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The Web: Internet voting still a long way off?

By Gene J. Koprowski

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CHICAGO, IL, United States (UPI) -- Some of the recommendations to improve electronic voting technology made by the election reform commission headed by former President Jimmy Carter and former Secretary of State James Baker provide only "marginal" improvements in election security, but they do keep the concept of Internet voting alive for now, experts tell UPI's The Web.

The Carter commission, formally known as the Commission on Federal Election Reform, said a paper trail should be required to confirm electronically cast ballots -- whether the copies are downloaded from the Internet and printed out or cast on an e-voting machine in person.

"Requiring electronic voting machines to produce a voter-verifiable paper audit trail is not only doable, but it's not even difficult technically," Steven R. Gordon, a professor of information-technology management at Babson College in Wellesley, Mass., told The Web. "The Carter/Baker proposal should not completely kill off the idea of voting for president or Congress using electronic voting machines that communicate with a central location over the Internet."

There are a number of different methods to vote electronically -- and they are distinguished by levels of complexity and cost. One system, made by the manufacturer Diebold, enables a voter to vote on a machine with a screen, and when the choices for the various races are entered a copy of a paper ballot appears behind a window. "If the user OKs the ballot, it is marked `OK` and fed back into the machine, where it remains in case of a recount or audit," said Gordon. "The vote itself is transmitted electronically."

Another technology called VoteFiler, recently debuted by New York-based Comfidex, allows voters to create anonymous, though verifiable, paper ballots on standard PCs and printers. These votes are then scanned and printed on election night, said Dan Ginsburg, a spokesman for the company.

The technology debuted at the FOSE trade show in Washington, D.C., this past spring, where it received a best-of-show award. "Since then, Comfidex has had significant interactions with local, state and federal officials to enable large-scale deployment of VoteFiler in the U.S.," said Ginsburg.

Yet another approach is to generate a random number for each electronic ballot -- and then print out a receipt with the number on it. The numbers of all the ballots are then published online, with the results of the vote. Voters can confirm that their vote was the same as that which was counted by the authorities.

Straight Internet voting, however, is much more complicated. There is a "need to authenticate users as valid voters, while at the same time preserving their anonymity," said Gordon.

This kind of Internet-based system has been used domestically in union elections and overseas quite successfully. The American Arbitration Association, the largest provider of election services in the United States, recently ran an election, via the Internet, for New York City firefighters. Some of the men, on duty with the military in Iraq, voted online, though Jeff Zaino, vice president of elections for the AAA, believes that voter trust is not high enough in the public sector for these kinds of systems to be used for national elections.

"I do not foresee viable Internet voting for U.S. national office in the near future," agreed Gordon, the IT expert. "The consensus of security experts is that such systems would not be adequately secure using existing browsers, so other software would have to be installed for such a system to work."

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