

Vermont Pioneers off-the-shelf Ballot Marking Tablet

Use Case – COTS as an Accessible Ballot Marking Device

Over thirty-five million voters in the U.S. have a disability that limits their ability to cast a private and independent ballot. These voters typically cannot vote a traditional ballot at the polls, or at home due to an array of disabilities. To meet federal and state laws requiring equal access to the ballot, elections officials are required to deploy accessible machines in each voting location. Accessible voting systems currently in the market are nearing their shelf-life and often rely on outdated, proprietary equipment. A big reason voting locations still deploy more expensive proprietary equipment is COTS, or *commercially off-the-shelf*, tablets did not exist when many of the polling place machines were first purchased.

In 2018, the State of Vermont deployed a Windows-based COTS ballot marking tablet to fully comply with HAVA accessible ballot marking requirements.

Accessible Tablets in the Polls

Technology companies have invested heavily in accessible hardware and software. Over 200 million Windows devices and printers have been deployed with the highest levels of accessibility built into each device. The tablet ballot marking system deployed in Vermont leverages current off-the-shelf technologies to ensure voters with disabilities receive the same level of access in the polls as they do in the home.

Cost Savings

Traditional ballot marking devices, DRE's or other polling place voting machines can cost between \$3,500-\$5,000 per machine. By using off-the-shelf devices for accessible ballot marking, the State of Vermont saved more than 40% over traditional proprietary polling place machines.

In Vermont, by leveraging the vendor's simple one-step data upload, the State was able to deliver a polling place accessible ballot marking device, accessible sample ballot and accessible UOCAVA ballot all at once. Previously the State did not have an accessible online sample ballot and

employed two different systems to comply with the MOVE Act and HAVA polling place requirements, respectively. By using this new system, the State was able to load data only once to serve all these balloting requirements. We estimate this saved the State nearly 180 hours of State staff and LEO time.

COTS & Accessibility

For the polling place module, a key requirement was offering the same, universal ballot to all voters at polling places. The goal is that every voter, regardless of disabilities, shall vote by casting the same form of ballot. The COTS tablet product is a fully accessible ballot marking device able to print the voter's selections by simply marking the ovals directly on the same pre-printed ballot used by all voters. Ballots are cast and tabulated along with all other ballots – further ensuring the privacy of ballots cast by voters with disabilities.

Process

The State of Vermont was able to fully comply with polling place and absentee accessibility requirements with a one-stop balloting platform. Vermont is the first State in the nation to use one software solution deployed on both commercially off-the-shelf (COTS) polling place tablets and the cloud to deliver fully accessible ballots for voters with disabilities.

The ballot marking tablets are loaded with the required ballot styles for each election via a USB device. All ballots are loaded on each tablet for easy transport to polling locations. The voter, or poll worker simply enters an activation code to pull up the correct ballot for the voter. The voter uses accessible, audio navigation tools to listen, mark and print the marks directly onto their ballot. The tablet polling place system was not connected to the Internet at the polls at any time.

Real World Experience

For the 2018 Election cycle, Vermont launched a solution consisting of both Tablet and Online modules. It is the first accessible balloting system that allows for the same software to be used for cloud based absentee voting as well as an off-the-shelf tablet for in-person polling place voting. Although the accessible online absentee solution is Web-based, no Internet, or Web access is required, or allowed for the tablet-based system.

Democracy Live and the State of Vermont worked with disability groups and advocates around the state to incorporate feedback from voters who regularly use assistive technology. Beyond using tablets in the polls, Vermont leverages the secure cloud to deliver the same accessible balloting experience to voters both online and in Vermont's 275 polling locations.

Conclusion

The system Vermont deployed in 2018 offered an all-in-one COTS ballot marking tablet, accessible, audio-enabled electronic absentee ballot, and accessible online sample ballot all under one software solution. Vermont has saved significant resources, both time and money, with its deployment of the system. More importantly, we are proud to have provided Vermonters with disabilities with an easier, more universally accessible method of casting their votes, privately and independently.

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