

# Supervisor of elections improves voter experience and cost efficiency with tablets

Real Impact  
for Better  
Government



The Supervisor of Elections in Orange County, Florida, wanted to give voters an easier sign-in experience on election days—so the department replaced a fragmented laptop-based system with HP ElitePad 900 tablets running the Windows 8 operating system and an application developed in-house. This has cut average voter sign-in time by 70 percent, greatly simplified the job of poll workers, and increased the speed and accuracy of election reporting.



## Business Needs

The office of the Supervisor of Elections, Orange County, Florida, is always looking for new ways to ensure the integrity of the electoral process, enhance public confidence, and encourage citizen participation. So when its staff realized the tools they were using to verify voter identity and distribute ballots at polling places were not delivering a great experience, they went in search of a better solution. In the previous workflow, poll workers used a form of identification to verify the voter's address with a custom-written application running on a laptop. The worker would print a label and paste it in a book, and the voter would sign the book to receive a ballot.

If voters encountered any issues during the registration process, they went to a help desk where a worker with special training and a separate application could resolve the issue. The voter would then return to the identification desk and start the process again—increasing wait times and reducing voter satisfaction. At the end of the 12-hour voting day, volunteer poll workers had to manually account for and record the distribution of more than 90 ballot variants. The ballot signature books were scanned and reconciled manually, which took a team of 10 people up to two weeks for large-turnout elections.

This technology was more than eight years old, with slow processing speeds and an outdated interface. Each laptop-based registration system weighed more than 22 pounds, putting an unnecessary burden on volunteer poll workers. It was also an issue to store the bulky devices in a warehouse where space was at a premium. "There were so many opportunities to improve the voter experience, we decided it was time to upgrade the entire process with the latest technology," says Luis Torres, Technical Service Manager at the office of the Supervisor of Elections.

**Company:** Supervisor of Elections, Orange County, Florida  
**Country:** United States  
**Industry:** Government—Elections  
**Employees:** 45

**Company Profile:** The Supervisor of Elections in Orange County, Florida, works to ensure fair and free elections on behalf of the county's more than 1 million residents.

### Software & Services:

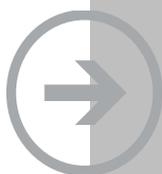
- Microsoft Server Product Portfolio
  - Windows Server 2012 R2
- Microsoft Visual Studio
  - Microsoft Visual Studio 2012
- Windows 8
- Technologies
  - .NET Framework
  - Internet Information Services

Microsoft Government

[www.microsoft.com/ongovernment](http://www.microsoft.com/ongovernment)

Customer Success Stories

[customers.microsoft.com](http://customers.microsoft.com)



"Microsoft has a proven track record for long life cycles on their operating systems, so we knew our software would have a long shelf life."

Sue Elias, Senior Deputy of Information Systems, Supervisor of Elections,  
Orange County, Florida

## Solution

The elections office decided to consolidate voter sign-in and help-desk functionality into a single tablet-based application. "Windows 8 was a must because we had the skills in-house to develop and support the application, and we also didn't want to rewrite the application every two years," says Sue Elias, Senior Deputy of Information Systems at the office of the Supervisor of Elections.

Key criteria for the hardware included drop strength and ruggedness so it could withstand being unpacked, packed, and stored year after year; a reader capable of capturing the 2D bar codes used on Florida driver's licenses and ID cards; and compatibility with a range of printers and other peripherals.

"The selection process took a couple of years because the market for Windows-based tablets was expanding rapidly," says Torres. "Toward the end, Hewlett-Packard told us they had something new coming out. They showed us the ElitePad, and we were sold—it had everything we needed. The ability to obtain all the required hardware attributes with a good warranty meant the equipment would serve us for several election cycles. Microsoft has a proven track record for long life cycles on their operating systems, so we knew our software would have a long shelf life."

The office invested in a fleet of 800 HP ElitePad 900 tablets, accompanied by HP ElitePad Retail Expansion Jackets. The jackets include an integrated image reader with 2D barcode scanning capabilities, a magnetic stripe reader, USB ports, and a second battery. A skilled team of developers led by Manny Cosme created the new software application using Microsoft Visual Studio and the .NET Framework, along with Microsoft server-side technologies.

For the 2014 primary election, the tablets were deployed across 227 precincts, 12 remote early voting locations, and the elections office itself. Sixty-three thousand people used the application to sign in, with the count rising to more than 306,000 in the general election.

## Benefits

The solution has reduced voter sign-in time by more than 70 percent and streamlined the customer service experience for those who need additional assistance. The office has also saved significant time and money by eliminating the need to reconcile voter check-in numbers and scan signatures manually.

## Improved voter experience

Upon entering a polling station, each voter is greeted by a poll worker standing behind a mounted tablet. When the voter presents identification, the poll worker scans it with the Retail Expansion Jacket's magnetic stripe reader or 2D barcode scanner to confirm the voter's registered address. The poll worker then asks additional questions provided by the app. Using a custom

stand developed by the elections office and Thomas Computer Corporation, the poll worker flips the tablet around and uses a finger to sign. All the tablets are Internet-connected using a secure Wi-Fi hotspot, enabling the first line of poll workers to handle a wider variety of situations. If voters need more help, they can pick right up at the help desk without having to track down the poll worker who initially checked them in. The Voting Technology Project, a joint effort between Caltech and MIT, provided the Supervisor of Elections with online tools which were used to measure the impact the new application would have on voter wait times. The average time it takes a voter to sign in has been reduced by more than 70 percent, from 140 seconds with the old solution to 40 seconds with the new one.

## More efficient use of public funds and space

By going paperless and collecting all data digitally in a single workflow, the office is using its budget more efficiently. "We no longer need to scan signatures manually, which translates to significant cost savings for the people of Orange County," says Elias.

The office of the Supervisor of Elections has a warehouse, but space is always tight. The previous configuration with laptops in cases measured approximately 30" by 24" by 24", while the new solution is only 8" by 11" by 11" including the jacket and stand. The office can store 48 tablets per cabinet which allows for simultaneous charging of all devices. Not only does this reduce the storage space requirement by 29 percent, but it also ensures maximum longevity for the device batteries. The office is also moving to a self-maintenance model supported by the serviceability of the ElitePad tablets and supporting even greater savings.

## Increased comfort and satisfaction for poll workers

"The poll workers love our new voting process," says Torres. "They used to have to do manual accounting every night. Now it's all electronic, so they can get home much faster." The previous solution was 22 pounds and was more complex to set up with its power strip, tabletop scanner, bar code reader, and large metal case. The new solution weighs only 8 pounds and has key functionality built into the compact case. It fits in a small wheeled suitcase, making transport, setup, and breakdown much easier.

*For more information:*

Microsoft Government  
[www.microsoft.com/ongovernment](http://www.microsoft.com/ongovernment)

Customer Success Stories  
[customers.microsoft.com](http://customers.microsoft.com)

