

## Bye-bye, ballot box?

by Jennifer Davies - CNS

From hanging chads to computer glitches that mysteriously lose thousands of votes, Lori Steele figures there has to be a better way to run elections.

Steele, a former investment adviser, became so obsessed with improving elections that she left her job to become CEO of Everyone Counts, a California company that specializes in Internet voting software for public and private elections.

"I thought if the right technology were employed, we could have irrefutable elections," she said.

The company, which Steele moved to San Diego in 2006 from Melbourne, Australia, has just 20 employees. But competitors say it is one of the top companies in the emerging field.

**BYE-BYE BALLOT BOX** - Everyone Counts offers secure online voting software to governments and private entities. CNS Photo.

Everyone Counts offers governments and private entities software that allows for secure online voting. With its system, voters receive a packet of materials that includes a code number. Voters then go to a Web site, using the code number to log in, and make their selections.

When satisfied with the choices, voters use the mouse to click a button on the screen to send the data, which are then loaded onto a DVD. Steele said the data are more secure than even bank transactions because of its end-to-end encryption.

Recently, Everyone Counts helped run an election for Swindon Borough Council in the United Kingdom that allowed people to vote not only at the polling place but also by phone or via the Internet. The Swindon election is part of the United Kingdom's five-year plan to modernize its voting systems.

Steele said that about 12,000 people, 24 percent of the turnout, voted online in that election.

But while Steele sees Internet voting as the answer to better elections, there are plenty of detractors - especially in the United States.

Computer experts say there are too many potential problems in using the Internet to vote, ranging from the hacking of results to vote fraud to even disabling the Internet with a viral attack to affect the outcome. Alan Dechert, president of the Open Voting Consortium, a group aimed at improving elections, said the Internet is too vulnerable to be used for government elections.

"I don't think that we are at the point where we can unleash Internet voting on the public," he said.

Lorrie Cranor, a professor of computer science at Carnegie Mellon University and an electronic voting expert, said people's perceptions about Internet voting's potential pitfalls are the biggest stumbling blocks in its adoption.

While there have been important advances in encryption, most people don't understand how that complex technology works, Cranor said.

"You just have to trust it, and there is a question whether the general public will," she said. Dechert said one important issue with Internet voting is that it raises questions about who is actually doing the voting. When people go to a polling place, regardless of whether they are required to show identification, it provides some safeguard against someone impersonating a voter. That is not the case with online voting, where users are anonymous.

But Steele said concerns over fraud are overblown because many jurisdictions do not check IDs at the polling place and many others allow absentee ballots, which are sent by mail.

She said it is technically possible to put in place security measures, such as thumbprinting and digital signatures, that would validate a person's identity, but many states don't allow asking for that type of identification.

"Until there are different laws, we can't take those higher steps," she said.

Paul DeGregorio, former chairman of the U.S. Elections Assistance Commission, a government agency created to improve the voting process, said he recently joined Everyone Counts as chief operating officer because the company has the best technology in the industry.

While he sees a big future in Internet voting, DeGregorio said the United States is lagging behind other countries because of the residual distrust from the 2000 election. Countries such as Spain, Argentina and the

Netherlands have begun to test Internet voting. This year, Estonia, the former Soviet republic, had a nationwide election in which 3 percent of voters cast their ballots on the Internet.

Pere Valles, CEO of Scytl, a Spanish company that is a direct competitor of Everyone Counts, said Europe is taking the lead in the Internet voting market.

"In the U.S., it is going to be much more difficult," he said. "But in Europe, it's taking off."

Steele said that despite the critics, acceptance of Internet voting is reaching a tipping point for public elections and for private ones such as shareholder or labor-union votes. She estimated that the private-election segment, which is still conducted predominantly with paper ballots, is a \$13 billion annual business.

Cranor said there is still a learning curve, even with private elections. A recent online election held by the Association of Computing Machinery, of which Cranor is a member, had to be redone because of an unspecified problem.

At Carnegie Mellon, the student government elections, which are conducted online, continually have problems, Cranor said. This year, the students used encryption software that they could not decrypt, so they were unable to tabulate the results.

A new election is scheduled for September, Cranor said, adding that the students wrote their own code and did not hire a professional firm.

But DeGregorio said it is younger people's interest in alternate forms of voting that will eventually push the use of the Internet into the mainstream. He pointed to what he calls the "American Idol" generation, who vote in the tens of millions for their favorite singing contestant each week.

"In the not-too-distant future, they will demand the choice of voting online," he said.

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