

Voting machines

[Business](#)



E-voting machines have certainly contributed to the voting progress and are an integral part of elections in the U. S. As some critics have dubbed e-voting as a really dangerous and unpopular with security people, some others showed much support to it. The latter, however, stressed the urgency of the auditability issue, saying that e-voting is safe when it is secured with the help of additional checks and balances. Keywords: e-voting, technology, elections.

Voting machines As the presidential primaries are over for this election season, it appears that e-voting proved itself as a reliable voting instrument. However, Dr. Rubin, a professor of computer science at Johns Hopkins University in Baltimore and an e-voting activist, thinks somewhat differently. His concern is that electronic voting machines may record votes incorrectly (Interview with Aviel Rubin, E-voting Activist and Professor of Computer Science, 2008). He thinks that the problems that may be encountered would not necessarily have noticeable manifestation. Moreover, one of the risks of fully electronic voting is the possibility that a small mistake can be magnified in scale throughout the country since similar electronic systems and certain sets of circumstances can cause errors all over the place.

However, Dr. Rubin thinks that computerized voting system can be made to work safely and reliably. Security and auditability can be ensured if systems that are software-independent are introduced. That means that a voting system should be designed where a software failure would not affect the integrity of the election. That does not mean using old-style vote counters and mechanical systems again.

It is a system that will have redundant components, and will include a touch-screen machine that prints out paper ballots and a scanner that tallies them up and keeps the count of votes. Dr. Rubin emphasizes the need for an audit trail (Interview with Aviel Rubin, E-voting Activist and Professor of Computer Science, 2008). He explains it in terms of personal finances saying that no one would be willing to forgo his monthly statements or confirmation of his ATM transactions. Using software-independent systems would allow counting printed-out ballots after the election when scanners can be randomly picked and audited.

The number of counted ballots will then be compared to the totals that particular scanner ran. Moreover, a different independent scanner can be used to verify the results. The Open Voting Consortium (OVC) has the similar approach, offering to use open-source voting machines that allow verifying paper ballot count (A PC-Based Open-Source Voting Machine with an Accessible Voter-Verifiable Paper Ballot, 2004, p. 1). The system they want to use is called Open Voting or Open Source. It is based on similar solution where a primary element of the system is the use of software through which a voter generates a printer paper ballot.

Dr. Rubin underlined that the problem has been improved to a great extent and switching to independent-software systems will be able to minimize the risks of incorrect operation. He stressed the necessity of proper auditing after the election.