

Online voting: It's inevitable

Let's face it: Voting through the Internet is much more intriguing than computerized, poll-site elections. But we can't be too hasty.

Remote voting – the kind that allows a voter to cast a ballot from home, in his pajamas, unshaven – isn't quite an option just yet. The technology that's needed to make it happen would have to ensure that the ballot is counted without the counters knowing who voted for whom, all the while protecting the system from hackers.

Some companies, such as Election.com, say it's possible to do it now. But such a move would be a

mistake for New Jersey. There are too many potential problems for us to jump into Internet voting now.

Though technology hasn't yet reached the level where voting from home is completely secure, New Jersey should start preparing for the inevitable. Eventually, new generations of secure technology will enable Internet voting to become the norm.

A research outfit called the Gartner Group predicts that all 50 states will be experimenting with online voting by the next presidential election in 2004. By 2012, Gartner believes at least 25 percent of the votes cast in the presidential election will be cast via the Internet – with 20 percent of the total cast remotely (not at a poll site).

Much of the necessary infrastructure for online voting is in place already. Now, it's only a matter of de-

veloping advanced encrypting technology – the computer stuff that guards your vote from an invasion of privacy or piracy.

Make no mistake: Voting via the Internet cannot be cast aside. With the obvious technological advantages, online voting could indeed do much for the terrible turnout at the polls. After all, what's a democracy worth if only half the voters cast a ballot?

Ultimately, new technology will be attractive to the sets of voters least likely to cast a ballot under the current system – 18- to 24-year-olds and busy professionals. Also, the prospect of getting to vote from home or office in the next few years will change the landscape and sweep some chaff from the excuse mill. And Internet voting isn't just about the well-to-do.

The notion of voting from work or home opens up opportunities for the working class – often tightly confined by strict working hours. With the chance to vote from just about any computer with Internet access, they increase their likelihood of casting a ballot without interrupting their work day.

The logical bridge to an Internet voting system in New Jersey would be to bring 21st-century technology

to the polls. The Gartner Group made that clear in a report it issued earlier this year:

"Electronically presented and recorded votes, tallies over dedicated lines from controlled locations, will offer significant technological gain, without the security exposures inherent in remote voting."

Gartner's right. Using a computerized system would take the human error components out of the current system, and prepare New Jersey for what's next: Internet voting.

Three ways to vote

Lever machine

Voter verification

- A registered voter goes to her polling place on Election Day. Currently, some polling workers do not ask for any form of identification, just a signature. The poll worker gives the voter a "ticket" to vote.
- The voter proceeds to a large machine the size of a refrigerator that only recently has been brought out of storage and, hopefully, is mechanically sound. She presents the "ticket" to a poll worker in order to cast a ballot.

Balloting

- Since the voter can only vote at her assigned polling place, all the ballots on the machines are the same.

Casting a vote

- The voter pulls down levers next to the names of the candidates for whom she wishes to cast her vote. Write-in votes are cast manually, in the voter's own handwriting.
- Once the voter registers her ballot, the curtain opens. There is no way for her to double check her selections before her vote is tabulated.
- With punch card ballots, which still are used in Salem and Sussex counties, nothing prevents the voter from "overvoting," or voting for more candidates in a race than allowed – thus possibly voiding her vote.

Tallying the vote

- Individual machines manually register the vote count using an odometer-like device on the back of the machine. Better hope those machines are well-oiled!
- Elections workers – using pencil and paper – manually tally up the totals from each of the machines for a total count at each polling site.
- Once the elections workers have done the math, the results are given to the town clerk's office, where the town totals are tabulated, manually. Then the results are off to the county clerk and the state.

Note: Though some counties use systems that are a bit more advanced than lever machines, these elections relics account for more than a third of all voting machines in the state. And some of the more advanced methods still fall short. For example, electronic machines, while more reliable in counting votes, still do not double-check selections with voters once they are made.

Computerized

Voter verification

- A registered voter goes to her polling place on Election Day and shows identification to a poll worker who will make sure the voter is who she claims to be. The poll worker also will ensure the voter hasn't already cast a ballot.
- The poll worker gives the voter a small device the size of a watch battery that acts as a "key" to the voting machine.
- In an advanced second stage of computerized voting, perhaps available in a few years, the polling places will be networked – allowing a voter to go to any of the more than 3,500 polling places in the state. There would be a statewide registered voter list to enable this.

Balloting

- The voter inserts the key into the voting machine – which is nothing more than a typical computer that spends non-Election Days in a classroom helping a child learn to read. The key contains all of the ballot information, and allows the voter to use the computer to register a vote. No personal information is contained in the key since they all are pre-programmed, so the computer cannot link the vote to the particular voter.
- In the advanced stage of computerized voting, the voter will get a "key" based on the ballot for their voting district – no matter where in the state they choose to vote.

Casting a vote

- The voter is prompted by the computer for each race. The system will not let the voter cast too many votes in any race (it will prompt the voter with an appropriate message); however, the voter is allowed to skip a race or vote for fewer candidates than allowed.
- To write in a candidate's name for any of the races, the voter would use a keyboard connected to the computer.
- After the voter is prompted for each race, including ballot initiatives, the computer gives a list of all of the voter's choices. At this point, the voter may confirm that the list matches her wishes, or start over before finalizing her vote.

Tallying the vote

- The vote is sent to a central poll computer at the polling site – called a server – where it is recorded.
- At the end of the day, the poll server will tally the election results instantaneously for elections workers.
- Moments after the polls close, the vote counts are given to a central authority – such as the county clerk – where they are compiled and given to the state.
- In the advanced stage of computerized voting, the poll servers could be located in a central office – such as the county clerk's office. This way, the tabulation is nearly instant.

Note: Other options for computerized voting include touch-screen systems that have no mouse or keyboard, and audible systems for the blind.

(Send)

Remote

Voter verification

- In her pajamas at home – or from her desk at work or a public library miles from home or her mother's house in Arizona – a registered voter logs onto the secure elections Web site. The voter enters her username and pin code, which are supplied by the division of elections.
- The Web server recognizes and approves the voter, letting her advance to the elections process.
- Once remote voting is available, there's nothing to prevent allowing the election to start a few days early – giving voters a larger window of opportunity to vote, similar to today's absentee ballots.

Balloting

- The Web server uses the username of the voter to determine which ballot is appropriate, and sends that ballot to the computer through which she is voting.

Casting a vote

- Just like with computerized voting, the voter is prompted by the computer for each race, and it will not let the voter cast too many votes in any race. Likewise, the voter is allowed to skip a race or vote for fewer candidates than allowed.
- To write in a candidate for any of the races, the voter would use her computer keyboard.
- Again, the same as with computerized voting, the voter's computer will give a list of all of the voter's choices at the end. At this point, the voter may confirm that the list matches her wishes, or start over before finalizing her vote.

Tallying the vote

- The vote is sent to a statewide central poll server, perhaps in Trenton, where it and all other votes in all races in the state are recorded.
- When the polling period closes, the poll server instantaneously will tally the election results statewide.
- Only moments after the polls close, the results of the election would be available to the public – and to local authorities – via the Internet.

Illustration, design by JEF DAUBER / Courier-Post

Getting there: A journey to an elections upgrade in N.J.

■ A lawmaker must propose a bill that would call for a unified, computerized election system funded by the state. Already, Assembly Majority Leader Paul DiGaetano has sponsored a bill (A-3034) that would establish an Internet Voting Pilot Program. The interest in new voting technology is apparent in the Legislature, it's just a matter of getting the right bill drafted.

■ Both the state Assembly and the state Senate must approve the bill, then the governor would have to sign it to make the bill law.

■ The state then would solicit proposals from companies that can provide a computerized voting system. It would examine the proposals and choose a company based on the cost of the system, the integrity of the company, the amount of service available and, of course, the type of technology the system offers.

■ The new elections system would be given to the county superintendents of elections, along with ample training.

■ Voters would get an opportunity to learn about the new system through demonstrations at public places and through literature sent out by the state.

■ The counties would begin using the new computerized system by phasing it in. (First, perhaps, it could be used in smaller municipal or fire district elections before it is used in the general election.)

Going to the Internet

■ Once the technology is secured by every measure to allow for remote Internet voting (voting from home, etc.), the same system used at the poll sites would be available to voters from just about any Internet-capable computer. (A number of poll sites still would be available for voters who do not have Internet access.)