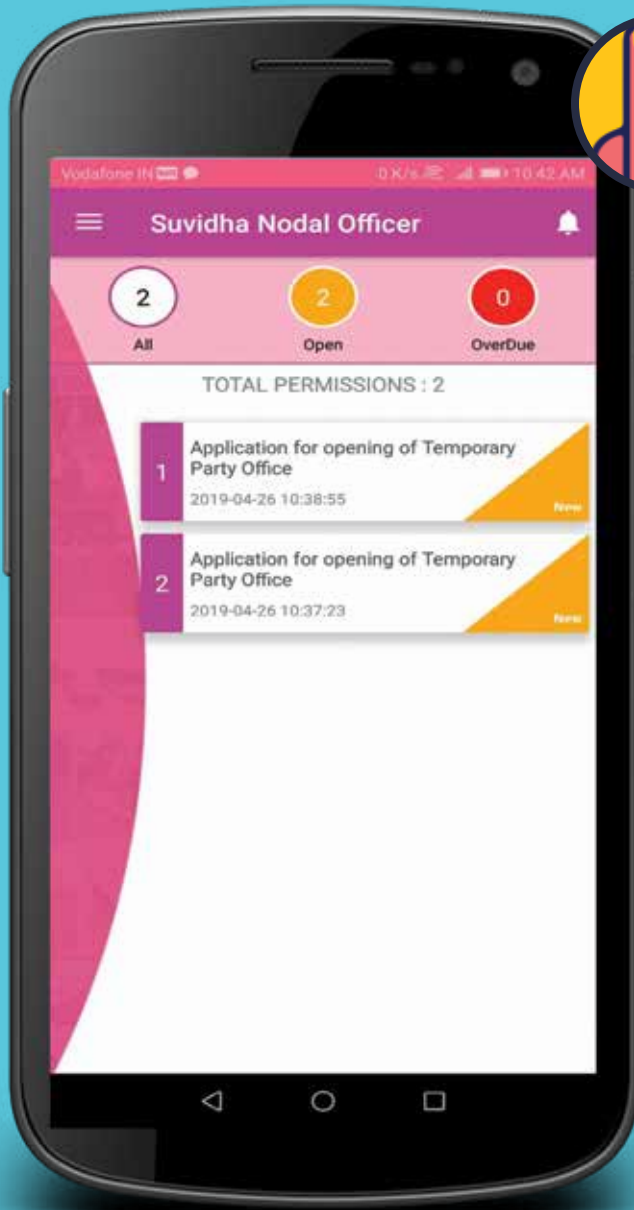
6. Suvidha Candidate App

Suvidha Candidate App

The political parties and candidate can track their application from the mobile app. During the elections, Candidate/ Political parties need to take permission from the authority to hold the rally and organise the event. All permissions once applied can be tracked from the mobile app.



7. Nodal App



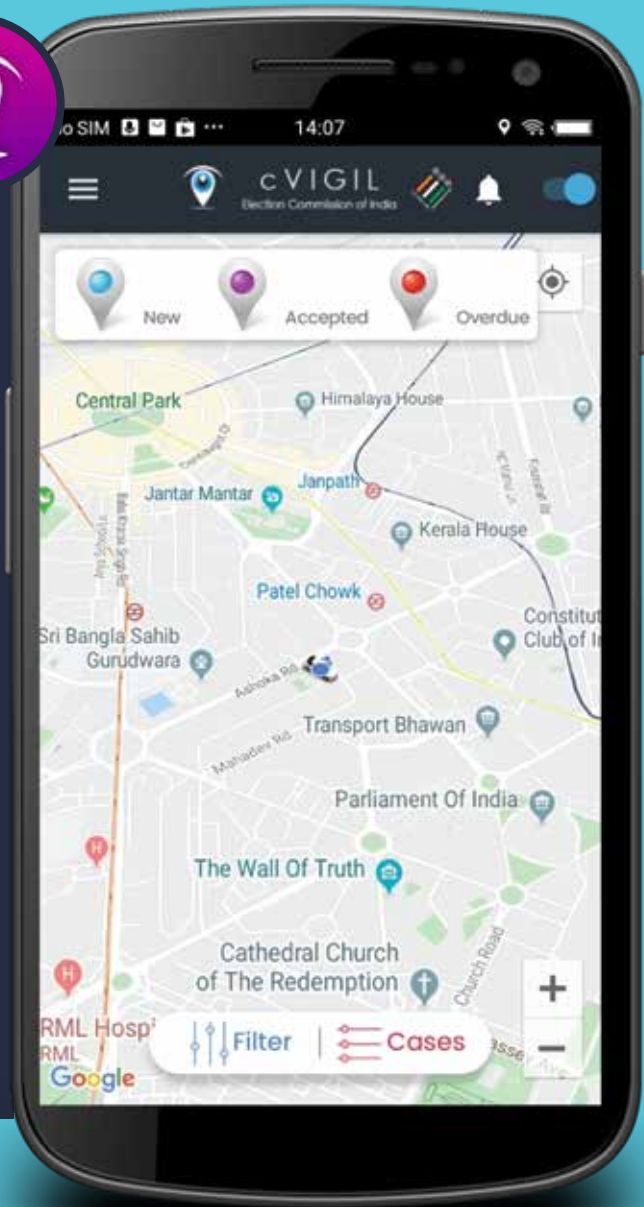
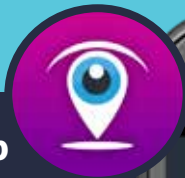
Suvidha Nodal App

During the elections, various departments need to give the clearance before the permission asked by the candidate / political party is accorded. Each nodal officer is given the mobile app for him/her to give no objection from his department. These departments include fire, police, environment e.t.c

8. Investigator App

Investigator App

This application is a potent tool in the hands of the field units deployed for the enforcement of violations and law and order situations. Upon receipt of the complaint, the magistrate/ police inspector reaches the point of incidence and after investigation files the pictorial evidence and his report through the app. The events are recorded with the GIS location to track the event and its disposal.



9. Observer App



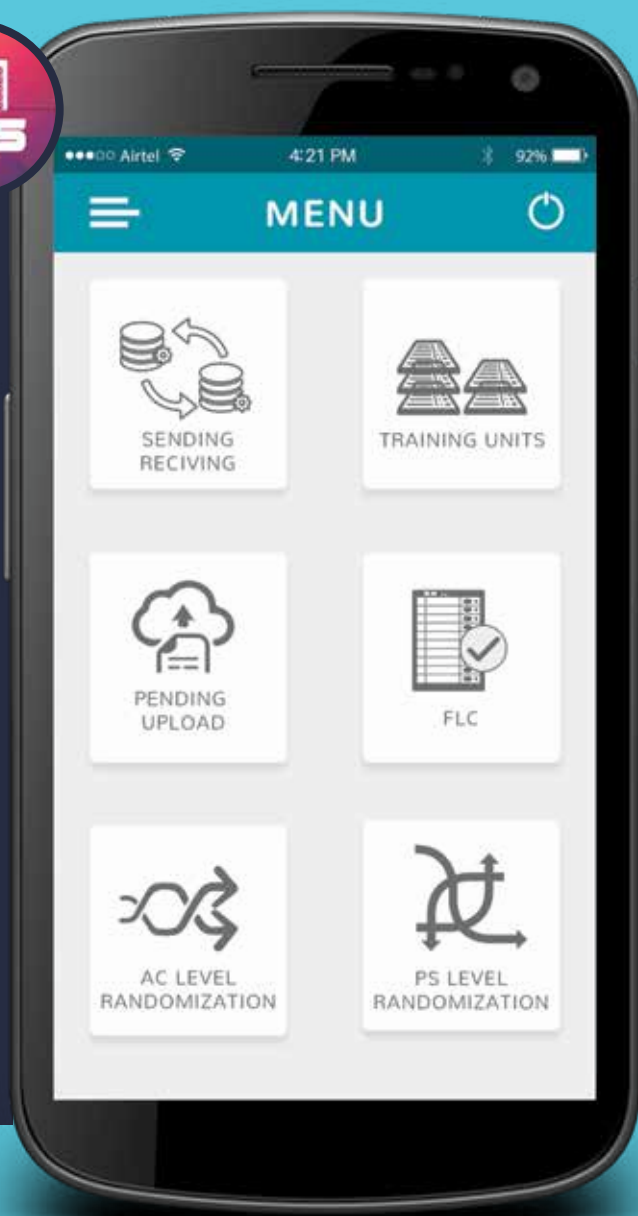
Observer App

During the elections, officers deployed as observers are aided by the use of the observer app. The Observers can see their deployment schedule, contact the relevant officers and monitor all the cVIGIL cases filed in his jurisdiction. He can also know about the location of the field units in the GIS-enabled platform in the mobile app.

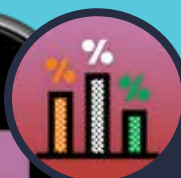
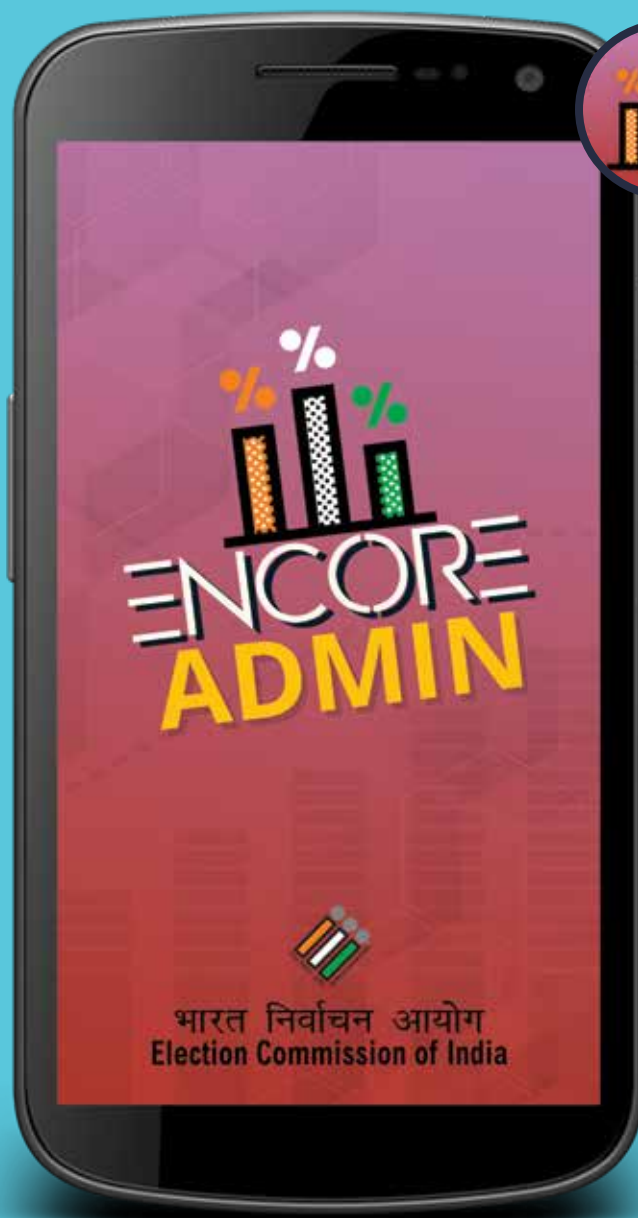
10. EMS App

EMS App

The EVM machine inventory is managed in the central application called as 'EMS'. All the machines are barcoded and they are only moved from one place to another by the use of EMS app only. Every machine is tracked and recorded from the mobile app only. Each field user is given the app for scanning and it registered into the system.

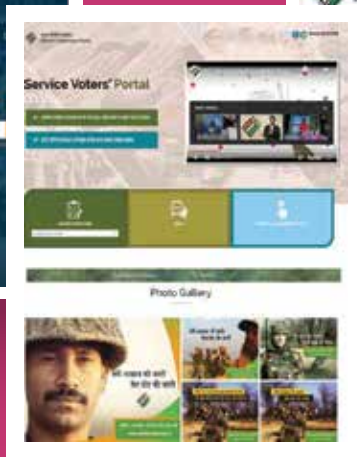
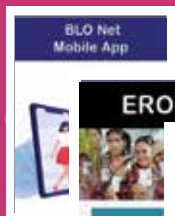


11. ENCORE Admin



Encore App

This app is meant for decision-makers who can monitor the poll turnout, deployment of manpower and also track the deficiencies. Each event is sent as a notification in the mobile app. The officer is presented with real-time information about the events and incidents reported by the field officers. They can also monitor all the cVIGIL cases reported for the model code of conduct violation through the mobile app.



Existing Application of ECI

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The Newley developed 20 apps of ECI compliments the existing apps and neatly integrates with each other. Some of them will be completely recasted to ensure advanced functionality

”

ERONET Features :



-----● Online Form Processing



-----● Maintenance of Health of Electoral Roll



-----● Family Information



-----● EPIC Portability



-----● Offline Form Processing

1. ERONET

Background

The form processing has been the core work of the election officials across the nation.

- 1) There were 36 disparate applications starting from excel to an oracle which were state-specific to manage the electoral registration.
- 2) Cost: Management of 36 Physical Data centres required 36 service providers with an implicit cost.
- 3) Smooth migration of elector from one place to other place & Uniqueness of Voter ID resulting in:
 - i) Existence of **multiple entries** for the same elector
 - ii) Non-removal of **dead and shifted** voters
 - iii) Non-availability of the **current status of Eroll and individual electors**.

Introduction

ERONET is a web-based system for Electoral officials, in 14 languages and 11 scripts, to handle all processes pertaining to Form 6/6A/7/8/8A/001.

- 1) All 29 States and 7 UTs are sharing common infrastructure at National Level.
- 2) UNPER (Unified National Photo Electoral Roll) is a common database for all States and UTs with data of 92 crore electors.

ERONET standardised forms processing, standard database schema, and a standard template for eroll printing. It automates the process of electoral roll management starting from elector registration, field verification of electors, decision support system for Electoral registration officers and for providing extensive integrated value-added services.

Citizens can fill up various online forms on National Voters' Service Portal, nvsp.in or by using voter helpline mobile application. The form is processed thereafter in ERO-Net. The applicant also gets periodical alerts and notifications on each activity performed at ERO-Net.

ERO-Net application is available pan India, to all citizens of India for enrollment/corrections/migration from Electoral Roll. The application on the backend is available for the Election commission of India, all Chief Electoral Officers, District Election Officers, Electoral Roll Officers and Booth Level Officers.

The application handles data of 92 crore electors and is used for printing of Electoral Rolls in state-specific vernacular languages. The application aims to handle all eligible electors above 18 years.

Before the implementation of ERO-Net (Centralized Software for Electoral Roll Management and Form Processing), Each State was using ERMS software for state-specific ERO-Net Management and Form Processing.

The ERO-Net has been designed and developed keeping in mind the need of Centralized form Processing and monitoring the work of all the Officials involved in Form Processing.

For this single unified Database was created and all the existing ER data were migrated to it from State-Specific databases. This created UNPER. The centralized Form Entry was made online via NVSP and all the State portals were closed thereby making data entry smooth into the system. Further Role-based access for form processing was finalized and this allowed Officials involved in the processing of the form to mandatory process the form through their own Login thus by creating accountability by means of audit trails maintained in the System.

The Application handles close to 8 crore forms per year for New Inclusion/ Change of Demographic Details/ Migration and Deletion from Electoral Roll of India. It was launched in Jan 2018.

Features

Online Form Processing

The applicant submits the form online at nvsp.in and on completion of the same gets the SMS/ email alert. Thereafter ERO/ AERO check the application for the process further.

Maintenance of Health of Electoral Roll

Among the major laws governing elections is the Representation of the People Act, 1950, which mainly deals with the preparation and revision of the electoral rolls. Publishing of electoral rolls is a key process that happens before the elections and is vital for the conduct of elections in India.

Family Information

The entry in E-Roll is linked to family information. The polling booth is allocated keeping in view that the whole family can vote at the same location. ERO can view your family details before assigning parts and sections, thus deciding your voting booth.

EPIC Portability

Migration from one constituency to another while retaining the same EPIC number: ERO-Net facilitates easy migration from one constituency to another by facilitating seamless communication between the EROs of two constituencies. De-duplication is also taken care of while including entries in the E-Roll.

Offline Form Processing

The data entry operator fills forms data in ERO-Net. AERO allocates jobs for Data Entry Operator and generates QR Code data file

ERONET was further enhanced with alert and monitoring facilities were added at the level of ERO, DEO, CEO & ECI level, along with Suo moto action for EROs and processing for removal of logical errors and DSE

- 1) Digitization of Forms Received Offline Online system of Form Processing
- 2) Objective field verification
- 3) E-ROLL management with Unique EPIC
- 4) Number Generation Synchronization of E-Roll at National
- 5) Level Generation of Reports, Notifications
- 6) Alerts Monitoring Dashboards
- 7) Printing of electoral roll from ERONET for all states
- 8) Printing of Photo Voter Slip
- 9) Printing of EPIC Cards

Technology

.Net Framework technology was used for developing E-RONET

Outcome

The application provided a seamless interface and one-stop for the citizens to apply for voter registration-related services. The voter now can easily track their application. Once

the new registration is processed, the user is intimated online through portal/SMS.

The citizens now do not need to visit any election offices for any electoral process. Therefore considerable reduction of time. The Election Commission of India provides electoral services free of cost, thus accepting duplicate voter ID Card all the services are free.

Hits on NVSP depend upon elections. During general elections, 2019 more than 2 crore daily hits were recorded for searching for names in the electoral roll.

Since the launch of ERONet Jan 2018, a total 90 crore electors were served for 18.9 crore forms, 7.8 crore Additions and Migration, 1.9 crore Overseas voters, 3.7 Crore Deletions and Objections, 6.78 crore Corrections and 44 lacs Transpositions). Another achievement is marking 62 lacs electors as PWD in Electoral Roll.

Recently Elector Verification Program (EVP) on ERONet recorded daily Verification forms of average 80 lacs for a period of 90 days continuously. Total 78 crore Electors have submitted their application for verification

“

ERONET is a web of Electoral Roll Officers. It provides the right amount of electoral information to the right set of people at the right time, for effective management and timely Voter Services

”



2. National Voter Services Portal

Background

Prior to the introduction of NVSP there was neither a centralized public interface for the citizens for applying for Voter ID card nor for seeking modification in their data, as it is available today. There was no online form processing and form status tracking system available in the public domain. In 2015, an urgent need was felt to provide citizens such a service which enabled them to search their names in the electoral roll. National Voters Service Portal (NVSP) was pressed into action to provide citizen friendly online interface for form submission and electoral search.

Introduction

National Voters Service Portal or NVSP in short, was developed with an aim to provide single window service through a user-friendly interface for citizens for the ease of access and doing business. The use of cloud services made the National Electoral Search significantly fast and provided search services for over more than 92 crore electoral data within a blink of an eye. The national electoral search has a responsive user interface (UI) which works for both desktop and mobile.

Features

Through NVSP, a user can avail and access various services such as access the electoral list, apply for voter id card, apply online for corrections in voter's card, view details of Polling booth, Assembly Constituency and Parliamentary constituency, and get the contact details of Booth Level officer, Electoral Registration Officer among other services.

National Electoral Search

Electors can search their name in Electoral Roll

- 1) By Entering their demographic details
- 2) By their EPIC Details

On-line Registration/Modification/ Deletion/ Transposition

Voter can apply online to register / modify / delete / transposition in the electoral roll using various forms like form 6, 6a, 7, 8 and 8a. The user is given the option to upload the supporting documents. The user can also fill the form partially and save it on desktop, this file can be uploaded to start the form filling again, from the point where it was saved the last time.

For all the applications submitted on NVSP Portal a unique reference number is generated and given to the applicant on email as well as SMS. Using this reference number applicants can track the status of the application.

Tracking Status of Application

Applicants can track his/her application status, the status of EPIC delivery by providing reference id.

Elector Verification Programme (EVP)

Elector Verification Programme was launched from 01.09.2019 for electors with the following objectives:-

- 1) View, Verify and authenticate ER details of existing Entry.
- 2) Provide Feedback on Polling Station.
- 3) View, verify and authenticate ER details of family members after creating the family group.

- 4) Submit forms for unenrolled Electors (Above 18 years age as on 1/1/2019) and submit details of family members with age group 16 years and 17 years.

The NVSP portal played a major role in bringing an online tool for verification, registration and updation.

Printing of Voter Information Slip

The voter information slip provided an electoral search which is bilingual in nature and provides all the required information to the candidate which he can print and carry to the polling station.

After searching the record in electoral search, the result list displays the elector's details and view details button. After clicking on the View Details button the elector's information is displayed along with the button to print the voter information slip.

Know your BLO/ ERO/ DEO/ CEO and Constituency/ Part

User can get BLO/ ERO/ DEO/ CEO and also constituency & part information by providing details of State, District, AC, Polling stations Mode to offer this service On-line through the portal, from a mobile phone through SMS

Technology

The technology used for the development .Net 2016, Sql Server 2016, IIS, Windows server, jquery & Apache Solr for electoral search.

Outcome

NVSP portal has established the service delivery platform for all Voter Services. A user from any part of the world is able to fill the requisite forms and reach out to Electoral Roll officers.

Similarly, the NVSP Portal is extensively used for searching the name in the electoral roll. During the recently concluded Electoral Verification Program, the NVSP was a major tool in the hands of the Voters.

“ Online Voter forms & Electoral Search ”



3. BLONet Mobile App

Background

Booth Level officers used to verify and collect details of electors and probable electors through visiting each and every elector and collecting their papers for any kind of services required by them. There are more than a million BLOs across the country. As no online system or mobile App was present, BLOs had to submit all their documents to the ERO office for further processing. This was not only tedious and labour intensive but also delayed the process of form processing. A need was felt to bring such a service that could collect the digital data at their doorstep. A mobile app BLO-Net was launched to connect all the BLOs to the ERO office which also eliminated the need of digitization of supporting documents.

Introductions

BLO-Net is a mobile app designed specially for Booth level Officers to provide online processing mechanism for claims, objections and enrollment received online/ offline. BLO-Net offers a rich interface to the BLOs where BLOs can verify the elector details, upload documents and provide their remarks for further processing of the forms.

Election Commission of India provided an application to Booth Level Officer (BLO) to verify each elector's entry, correct the errors and enable deletion of verified register death

cases under the EVP program. It helps to avoid data entry, which often causes mistakes. Moreover it saves a large amount of paperwork thereby bringing economies of time and cost.

Features

- 1) Download Electoral List: This feature allows BLO to download Elector's list from this tab. This will be saved in the phone memory.
- 2) Verification of Electoral Detail:
 - i) My EVP Dashboard
 - ii) Verification of data furnished
 - iii) Collection and verification of data
 - iv) Verification of polling station
- 3) Collections and Verification of Data:
 - i) Electoral verification
 - ii Family tagging verification

Technology

The technology used for the development Android studio and SQL Server 2016

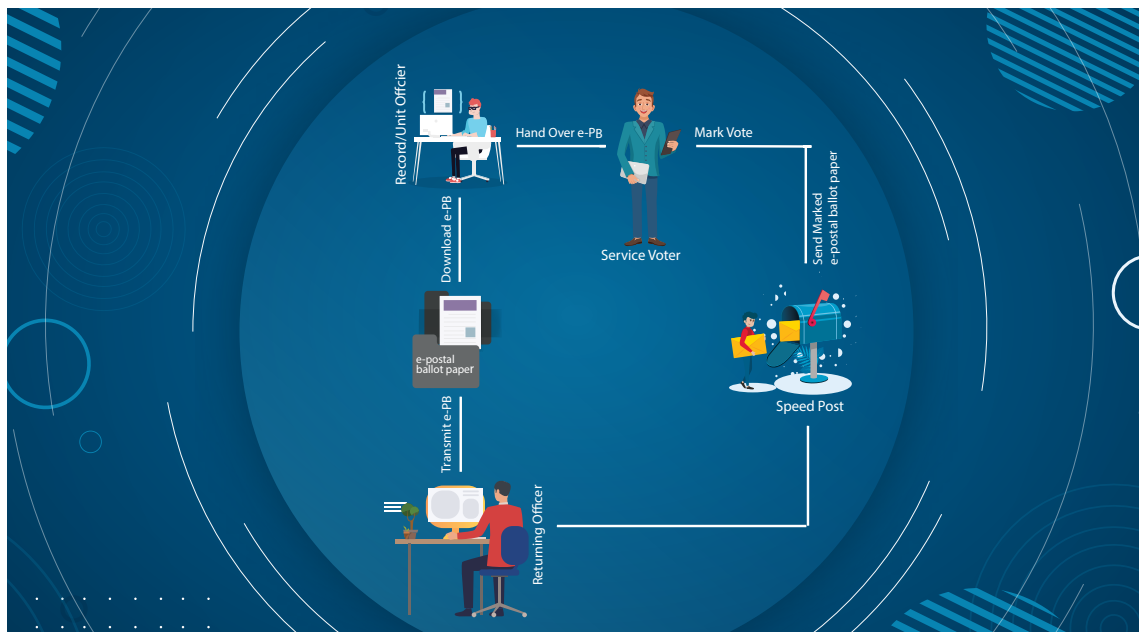
Outcome

With the launch of BLO Net app, the verification and form submission has been simplified and BLO can directly perform all his duties from the app.

“

*Form submission and verification
by Booth Level Field Officer*

”



4. ETPBS

Background

The postal ballot paper to the service voters was sent by the Returning Officer after printing the ballot for each and every service voter of the Constituency, and then put it in an envelope inscribed with the address of the Record Office of each service voters. This takes a lot of resources, efforts and time, thus increasing the chance of mistake, since each ballots need to be printed and put in the correct envelope. Since, the last part of electoral roll was not upto date, therefore, the Record Officer faced a challenge in identifying the present place of posting of the service voter thus failing in delivering the postal ballot to the concerned service voters in time. This led to low turnout of the service voters of about 3-4% in the General Election to Lok Sabha 2014.

Introduction of the application

Electronically Transmitted Postal Ballot System (ETPBS) is the one-way electronic transmission of the Postal ballots to the Service Voters. The Service Voter then cast their vote and send it to the respective returning officer via Post. The complete process is secured by way of multiple checks and transmission protocol to ensure safe transmission.

Upon receipt of the postal ballot at the counting centres, the returning officer validates the receipt by a series of QR codes with that of the transmitted system.

This application was launched on 21st Oct 2016.

Functionality

Returning Officer generates ballot paper electronically by a specific desktop application. The list of the candidates is punched along with their party names. This ballot then gets encrypted in the system is ready to be sent. The first functionality is the ability to generate the postal ballot online for transmitting through ETPBS.

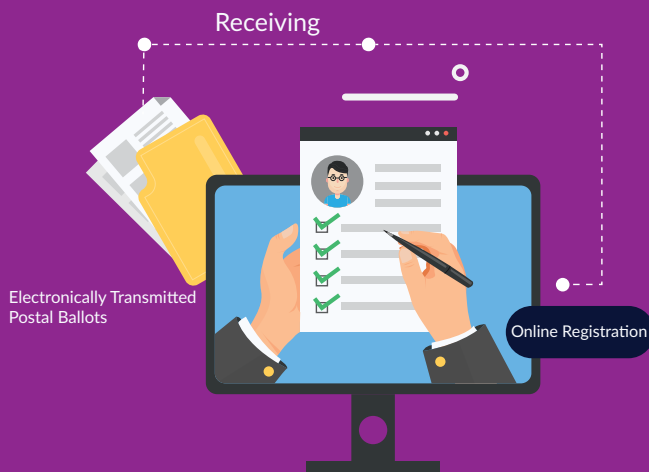
Through ETPBS system, the ballots are automatically assigned to Service Voters based upon their constituency and get then gets transmitted. The unit officer downloads the Postal ballots on behalf of the service voter. These downloaded ballots will be password protected. The downloaded Postal Ballot can now be e-transmitted / hand-delivered using their secured network/infrastructure to the individual service voters. The PIN will be transmitted/ dispatched to the individual service voters by the Record Officer to ensure that the downloaded Postal Ballot is opened by the concerned service voter only.

Thus ETPBS transmits the Postal ballot from the returning officer to the service voters electronically by a series of security protocol.

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*One way electronically
transmitted postal Ballot
system for service voters*

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SERVICE VOTER **REGISTRATION** PORTAL

5. Online service voter portal

Background

The difficulties and hardships encountered by the service voters, especially by the armed forces and Police personnel serving at the border and remote areas of the country and the service personnel working under the Government of India in missions abroad, have been receiving the attention of the Commission in recent times. Many associations of such wings also approached the Election Commission with a view to mitigating the difficulties faced by service voters in the matter of registering and exercising their franchise. Preparation of the last part of the electoral roll was not happening properly due to which there were duplicate service voters, no provision for deletion was provided and the address of the record office was also not updated periodically. The entire process of registration was manual and lengthy.

Introduction

The purpose of the online Service Voter Registration Portal system is to provide convenience and easy-to-use portal for Defence Personnel, employed under the Government of India and member of an Armed Police Force of a State and serving outside that state. The system allows registration and acceptance of forms for Service Voter. Through this online system, District Election Officer assigns the Assembly Constituency to Service Voter, then the form processed by Electoral Registration Officer.

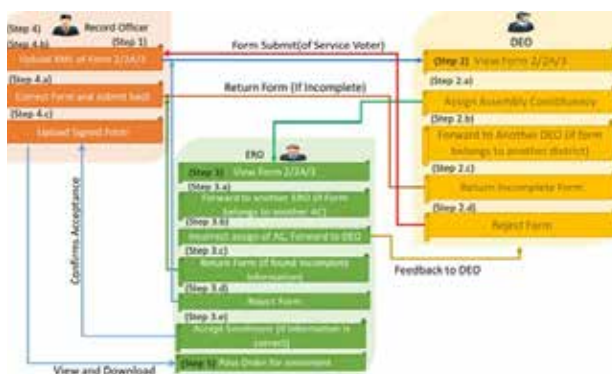
Their names are registered in the last part of the electoral roll. The data of service voter is maintained by ECI and the request for registration is submitted by the Record Officer.

This application was launched on 14th July 2017.

Functionality

- 1) Processing of electoral forms
- 2) Maintain last part of electoral rolls
- 3) Communication between EROs across ACs and States
- 4) Simultaneous addition and deletion process
- 5) Connected with a single source of online forms acceptance (through servicevoter.nic.in), it provides real-time monitoring of the progress of the form processing (Status of the forms submitted)
- 6) In case of deletion, proper records of deletion, notices are generated, issued and notice served details are captured.
- 7) Easy to use Dashboard for DEOs, CEOs, ECI officials and EROs themselves for single window view and dashboard for Nodal, Record and Unit Officer to view the status of registration.
- 8) Draft and Final roll of the last part is automated and is available under CEO and ERO logins on the day of the draft and final publication.

Process Flow



Technology

The technology used for developing the system is Microsoft .Net for application and Microsoft SQL Server for Database

Outcome

Compared to 13,27,627 number of registered Service Electors of last General Election in 2014, a record highest number of 18,02,646 were enrolled as Service Electors through

online registration with the dedicated portal. For the first time a full-fledged online registration portal for service electors saved processing time, resources and human errors. Out of the total number of Service Electors, 10,16,245 were from the Ministry of Defence, 7,82,595 from Ministry of Home Affairs Central Armed Police Forces), 3539 of Ministry of External Affairs and 267 were from state police.

Service Voters can now register online and receive Electronically Transmitted Postal Ballots in their door-steps



6. Observer Portal

Background

The management of General Observers including Police and Expenditure is always a challenge. There was a need for an online deployment system for effective order generations and timely notifications.

Introduction

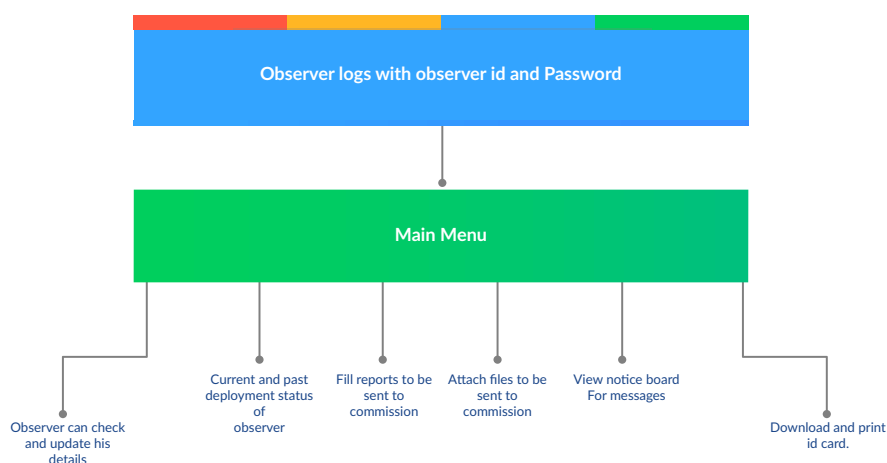
Election Commission of India has developed an online portal for database management of all types of observer's i.e. general observer, police observer and expenditure observer.

All the latest instructions of the Commission are available on the portal for the observers. It allows observers to verify and correct their personal information including important bank details for quick remittance and Local Mobile number for getting important SMS sent by the commission. They can check their deployment details online and can fill/upload Reports in their portal. They can also check their notice board for any information/instruction sent by the Commission.

Features of Observer Portal

- 1) View Filled Reports, Uploaded and Poll Day Related Reports by Observers
- 2) Send messages/SMS to Observers
- 3) Review Filled Reports
- 4) View deployment status
- 5) View State-wise finalized list of observers
- 6) Candidate Details - Form 7A is available to observers
- 7) Download and print Observer ID card

Process Flow



Technology

Sqlserver 2008R2, .net 4.5 Framework technology was used to develop Observer Portal.

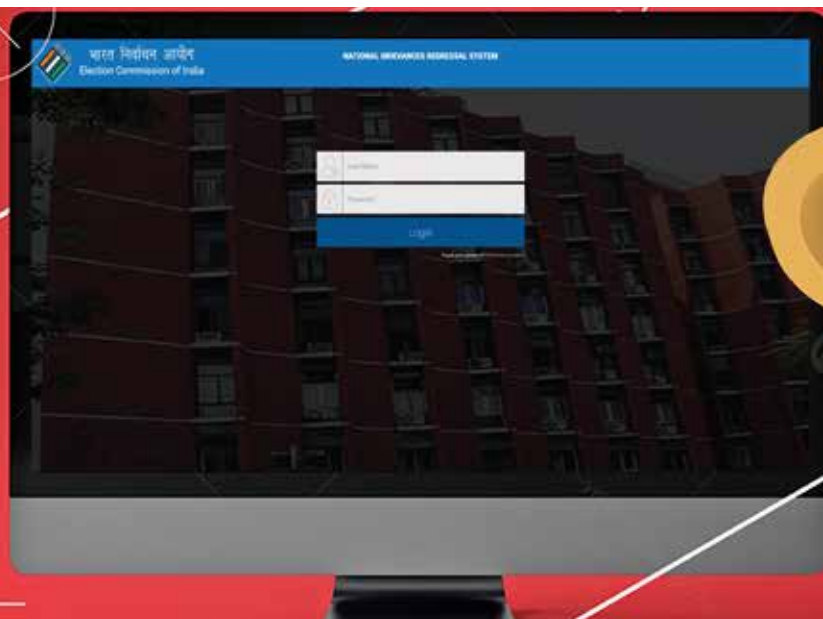
Outcome

The observer portal helps in the deployment of observers from the backend, notification to observers for their deployment, provides facilities for observers to submit their arrival and other mandatory reports, allows ECI to download the submitted reports and overall helps the Observer in managing their profile.

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Observers are the key officers deployed directly by the ECI and observer portal aptly provides direct communication link between ECI and Observers

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7. National Grievance Services Portal

Background

An online complaint handling mechanism is always desirable as compared to the manual methods. There are 4125 EROs, 735 DEOs and 36 CEOs who are required to handle the issues pertaining to voter registration for Elections. These require a robust centralised grievance handling system.

Introduction

A comprehensive National Grievance Service Portal (NGSP) has been developed by the Election Commission. This system has been developed in such a manner that in addition to

providing redress to the complaints of the Citizens, Electors, Political parties, Candidates, Media and Election officials at National, State and District level, it also serves as a common interface for providing services through a common interface.

The system is seamless and Integrated Help Desk-cum-Call Centre-cum- Single Window system. This portal is available for citizens of India where people can directly lodge IFSC (Information, Feedback, suggestion and Complaints) into this. IFSC can be captured via a different medium like Online mode (Portal, Contact Centre) and offline mode (FAX, Letter, and Personal Meeting).

The application provides for a single interface for handling complaints by the Election officials. All Electoral Officers, District Election Officers, CEO and ECI Officials are part of the system. Thus issues are directly assigned to the respective user upon registration. The portal can be accessed from the online link here:

<https://eci-citizenservices.eci.nic.in>

Process Flow

- 1) A Citizen can register them self while entering their Mobile number and input the OTP to validate the mobile number and fill their profile information.
- 2) They can get an OTP having with Complaint id in it as soon as complaint lodged.
- 3) The registered complaint gets marked to the concerned officer for further action.
- 4) Complaint status can be tracked using complaint id.

Technology

Web/API Development : PHP-Laravel framework(LAMP)

Database: MariaDB

Outcome

The NGSP portal has handled 13,07,967 complaints from 16.05.2015 to 19.01.2020. A total of 4246 officers are part of the NGSP Portal and the disposal success is 90.62%

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Online Grievance Portal for Citizens

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Election App Ecosystem

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How the apps work in tandem during non-election, pre-election, in-election and post-election phases to create a perfect ecosystem

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12 MOBILE APPS OF ELECTION COMMISSION OF INDIA FOR LOK SABHA 2019



Election App Ecosystem

How the apps work in tandem during non-election, pre-election, in-election and post-election phases to create a perfect ecosystem.

In the General Elections to Parliament of 2019, 610 million voters participated within a span of 74 days, which was perhaps the biggest ever election exercise to have been undertaken. Over 910 million electors database was digitized. 369 million voters used the Election Commission of India Mobile platform to search and confirm their name and polling station. On realizing their name not present, 6,52,533 forms for new registration, corrections and shifting to new locations were filed. All this happened in 138 days from the date of the launch of Mobile App by the Election Commission of India

The suite of 20 Apps provides the perfect ecosystem for rolling the giant wheel of electoral system from Registration to Results. It is divided into 4 phases.

- 1) Non-Election: This includes the continuous phase when the voters register into the system.
- 2) Pre-election: This phase starts from one year before the elections and extends upto the date of announcement
- 3) In-elections: This phase is the most important phase which starts from the date of announcement, runs through the poll day and ends on the conclusion of counting.
- 4) Post-elections: This phase signifies the time when the reports are generated and post audits are done

Phase 1 : Non Election Phase

This is the phase when there is no obvious activity undertaken for preparation of an election. During this phase, the electoral staff are engaged in strengthening the health of the electoral roll. The Election Commission of India utilizes ICT application for new voter registration, correction of entries, and migration cases.

There are four methods by which the new voter is engaged.

First is through the use of the National Voter Service Portal. The website provides the facility of searching one's name in the electoral roll, registration of new voters, corrections and migration cases. The voter can submit the form and upload the relevant documents. No further form or document needs to be submitted in physical format. Once the forms are submitted the citizen can visit the portal and find the status of the application. The website is <https://nvsp.in>



Second is through the use of the Voter Helpline Mobile app. The Election Commission designed an innovative mobile application which was called the Voter Helpline. This mobile application connected five databases together and prepared seamless services for the citizens. The mobile application allowed searching for their names from 910 million in a fraction of a second. The voter can verify their name, the polling station, details in the voter card and also election schedule. If they already had a voter ID card simply by calling the voter ID card the details can be verified. The Voter Helpline App is available both on iOS and also on Android. The iOS app is available here: <https://apps.apple.com/in/app/voter-helpline/id1456535004> and the Android App is available here: https://play.google.com/store/apps/details?id=com.eci.citizen&hl=en_IN

Third is by SMS. By sending a short message at a designated number the voter can verify the presence of their names.

Fourth is by calling toll free 1950: 1950 is the one universal number available across India by which any user can call from any mobile operator and can talk to election-related issues in more than 22 languages. The agents were trained to operate on a universal portal for searching the names of the voters taking the requests of new forms and also lodging a complaint in case of any grievance.

The Election Commission had declared the year Lok Sabha Election 2019 as accessible elections. So, one of the primary focuses was to ensure wider participation of persons with disabilities. The Election Commission of India launched a mobile application called PWD app. This application was specifically designed keeping the visual impairment & hearing impairment into mind. The PWD user can search their names & their voter ID details. The Commission provided detailed facilities for filling all forms.



The application also provided the facility for marking themselves as PWD by describing their locomotive disability and requesting for wheelchairs. The application was used by 80,232 users. The Pwd app is available from the Google Play store from here https://play.google.com/store/apps/details?id=pwd.eci.com.pwdapp&hl=en_IN

To provide transparent access to various information in the Commission RTI online portal was created by each user can request for any questions by making an online payment of Rs.10. The URL is: <https://rtionline.gov.in/>

Similarly, for voter encouragement a dedicated online portal was created was called SVEEP

portal which provided voters to participate in a more constructive manner. The website contents forums, quizzes, manuals, tutorials and also provided the facility for voters to share photographs. The website is <https://ecisveep.nic.in/>

The new website was created by the ECI which provided deep integration of mobile application and provided various accessibility and mobile-friendly features. The website is <https://eci.gov.in>

Also during the Non -Election period Political Party registration tracking has been made online. Once the applicant submits his application, a unique number is allocated and thereafter by using this number and his mobile number, he can track the status of his application online. All types of discrepancies are intimated to the application from the portal itself. The Portal is available here at <https://pprtms.eci.gov.in/>

Phase 2 : Pre-election

Planning Phase

On the other hand, six months before the election, large scale planning exercise is undertaken with a view to move the Electronic Voting Machines. The machines' requirement is assessed for the entire country, and then the machine is moved from manufacturer to district warehouses and also from one district warehouse to the other district warehouse of the State based upon the requirements. However, this movement requires decision control of each and every machine from its inception to its destruction. The Commission therefore designed a new centralized software for tracking each machine end to end and is called the EVM Management System. EVM Management System i.e. EMS is designed to manage inventory of EVM units. Tracking of units from manufacturer to state, state to state, district to district. ECI strictly ensures highly secure, non interrupted and non manipulated distribution of machines from one place to another place and EMS fulfills this purpose of ECI.

EMS is designed in a way where all the records are kept from production of machines, order generation by ECI / CEO, sending from the location of the sender and receiving at the location of the receiver. One of the important activities by which the Commission ensures fair allocation of EVMs is through the Randomization of the machines first at the Assembly Constituency level and other at the Polling Station level. This has been done for the first time pan-India through the use of Information and Communication Technology. The whole process of the Randomization of Ballot Unit, Control Unit and VVPAT is being done in the presence of Political Parties multiple times and then finalized. This has added another layer of a confidence-building measure to establish the neutrality of the EVM machines.

THE 100 MINUTE SUCCESS STORY OF cVIGIL



Phase 3 : In-election

Date of the announcement to date of poll

cVIGIL, an Android mobile application designed by the Election Commission of India, provided Indian voters an opportunity to report election code violations. The Commission's application was widely available, easy to use, and generated legally tenable and prosecutable information to administrators. The application was so stitched that every actor in the whole process was on either a mobile platform or web-based system. Chief Electoral Officers, District Election Officers, Returning Officers, flying squads and Police were all using the ICT application in prompt disposal of Model Code and Expenditure cases.

A trinity of factors worked simultaneously to make the platform a success: users captured photos or videos in real-time (and could not upload these), all visual or videographic evidence was geotagged, and a "100-minute" countdown for time-bound disposal of complaints. The result: nearly 142,250 complaints were received in the election period; 99% of which were disposed of, and 80% of which were found correct. Compare this to previous elections in which citizens were not co-opted in the enforcement of the code, and meager 20-25% of complaints were found correct.

One of the fundamental shifts that the cVIGIL has brought in its 77% success was the GIS-based location tagging. For example, the app automatically enabled a geo-tagging feature when users switched on their camera in the cVIGIL to report a violation. This meant that flying squads could know the precise location of a reported violation, and the image could be used as evidence in a court of law. The details of cVIGIL is available here: <https://cvigil.eci.gov.in> and the mobile app for iOS can be downloaded from here: <https://apps.apple.com/in/app/cvigil/id1455719541> and for android from here : https://play.google.com/store/apps/details?id=in.nic.eci.cvigil&hl=en_IN.

On the extension of cVIGIL various MCC violations cases, complaints received from the political parties or the cases of high importance, the cVIGIL app allowed publication of all the important cases for public information, immediately on its decision by the Commission. The MCC violations thus were made public. The Portal is called as MCC Violation Portal. The portal is available here <https://cvigil.eci.gov.in/mcc>

The next important stakeholder after the announcement of the election are the candidates. An online portal has been created where the candidates can register themselves and a mobile application was created for them to follow up the status of their permissions and application application.

The ENCORE Scrutiny Application is a part of ENCORE that allows Returning Officers to do the scrutiny of the Nomination filed by the Candidate. Each nomination is verified and the status is marked as 'Accepted' or 'Rejected' and 'Withdrawn' if the Candidate has withdrawn his candidature. This helps the Returning Officer to prepare the final list of contesting candidates and assigning symbols.

The information about candidates' finances, their assets liabilities are also digitized and made available to the public by way of an affidavit portal. The Affidavit portal is available here : <https://affidavit.eci.gov.in/> . The features of the affidavit are also available on the voter helpline app.

The Political Parties or any individual candidate can apply for permissions, in an online or offline mode, during elections using Encore Web Application. Permission module allows the candidates, political parties or any representatives of the candidate to apply for the permission for meetings, rallies, temporary offices, and others. The app goes live after the election dates are announced. Candidates can also track their application status through Encore Web Application and also by using Candidate App from Google Play Store. This application replaced the old 'Suvidha' App and integrated into ENCORE application. It was launched on 10 March 2019. The website for applying for permissions is <https://suvidha.eci.gov.in>

Technology has now enabled an integrated app for election permissions. Once the permission is sought from the Returning Officer, then there is no need to seek individual No-Objection from various departments like Fire, Revenue, PWD, Police etc. With the launch of Nodal App, it is no longer binding for officials to sit at one place. All Nodal Officers are registered as part of the ENCORE and they receive notifications on the mobile app, as and when a request for permission arrives. They can accept/reject permissions and upload their status by using the App. Nodal officers can automatically assign and get push notification as the permission is applied for. The Nodal App allows officers to take immediate action i.e. whether Objection or No- Objection is to be granted to the candidate along with reasons for the same.

During the phase of the poll announcement, any citizen by use of Voter Helpline Mobile Application can find the details of their polling officials, make a call directly from the mobile application and also see the list of contesting candidates and also download the list of contesting candidates. One of the important features was that the list of contesting candidates are exactly as per the ballot papers sequence. Thus, the voter could easily identify the sequence of his preferred candidates.



Date of poll

Booth App is an integrated app of the ENCORE application, which facilitates in faster identification of voters using encrypted QR code from the digital marked copy of the electors. This reduces the queue, helps in faster polling and allows error-free recording of two hourly poll turnout with minimal intervention.

To enable voters to download the digital photo voter slip in their mobile application, voters can continue to link up their mobile phone with EPIC card on the Voter Helpline App and download the Digital Photo Voter slip containing QR code which is to be used for booth app. Those Voters carrying Digital Photo voter slip within Voter Helpline App can carry mobile phones inside polling station only upto Polling Official using booth app and use it instead of printed copy. The details of booth app is available here: <https://boothapp.eci.gov.in>

One of the important mobile applications was launched by the Commission called Voter Turnout App which provided real-time turnout details of each assembly constituencies primary constituencies including the number of men, women and third gender. This voter turnout app is exclusively used not only by citizens but has been the primary method used by media houses for the first time. The Voter turnout app is available here https://play.google.com/store/apps/details?id=in.gov.eci.pollturnout&hl=en_IN

Similarly, Voter Helpline Mobile Application during the day of poll provided the facility of uploading selfies. This greatly encouraged the voters.

Date of Counting

One of the important features during the day of counting has been the real-time publication of round wise results through the new application called ENCORE. The results are published at <http://results.eci.gov.in/>. The data was made available through the voter helpline Mobile Application. The Election Commission of India result page recorded 812.3 Million hits on the website in a single day. The new portal has been launched called Results Trends Tv. This is a customizable auto-scrolling panel

which displays the results in real time. These are put outside the counting centres, public places and also used as a standard monitor in the officials monitoring the results.



One of the important facets during this Lok Sabha Election had been cybersecurity. As we are entering into the era of large scale technology induction in the conduct of elections, cybersecurity requires equal attention. The Commission undertook major training for ensuring maintenance of cyber security, starting from end-users to the application.

Various government agencies looking after cybersecurity were put on high alert and the network infrastructure was completely under control, the traffic was regularly monitored and various cybersecurity layers were put into place to ensure the absolute integrity and availability of elections system.

Phase IV: Post Elections

For monitoring day to day election expenditure incurred by the candidates, the election expenditure monitoring mechanism has been put in place in each constituency. This application is called the Election Expenditure App. Maintenance of the day to day account of election expenditure by the candidate is mandatory. Though the account of election expenditure is required to be submitted within 30 days from the date of the declaration of the result, monitoring has to be done on a regular basis during the campaign period so as to properly and correctly account every election expenditure incurred by the candidates and political parties during this period.

Index card module of ENCORE allows the Returning officer to fill the Index card online after counting that contains each and every detail of elections from the schedule of elections to the declaration of results. This module helps the Election Commission to

generate different statistical reports that are then published on the ECI website for Public view and analysis. Upon the successful launch of Index Card Application, the process of publication and verification has been simplified.

Conclusion

The suite of web based and mobile app stitches end to end process of elections and provides valuable assistance for decision makers. All stakeholders are engaged in a meaningful way starting from planning till the counting.

**READY
RECKONER
FOR
ECI ICT
APPLICATION**

Ready Reckoner for ECI ICT Application

“

*All ICT Application Address &
Details*

”

Ready Reckoner for ECI ICT Application

WEB APPLICATION

Application : Candidate Affidavit Portal
Application Type : Web
Users : Citizens
URL : <https://affidavit.eci.gov.in/>
Description : For Citizens to view Candidate's profile, and original affidavits

Application : Candidate Nomination Application
Application Type : Web
Users : Officers
URL : <https://encore.eci.gov.in/>
Description : The app for digitisation of Candidate Nomination Forms

Application : Candidate Permissions Application
Application Type : Web
Users : Candidates & Political Parties
URL : <https://suvidha.eci.gov.in/>
Description : For Online applications of Permissions by Candidates and Political Parties

Application : Candidate Scrutiny Application
Application Type : Web
Users : Officers
URL : <https://encore.eci.gov.in/>
Description : The application for detailed scrutiny of the nomination forms submitted by the candidates

Application : cVIGIL Portal
Application Type : Web
Users : Officers
URL : <https://cvigil.eci.gov.in/>
Description : Mobile app suite for enforcement of Model Code of Conduct Violation cases

Application : ECI Main Website
Application Type : Web
Users : Citizens & Officers
URL : <https://eci.gov.in/>
Description : The Official website of ECI

Application : Election Counting Application
Application Type : Web
Users : Officers
URL : <https://encore.eci.gov.in/>
Description : The Application meant for Returning Officers to enter the Round wise result data

Application : ENCORE
Application Type : Web
Users : Officers
URL : <https://suvidha.eci.gov.in/>
Description : Centralised Portal to facilitates Elections Officials deputed at ECI and States for procesing and management of Cadidate Nominations, Permissions, Affidavits, Voter turnout, Counting, Results, Index card and Expenditure monitoring

Application : ERONET
Application Type : Web
Users : Officers
URL : <http://eronet.ecinet.in/>
Description : Portal for Electoral Registration Officers to process the Electoral Forms submitted by Citizens, Generationof EPIC and other related work

Application : ETPBS
Application Type : Web
Users : Officers
URL : <https://etpbs.in/>
Description : Electronically Transmitted Postal Ballot System (ETPBS) is the one-way electronic transmission of the Postal ballots to the Service Voters and the Validationby the Returning officer

Application : EVM Management System
Application Type : Web
Users : Citizens & Officers
URL : <https://ems.eci.gov.in/login>
Description : EVM Management System is a centralized online tracking system, which keeps track of movement and placement of each machine during elections.

Application : Expenditure Monitoring Application
Application Type : Web
Users : Officers
URL : <https://encore.eci.gov.in/>
Description : The application to enter and monitor the expenditure of the candidates

Application : Index Card & Statistical Reporting Application
Application Type : Web
Users : Officers
URL : <https://encore.eci.gov.in/>
Description : For generation of more than 30 types of reports of the elections.

Application : Model Code of Conduct Relaxation & Violation Portal
Application Type : Web
Users : Citizens & Officers
URL : <https://cvigil.eci.gov.in/mcc>
Description : The website to display the important Model Code of Conduct Violation cases reporting. Also it helps various departments to process the cases online

Application : NGSP (Citizens)
Application Type : Web
Users : Citizens
URL : <https://eci-citizenservices.eci.nic.in/default.aspx>
Description : National Grievance Service Portal for Citizens is to facilitate citizens for lodging of complaints online and to track the status by complaint Id

Application : NGSP (Officers)
Application Type : Web
Users : Officers
URL : <https://eci-citizenservicesforofficers.eci.nic.in/>
Description : For Processing and Disposing of Complaints by the Election Officers at National, State, District and Constituency level.

Application : NVSP
Application Type : Web
Users : Citizens
URL : <https://www.nvsp.in/>
Description : National Voters Service Portal for search of name in Eletoral Roll, Know your Polling Station and BLO, Online Form submission for New Voter registration, Correction, Deletion etc.

Application : Observer Portal
Application Type : Web
Users : Officers
URL : <https://observerseci.eci.nic.in/>
Description : For Submission of Reports by the Observers and Monitoring by election Official

Application : Online service voter portal
Application Type : Web
Users : Officers
URL : <http://servicevoter.nic.in/>
Description : It facilitates the Service Voters to apply online for registration in Electoral Roll through their service nodal officers and its processing by ECI officers

Application : Political Party Registration Tracking Management System
Application Type : Web
Users : Political Parties and ECI Officers
URL : <https://pprtms.eci.gov.in/>
Description : Real time tracking of Political Party Registaion applications submitted by Parties

Application : Results Trends Tv
Application Type : Web
Users : Officers
URL : <http://resultapi.eci.gov.in/login>
Description : For real-time display of election results with infographics at public places on wider screen

Application : RTI Online Portal
Application Type : Web
Users : Citizens & Officers
URL : <https://rti.eci.nic.in/>
Description : Online Portal where Indian citizens can file RTI applications and appeals directly to ECI with online payment facility

Application : SVEEP Portal
Application Type : Web
Users : Citizens
URL : <http://ecisveep.nic.in/>
Description : Web Portal for Voter Education

Application : Voter Turnout Application
Application Type : Web
Users : Officers
URL : <https://eci.gov.in/voter-turnout/>
Description : Application that displays the Voter turnout during the Poll day.

MOBILE APPLICATION

Application : Booth App
Application Type : Mobile
Users : Officers
URL : <https://boothapp.eci.gov.in/boothapp.apk>
Description : The QR code based Mobile app for faster polling and poll day report submission.

Application : Candidate App
Application Type : Mobile
Users : Candidates
URL : <https://play.google.com/store/apps/details?id=suvidha.eci.gov.in.candidateapp>
Description : For Candidates to track the status of Nominations and Permissions

Application : cVIGIL Citizen
Application Type : Mobile
Users : Citizens
URL : https://play.google.com/store/apps/details?id=in.nic.eci.cvigil&hl=en_IN
<https://apps.apple.com/in/app/cvigil/id1455719541>
Description : Mobile App to report Model Code of Conduct Violations

Application : cVIGIL Decider
Application Type : Mobile
Users : Officers
URL : [*Available to Registered and Authorised officers*](#)
Description : Mobile App for Returning Officer to take decisions on cVIGIL cases

Application : cVIGIL Investigator
Application Type : Mobile
Users : Officers
URL : [*Available to Registered and Authorised officers*](#)
Description : Mobile App for field units to investigate Model Code of Conduct Violations reported through cVIGIL

Application : cVIGIL Monitor
Application Type : Mobile
Users : Officers
URL : [*Available to Registered and Authorised officers*](#)
Description : Mobile App for ECI, CEO and DEOs to monitor, highlight and emphasise the cases filed through cVIGIL

Application : cVIGIL Observer
Application Type : Mobile
Users : Officers
URL : <https://ems.eci.gov.in/login>
Description : Mobile App to monitor the cVIGIL reported cases and flying squads in the observer jurisdiction

Application : EMS Mobile App
Application Type : Mobile
Users : Officers
URL : https://play.google.com/store/apps/details?id=in.gov.eci.ems&hl=en_IN
Description : EMS Mobile App allows officers to scan the permanently encoded barcode of each machine (EVM/VVPAT) while they are in movement.

Application : ENCORE App
Application Type : Mobile
Users : Officers
URL : <https://play.google.com/store/apps/details?id=in.gov.eci.suvidha.admin>
Description : A Mobile App for Decision Support system during Elections

Application : Nodal App
Application Type : Mobile
Users : Officers
URL : <https://play.google.com/store/apps/details?id=suvidha.eci.gov.in.nodalofficerapp>
Description : For Nodal officers appointed to provide NOC for Permissions applied by the Candidates and Political Parties

Application : Observer App
Application Type : Mobile
Users : Officers
URL : https://play.google.com/store/apps/details?id=in.gov.eci.observer&hl=en_IN
Description : An app for General, Police and Expenditure to get the information on observer duty deployment with a provision to upload their reports.

Application : PwD App
Application Type : Mobile
Users : Citizens
URL : https://play.google.com/store/apps/details?id=pwd.eci.com.pwdapp&hl=en_IN
Description : Mobile App for Persons with Disabilities to avail Voter services

Application : Voter Helpline App
Application Type : Mobile
Users : Citizens
URL : https://play.google.com/store/apps/details?id=com.eci.citizen&hl=en_IN
<https://apps.apple.com/in/app/voter-helpline/id1456535004>
Description : The award winning Mobile app providing citizen centric services

Application : Voter Turnout App
Application Type : Mobile
Users : Citizens
URL : https://play.google.com/store/apps/details?id=in.gov.eci.pollturnout&hl=en_IN
Description : Mobile App that displays the Voter Turnout during the Poll day



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