

Technology enables the Differently-abled to vote in Kerala

This Election is supposedly the world's largest in terms of participation and sheer outreach. There can't be much doubt when 900 million voters are expected to exercise their franchise to decide the fate of the nation for the next 5 years. On an average, the voter turnout in India is about 66%. While aspersions are cast on the balance ~34% who do not vote, not all are indifferent though. Ever wondered the challenges faced by the differently-abled to reach the venue? There's a high possibility that many of them would end up not voting because of this difficulty alone.

The Ernakulam constituency has about 9000 voters who are differently abled – PwD. Till this election, the district authorities did not have a clear idea (read analysis) on how many are able to successfully cast their votes despite the difficulties faced due to their physical conditions. It was largely left to the political parties to make special arrangements for them to go to the booth and do the needful.

A NASSCOM meeting with the Ernakulam District Collector Shri Muhammed Safirulla got this whole initiative started. The idea was to use technology to assess the number of people (PwDs) voting and to do so in real-time, to provide back-end logistical support to them to reach the booth.

Paucity of time was a major concern. The solution had to be built (including the test run) in a matter of 2 - 3 weeks only. The election date for Kerala was 23rd April.

In the initial stage, booth-level agents were required to visit the houses of all the 9000-odd voters to collect data and capture their GPS locations. Not having a clear knowledge on how the solution worked, the agents started to enter the data from a centralized location - avoiding cumbersome visits - which led to a setback. The GPS locations were not captured. Undeterred, they proved to be flexible enough and it was immediately rectified. Educating the booth agents on how the technology worked wasn't easy and some vital time was spent on this.

Three applications and a dashboard were created by "SayOne Technologies" & their product division "BeCo Technologies" (a 10000 startup Kochi company). One was for the agents to capture all the data. The second, was for the Presiding Officers at the booths – to register once the votes were cast. The third one, rested with the Sector Officer and with the aid of this application, he was able to gather in real-time the total number of people who voted. The dashboard created was able to handle queries in real-time.

The solution was created by using Android at the front-end and Firebase at the back-end. Since the team was going to be crunched for time, choosing the right technology was most important. There was simply no time to abort the project mid-way and start afresh on a different platform.

Final Impact: 2500-odd voters required assistance to reach the venue, of which on D-Day, the turnout was more than 75% - thanks to real-time information exchange through this platform. Others (~9000 – 2500) made their own arrangements. This kind of Mission Mode Project comes under the purview of Kerala IT Mission. A special thanks to them for their continued support. It was a great example how multiple stakeholders got together and made a vital difference to society in real quick time.