

Etopian Elections:

Virtual Voting, Smart Initiatives, and
the New Electronic Democracy

By

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&

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The Virtual Voting Book

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1994-1998

by Marc Strassman

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March, 1994

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Chapter 1

Theory

On January 2, 1994, the National Information Infrastructure Task Force came to the University of Southern California to address the issue of universal service. Spokespeople from Pacific Bell rambled on for hours about what they were doing in this area. Professor Tracy Westen, of the Center for Government Studies, also spoke at some length to a panel that notably included Larry Irving, then the Clinton Administration's point person on such issues. During the afternoon session, as panelists and audience alike were nodding off, I was given 2 minutes to speak and managed to get part of this presentation out to an audience that was paying absolutely no attention.

Address to the Universal Service Conference at the University of Southern California, January 2, 1994

My name is Marc Strassman. I'm the President of Transmedia Communications, a network content provider. I'm also a candidate for the U.S. House of Representatives from the 27th District of California, which includes Burbank, Glendale, Pasadena, and the Foothill Communities to the North. The centerpiece of my campaign is a promise to give the 27th District a new identity as Pacific Hills, a cybercommunity on the order of Singapore and Northern California's Smart Valley, where **every** household is connected through broadband links to all the electronic and economic resources promised by the Information Superhighway. This connection must extend to every household, so that the benefits and responsibilities of civic and commercial life will belong to everyone in Pacific Hills.

Some here today have already and others will continue to make the case for universal service. I applaud and support their efforts. But I want to focus on a special application that requires universal service and will be of particular importance for our future. After the system is up and running, after everyone has shopped electronically until they drop, interacted with every imaginable hedgehog, plumber, or race course, studied Greek mythology, macroeconomics, and Sanskrit at the Virtual University, and finished a hard day or night's or afternoon's work telecommuting or teleputing or whatever we call it, what will be left to do with this terrific tool/toy?

There's a hint in the Report of the National Information Infrastructure Task Force. The Net, says the report, can be used to "access government services" more easily. Indeed it can; indeed it should. From filing income tax returns electronically, to getting social security payments deposited automatically. Also, citizens will be able to use this system to access information that the government has generated and holds: materials in the Library of Congress, census data, etc. And the information won't only go one way: the President, the Vice-President and a few forward-looking members of Congress have already made themselves available for input on the Internet.

But I'm talking about electronic democracy, where these tools are used to create a system where the citizen-voter-netusers directly make decisions over the network.

In the 18th century, people and individuals traveled no faster than they had in Roman times: at horse speed. One of the reasons our Constitution provides for representative, rather than direct, democracy, is that it wasn't possible to get everyone together in one place in 1789. Representatives of the people met in Philadelphia and created a government form that replicated the representative nature of their own conclave.

With modern digital communications, everyone can be in one place at once. Everyone can express his or her view and it can be seen, read, or heard by millions of other people instantaneously. This idea is not new. In the late 40's Buckminster Fuller pointed out that with television and telephones it was already theoretically possible to have direct electronic democracy. Forty-five years later, CNN and C-SPAN put the deliberations and the pronouncements of our political leaders onto our screens as they happen. The House of Representatives now votes by electronic device. Millions of citizen vote for fat Elvis or thin Elvis stamps via 900- numbers set up by tabloid tv shows. Why can't the members of Congress vote from their home districts while watching the debate on C-SPAN? Why can't they participate in the debate from their home districts, or any other place in the world, through video teleconferencing? Why can't constituents throughout a congressional district participate in digitally-mediated town halls and instruct their representative on how to cast his or her vote on the Virtual House Floor? Why can't the people vote on the issues before the country directly?

These are some of the issues raised by the advent of technologies that make electronic democracy possible. Whether debates open to all and votes involving the entire electorate will give us better government than we have no is not immediately obvious. What should be obvious is that the more developed these communications technologies become, the more feasible such arrangements will be. In light of the high-stakes and on-going struggle among the cable companies, phone companies, cable-phone companies, etc., for control of the Information Superhighway, it is crucial that we continue to consider the possibilities for and the implications of, this highway as the backbone and forum for our own self-government. Because if we end up using it this way, and in some senses we almost certainly will, as a means of deciding who owns what and who gets to behave how, then we really have to be aware that whoever owns, operates, or controls the Information superhighway is going to be very interested in how it is used to decide issues of ownership, operation, and control of that system, which, to the extent that the Information Superhighway becomes the linchpin and key to our economy, culture, and politics, will be tantamount to deciding who owns, operates, and controls the world and the lives we live within it.

These are important issues, and I thank you for giving me a chance to comment upon them here today. Please continue your very important and welcome efforts in a crucial area that concerns us all.

*The Los Angeles Chapter of the International Interactive Communications Society figured in the evolution of digital democracy in two ways. First, in March of 1994, it provided me with a forum to discuss some new ideas on this subject in a column in its newsletter, **inter.com**>. I'm not sure there ever was another **Poli*Tech** column in **inter.com**>.*

Later, IICS members would provide me with the signatures I needed to get the Office of Legislative Counsel in Sacramento to help me draft the language of the Virtual Voting Rights Initiative.

Interactive Politics

March, 1994

*first published in **inter.com**> newsletter of*

The Los Angeles Chapter of the International Interactive Communications Society

Prince Otto von Bismarck, the father of modern Germany, once remarked that "War is too important to be left to the generals." The formulation of a national policy for the creation and maintenance of an interactive infrastructure is likewise too important to be left to a political class ignorant of and indifferent to the technologies and possibilities involved in the amazing machines and programs that are at the center of our professional and, in many cases, personal, lives. As interactive professional, we need to get and stay involved in the framing of questions and making of decision that will be of such importance in shaping the interactive environment in years to come. In light of recent seismic events, the need and opportunity to use interactive network technologies in place of traditional methods like commuting, snail mail, and the radical separation of workplace and home are more compelling than ever. Decision regarding the deployment of these technologies are sometimes technical and economic, sometimes political.

In the late '70s, when I was a science and politics reporter at *The Stanford Daily*, I found that the scientists I interviewed (with the exception of Edward Teller) knew little about politics, and that the politicians, who had to make decisions about recombinant DNA, plutonium disposal and swine flu inoculation campaigns, knew little about science. Motivated partly by a desire to correct this political and scientific literacy gap, I ran for Congress in Silicon Valley in 1980, pitching myself as a journalist who could upgrade the political debate by helping to educate the voters about the scientific and technological issues that have such an impact on our personal lives, and that play such a large part in our political lives as well. My campaign slogan was "Compute; don't commute," and I spoke constantly about the benefits of telecommuting. At a time when IBM was still negotiating secretly with Bill Gates for their operating system and the graphical user interface was still only a private toy for the Xerox PARC engineers up in the Palo Alto hills, not very many people got it.

Today, with interactive technology exploding, multinational multimedia monsters merging monthly, and the government trying to decide how to react, the need to deal with the political dimensions of the information revolution is greater than ever.

There are three major areas of political/technological intersection that need to be addressed. the first is the degree to which the federal government should involve itself with (or interfere in) the construction of the physical infrastructure, the protocols, standards and software, and the regulation of the operations of the Infonet. The second involves the use of the Infonet itself to remedy some or all of t day's social and economic problems, such as crime, jobs, pollution, health care, education, etc. Finally, there is the possible of the Infonet to transform the political process itself, by putting it to use a s a forum to discussion and a tool for decision-making that would involve everyone, not just economic, political, and social elites.

At a time when substituting fiber optic cable for fallen freeways makes more sense than ever, it's imperative that the builders of the interactive future also get involved in the related *political* processes (in an appropriate way that they feel comfortable with)--this is the best way to influence the shape of the powerful interactive metasystem that will be dominating the economic and social landscape in the future.

This piece was written during my 1994 campaign for Congress in the 27th Congressional District of California (Pasadena, Glendale, Burbank)

The Digital Manifesto

When I was a Student Congressional Intern in the Summer of 1966, there was no television camera in the back of the House of Representatives, and when a Member called for a division of the House, all the Representatives would have to file between a Democratic and a Republican counter who would tally their votes. There was a lot of resistance to electronic voting, and a lot of objection to televising the proceedings, but now everyone wonders how the House could have ever done without these modern electronic tools. I would like to suggest today that we can go a few steps further than we already have.

It's possible for House members to watch floor proceedings from their offices on C-SPAN and then walk or take the underground trolley to the chamber to vote. Why can't they vote from their offices? If the Information Superhighway can wire the nation, surely it can run wires from one part of Capitol Hill to another. Wouldn't this make the operations of the House more efficient and give members more time to tend to the people's business?

But if members can watch the proceedings and vote on procedural and substantive issues from their offices in the Longworth, Cannon, and Rayburn House Office Buildings, why can't they watch the proceedings and vote from their offices in their districts? Furthermore, now that Silicon Graphics is selling its IndyCam, a digital camera that sits on top of a computer and transmits digitized video signals of the person sitting in front of it to others on the network and other companies are following suit, why can't Members participate in "virtual floor debates" from in front of their computers, wherever they and their computers are? If executives of major multinational corporations can hold videoconferences involving multiple decision-makers at multiple sites worldwide, why can't the Congress of the United States do the same?

Now that we have the House members telelegislating from their districts or world trouble-spots, or even fishing retreats, why not bring the voter/constituent/citizens into the mix? Let the Representative preside over a seminar/symposium/town meeting like the ones President Clinton likes so much and uses to such good effect, only conducted electronically. Let experts and facilitators, regular citizens and interested parties, join the Representative by fax, telephone, computer, digital video uplink, etc., to state their opinions, provide information, and present arguments, logical and emotional, as to what course of action would be adopted. The Representative could then decide what to do on the basis of this input, and vote accordingly.

But wait, what exactly do we need this Representative for if the citizens can communicate directly with each other, point-to-point and in broadcast mode as well? he or she can help the citizens use these tools and facilitate the discussion. But we the

people no longer need a permanent, disproportionally-empowered, PAC-controlled official to represent our wishes. With the empowering technology of the Information Superhighway, all citizens, like John Alden, can speak for themselves. And, more importantly, decide and vote for themselves.

If people can choose zirconium baubles on QVC, consult schedules and make airline reservations by modem, and call 900 numbers to vote for fat Elvis or thin Elvis stamps, why can't they vote directly on health care reform, welfare reform, gun control and all the other issues facing the nation? Representative democracy was a revolutionary breakthrough and a progressive alternative in the late 18th century when the Industrial Revolution was just beginning. Direct digital democracy can be an equally or even more stunning breakthrough in the late 20th Century, as the electronics revolution that began in the late 1940s with the invention of the transistor is beginning to carry us into uncharted realms of increased productivity, instantaneous global communications, staggering possibilities in graphic and visual effects, access to information on a scale comparable to Jorge Luis Borges' Babylonian library, and, in general, a world where everyday life, at least for those who can afford to participate, testifies to the truth of Arthur Clarke's dictum that "any sufficiently-advanced technology is indistinguishable from magic,"

In a world where the potential of this technology is being most notably used to let viewers decide, via 900 numbers, which sit-com character another sit-com character should date, I think we'd all be better served if we started to discuss seriously the use of these amazing tools to improve our country and our world and upgrade the quality of each of our own lives by using them to create a universal democracy where we all have equal access not only to video dial tone but to the circuits and programs that will allow us to participate directly in the decisions that affect our lives and to shape our individual and collective destinies by means of the most powerful and sophisticated machines that can be constructed to allow us to shape our future through the instrumentality of network-based digital electronic self-government.

*In late 1995 I wrote "Some Early Notes on the Campaign for Digital Democracy and the Virtual Voting Rights Initiative". It was later reprinted in **The Initiative Press & Seminars** magazine.*

Some Early Notes on the Campaign for Digital Democracy and the Virtual Voting Rights Initiative

The Campaign for Digital Democracy (CDD) will soon launch an effort on the Internet to turn the World Wide Web into a World Wide Virtual Voting Booth. The Virtual Voting Rights Initiative (VVRI), drafted by Transmedia Communications president Marc Strassman (with help from the Office of the Legislative Counsel in Sacramento) and now awaiting an official title and summary in the office of state Attorney General Dan Lungren, will allow any otherwise eligible California to register to vote, sign official petitions (including initiative and recall petitions), and vote electronically through computers, telephones, kiosks, personal digital assistants, interactive and cable television, and any other device capable of originating and transmitting a secure digital signal. Also included in the initiative is a provision mandating the establishment of a State Electoral Server (SES) with space for candidates and initiative committees (pro and con) to present their views to the people of California without having to raise millions of dollars for television ads and mass mailings from individuals, groups, and corporations who will later want the influence on government policy they'll feel they've paid for.

Discussions between CDD and the Office of the Secretary of State, which would be charged with implementing the Virtual Voting System itself or hiring outside contractors to do so, seem to have concluded with a vague and indeterminate unofficial acceptance by the state of the use of a single-page, single-sided "petition-for-1" that will be accessed through the Internet on a soon-to-be-but-not yet-launched website, <http://www.cddemocracy.org>. (The beta website can be found at <http://www.source.net/cddemocracy>. E-mail to CDD should be sent to jason@source.net.)

Once downloaded by the user, he or she can sign it (once as the "signer" and once as the "circulator" who witnesses his or own signature; these are legal requirements of the existing, pre-digital system), and then mail it to the Campaign for Digital Democracy office for manual sorting and eventual delivery to the appropriate county Registrar of Voters. Those who download the file are, of course, encouraged to print out or photocopy additional copies for signing, witnessing, and mailing to CDD by members of their family, friends, co-workers, strangers, whomever. The CDD's goal is to collect 700,000 signed and witnessed copies of the VVRI form, hopefully within two month of the time it goes up on the Net in late December, 1995, or early January, 1886, in order to qualify the initiative for the November 5, 1996 election ballot.

Provisions will be made to collect e-mail addresses of signers for distribution of the CDD Newsletter (worked title: "Virtual Politics") and to begin organizing a Virtual party that will pursue humane pro-technology policies through a democratic and participatory form of network-based collective decision making in California and elsewhere. Petition signers will be asked to register or re-register as members of the Virtual Party and provided with a form to mail to their county Registrar of Voters to request the necessary registration forms.

Digital signatures, employing public key cryptography, will be used to protect the Virtual Voting System (VVS) from fraud, which is prohibited in the VVRI and punishable by a \$3,000 fine and one to three years of exile from the Net. California's early adoption of the VVS will provide it with immediate technological, commercial and political advantages as other states and other countries begin to adopt the California-pioneered Virtual Voting System.

As the political process follows the VVS onto the Web, documentation and government regulation of campaign contributions and spending, animated and video advertisements for candidates and initiatives, interactive candidate forums and videoconferences, and additional citizen-to-citizen discussion will appear and proliferate on-line. The increased opportunities that come to individuals and the flexibility and synergies that come to every domain as networked computers and their users move into it will rapidly become available to the citizen-users of the Virtual Voting System. The on-line petitioning and voting functions will give the networked community the collective power and the desktop tools to reshape the government more to its own design. Perhaps there will emerge a director democracy, without "representatives" or "bureaucrats", controlled by a Virtual Assembly and managed by networks of intelligent agents implementing the will of the virtual community, which may actually come to include virtually everyone as a result of the recently-initiated campaign by RAND Corporation to convince top decision-makers and the general public that it is in the national interest of the United States to provide everyone in it with universal e-mail access, which would naturally and automatically mean universal access to virtual voting. Or perhaps we will end up (for a while) with something as yet unimagined, brought into being by ever more powerful and inexpensive networked computer systems and constrained only by whatever limits we choose to put on our individual and collective creativity and will.

This piece has never been published before. It was written in 1997, during the campaign to pass AB44 in the California Legislature.

A Digital Voting System for California

Conceived by me as a “virtual voting system,” called a “digital electoral system” in the bill that would enact it into law, perhaps to be marketed as “VoteStar,” what we are talking about here is a system that will let voters use the Internet to vote in real elections and have these votes count, just like votes cast on paper ballots, with computer punch cards or mechanical voting machines.

Extending the process pioneered in Oregon as mandatory vote-by-mail, virtual voting is voting by e-mail. Written and first proposed by Marc Strassman in 1996 as an initiative that never got the half-million signatures it needed to make it onto the November, 1996 General Election ballot in California, and introduced on December 2, 1996 as AB(Assembly Bill)44 into the California Assembly by Assemblymember Kevin Murray of Culver City, this pending bill will allow eligible California voters to use any secure electronic network to cast their votes and also to sign on-line initiative petitions. Allowable means to do this include the Internet, telephones, and publicly-accessible kiosks with Internet connections. The focus here will be on the Internet aspect of the systems authorized by AB44.

The principle challenge in building a viable and secure electronic voting network (EVN) is to provide “anonymous authentication.” This seemingly-oxymoronic phrase refers to the double imperative faced in constructing an EVN that will both allow in only qualified voters, prevent them from voting more than once in any given election, and simultaneously allow them to vote in complete and utter privacy and retain the secrecy of their choices from any potential observer, including whomever is administering the voting process, be it government agency or private firm. Until these dual problems, one problem really, can be solved, no EVN can or ought to be put into place.

One way to solve the problem is to issue every voter a digital certificate. In fact, AB44 specifically says that digital certificates are to be used to identify and authenticate all voters using the California EVN. Whatever systems now exist or are being developed by Netscape by itself or in collaboration with its partners, especially VeriSign, to issue, record, and administer digital certificates and to create digital certificate authorities can and ought to be used to build the authentication module of any California EVN. Further, whatever technology, procedures, or algorithms existing or in development at Netscape, VeriSign or other Netscape partner companies capable of providing privacy and secrecy for the content of the electronic ballots, as opposed to the need for system administrators to know who did vote, without regard to how they voted, ought be looked at for possible applicability in this area.

As currently envisioned, a California electronic voter, equipped with his or her digitally-certified browser, would log on to at <http://www.calvote.gov>, be authenticated

through their digital certificate, be identified by the state server by their address and be allowed to access an electronic voting form (probably generated with Decisive Survey from Decisive Technologies of Mountain View) that would contain the candidates and ballot measures appropriate to their address (more in another paper about the obvious silliness of requiring people to vote on measures and candidates according to where they live in a world of telecommuting, fading national boundaries, and so on, rather than voting in professional blocs, gender blocs, or whatever).

The voter would complete the form, check to see that it properly reflects his or her choices, then click "Submit." Through the use of "anonymous remailers," the voter's electronic ballot would be "deposited" and their name taken off the list of those eligible to vote in the current election. Then their identifying information would be stripped off and the ballot, now anonymous, would be remailed to the tabulation server, where it would be counted (probably by the functions in the Decisive Survey program that aggregate the results of the separate submitted forms).

The totals will be provided to the electoral authorities and posted to the Net when certified. More voters will be able to vote more easily, faster, and more securely, and the state can save money and increase voter turnout (or logon) at the same time. As a side benefit, many more people will acquire digital certificates, which can also be used in electronic commerce of various types, thereby enhancing the electronic infrastructure of California generally, increasing economic activity, generating more money for education, more productive workers, etc., etc.

All this electronic electoral activity will focus more attention on the Net as a place to campaign. New products for online video will mean that candidates and initiative campaigns will begin using websites to promulgate their messages in multimedia. This will lead directly to the second major reform enabled by new digital networks.

This piece has never been published before either. It was also written during 1997.

Campaign Finance Reform by Digital Means

Campaign finance reform is this year's special political theme. Digital networks offer a cost-effective, even elegant, partial solution to this morass. By building an electronic campaign finance monitoring system, some of the major deficiencies in the present set of arrangements could be eliminated, or at least substantially reduced.

COIN (Candidates Online Information Network) would include these elements:

1. Candidates and initiative campaigns would complete a questionnaire (with Decisive Survey) where they could express their stands on various political issues of the day. These would be collected, sorted, and used to generate a database.
2. Individuals and other contributors would log-in to <http://www.coin.com> and fill out similar questionnaires. Their preferences would be matched with the views of the candidates and the initiative committees.
3. Potential contributors could access additional information about their matched potential recipients, at the COIN site or through links to the sites of the candidates and committees.
4. Contributors could use CyberCash products and services to make a contribution.
5. The contribution would go into "digital escrow" while information about the contributor, unambiguously identified through the use of digital certificates, and the contribution, unambiguously identified through its CyberCash parameters, was electronically forwarded to the Federal Election Commission, the California Fair Political Practices Commission, or whatever the appropriate regulatory agency is for the particular race at issue.
6. The controlling campaign finance regulatory agency would then run the proposed contribution against its up-to-date and state-of-the-art database system to determine if the proposed contribution were legal. If it is, then a campaign contribution authorization code would be generated and sent back to the campaign committee that is intended to receive the money and the cash would leave its digital escrow state of limbo and be deposited electronically in the account of the intended recipient, while at the same time the contribution is being logged in at the regulatory agency and posted to their site on the Net so everyone who wants to know who's giving what to whom can find this out.
7. If, for example, this contributor has already exceeded their limit of allowable giving to this candidate, or this candidate has agreed to a spending limit in exchange for free TV time and the contribution would put him over that limit, or if allowing this contribution would mean violating any of the complex and increasingly complex laws now in existence or soon to be established to regulate campaign contributions, then the regulatory agency would not issue a campaign contribution authorization code, and the proposed contribution

- would revert to the control of the contributor.
8. All potential contributors, not just ones using COIN as a front end to find candidates they agree with, and all candidates and initiative campaigns, would be required to use this system.
 9. This is mandatory electronic filing with a twist, mandatory electronic filing with vetting (vet: to subject to expert appraisal or correction, evaluate). All proposed campaign contributions would go into digital escrow, they would be vetted by the appropriate authorities through the use of modern database technology, and they would be accepted only if they were demonstrably legal. Then information about them would immediately be posted to the Internet for public viewing.
 10. Nobody doubts that it's essential to "vet" airline reservations, stock transactions, or just-in-time deliveries. Or that it can be done. Considering the importance of maintaining honest elections, it ought to be possible to use variations of the same technology that can match travelers, credit cards, itineraries, and empty seats to similarly coordinate contributors, candidates, initiative committees and money.

That's about it: digital platforms for candidates to get their message out (specifically authorized in AB44 and subsidized there as well), automated means of finding candidates and initiative campaigns one might want to support, digital escrow for contributions until they can be checked for legality, and, finally, a secure and private means of voting over the Internet from the comfort and security of your own home or office from a computer that holds your digitally-certificated browser. Maybe once this Integrated Electronic Electoral System (IEES) is in place, we can get started doing some real politics.

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Similarly unpublished previously, this article makes the point that electronic politics is good for electronic business.

Vote Today; Shop Tomorrow

Two Sets of Reasons for Supporting the Adoption of the Integrated Digital Political System

IDPS (Integrated Digital Political System) is a collection of software programs and systems that will allow citizens to:

1. sign petitions and vote in elections over the Internet and by telephone through the use of digital signature certificates
2. match their views with those of candidates for office and make contributions to the campaigns of their choice with the assurance that they are not breaking any laws
3. communicate with their elected officials easily and in a timely manner about issues of concern to them over the Internet and by telephone using digital signature certificates that will insure priority to the views of district constituents
4. have their casework regarding their dealings with the government handled efficiently and promptly

Taken together, I believe that these elements will save taxpayers money, put legislators in closer touch with their constituents, greatly reduce or eliminate fraud in voting and illegality in campaign fundraising, and help build the electronic infrastructure and personal competency required for the transition to a digital, or wired, economy.

The Political Case for IDPS

American elections are expensive and poorly-attended. Holding them on Tuesdays, in the middle of the workweek, means that citizens who are already stressed-out and over-scheduled with a multitude of business and personal responsibilities, need to set aside time and energy they may not have to go to the polls before or after work, wait in line, and then hurriedly vote so others similarly stressed-out can have their spot in the voting booth.

Most other democracies make voting compulsory, but they also hold elections on Sundays, so it's easier for their citizens to go to the polls. Most other democracies also have voting participation rates much higher than those in the United States.

Allowing busy citizens the option of using their telephone or Internet-linked computer to cast their votes could significantly increase the rate of participation in American elections, while at the same time reducing costs and increasing security. Furthermore,

equipping voters with the digital signature certificates they will need to assure the security of a digital voting system will move them and the country as a whole significantly further along the road to a digital economy, where selling, shopping, and working will all be mediated through smart cards holding digital signature certificates and the certificate authorities (CAs) that will administer and regulate their use.

The Business Case for IDPS

Using IDPS as a way to jump-start the digital economy would mean the creation and then the expansion of a multi-trillion dollar business sector that could soon dwarf the rest of the economy. When citizens with smart cards turn into workers and shoppers with smart cards, the possibilities for increased productivity and consumption escalate exponentially.

Smart carded workers will be able to work anywhere there's a computer linked to the Internet. Smart carded shoppers will be able to buy products at will or at whim from virtual stores selling every conceivable product or service.

All of this will mean business for the companies that produce the computers, and servers, and networking equipment and connectivity tools and the software that runs the networks. It will mean business for the companies, large and small, selling over the Net. The increases in efficiency throughout the system will translate into increased productivity, low inflation, declining interest rates, and more investment in a virtuous circle generated by the efficiencies of e-commerce.

The Best for Both Worlds

So while adopting an IDPS will pay big benefits in the political sphere, it could yield its most luscious fruits in the orchard of commerce and business.

For both these reasons, political parties and politically-involved individuals from everyone along (and even off of) the political spectrum would be well-advised to take a serious look at how implementing IDPS would positively effect their situation. Then, if they so decide, they ought to get involved wherever they are in working to bring it into existence at the earliest possible date.

Chapter 2

Virtual Voting Rights Initiative

All the previous theory led up to this document, the Virtual Voting Rights Initiative. I collected thirty or so signatures from members of the Los Angeles Chapter of the International Interactive Communications Society on a petition asking the Office of Legislative Analysis in Sacramento to help draft an initiative authorizing Internet-based voting. Joe Ayala in that office provided the legal language to implement my proposal for electronic registration, initiative signing, and voting over the Internet. This Virtual Voting Rights Initiative would later become the basis for Assembly Bill 44, in its original form.

Virtual Voting Rights Initiative

To the Honorable Secretary of State of California:

We, the undersigned, registered, qualified voters of California, residents of _____ Country (or City and County), hereby propose amendments to the Elections Code and the Government code, relating to voting, and petition the Secretary of State to submit the same to the voters of California for their adoption or rejection at the next succeeding general election or any special statewide election held prior to that general election or otherwise provided by law. The proposed statutory amendments read as follows:

Virtual Voting Rights Initiative

SECTION 1. Section 107 is added to the Elections Code, to read:

107. (a) The Secretary of State shall design, develop, and implement a digital electoral system for the collection, storage, and processing of electronically generated and transmitted digital messages to permit any otherwise-eligible person to register to vote, sign any petition, and vote in any election, including applying for and casting an absentee ballot, using that system.

(1) The identify of the person submitting the digital message shall be established and the submission shall be authenticated as being the work product, political product, or actual and attributable communication of this identified person by the use of that person's digital signature, as defined in subdivision (d) of Section 16.5 of the Government Code.

(2) Each message may be originated in any electronic device, as long as the message is readable by an industry standard digital file server that shall be designated by the Secretary of State as the state electoral server and, in order to be valid and accepted for its intended purpose, shall be transmitted through a secure digital network that meets prevailing industry standards for these networks. Originating devices may include, but are not limited to, the following digital platforms: computers, touch-tone telephones, freestanding kiosks with touch screens, keyboards, or mice, personal digital assistants, interactive televisions, virtual personal assistants on phone networks, cable television systems, phone company or other fiber-optic networks, or utility company powerlines.

(b) No person shall willfully manipulate the digital electoral system specified under subdivision (a), either by destroying data in it, interfering with the operation of the system, transmitting false or inauthentic data, using the digital signature of another person without the consent of that other person, or securing the digital signature of another person by deceit, fraud, threat, coercion, subterfuge, trick, misrepresentation, or by buying the digital signature for money or any other valuable consideration and using it to enter and transmit false or inauthentic data. Any person who violates this subdivision shall be prohibited from using any public computer network for no more than three and no less than one year and shall be fined three thousand dollars (\$3,000).

(c) The Secretary of State shall provide each candidate for elective office and each

committee supporting or opposing a ballot measure with a reasonable amount of space on the state electoral server in order to provide candidates and committees with the means to store and make accessible multimedia documents including text, graphics, audio, video, and interactive forms and intelligent agents in order to provide the candidates and committees with a means to communicate with the electorate and to provide citizens and others with a means to obtain information about the candidates and ballot measures and to communicate their own views, opinions, suggestions, ideas, and comments to candidates or committees. Generally accepted industry standards shall be ascertained and employed in providing for the formatting, collection, and storage of the documents to be used for this purpose and for making them accessible through public computer networks and online services under the terms of this section. The identity of the sender and the authenticity of the submission to be posted on the state electoral server may be established by the use of digital signature, at the discretion of the submitting person or group.

(d) The Secretary of State may research, design, develop, purchase, and deploy the hardware, software, network resources, and training for his or her staff, county election staff, and the general public necessary to implement the provisions of this section. The Secretary of State may contract with one or more private vendors to wholly or partially provide the data collection, storage, processing, encryption, decryption, and authentication and the network resources required to implement the provisions of this section.

SEC. 2. Section 3024 is added to the Elections Code, to read:

3024. Any person may vote by means of the digital electoral system authorized by Section 107 during the same time period that absentee ballots are permitted to be cast.

SEC. 3. Section 16.5 of the Government Code is amended to read:

16.5. (a) In any written communication with a public entity, as defined in Section 811.2, in which a signature is required or used, any party to the communication may affix a signature by use of digital signature that complies with the requirements of this section. The use of a digital signature shall have the same force and effect as the use of a manual signature if and only if it embodies all of the following attributes:

- (1) It is unique to the person using it.
- (2) It is capable of verification.
- (3) It is under the sole control of the person using it .
- (4) It is linked to data in such a manner that if the data are changed, the digital signature is invalidated.

(5) It conforms to regulations adopted by the Secretary of State. Initial regulations shall be adopted no later than January 1, 1997. In developing these regulations, the secretary shall seek the advice of public and private entities, including, but not limited to, the Department of Information Technology, the California Environmental Protection Agency, and the Department of General Services. Before the secretary adopts the regulations, he or she shall hold at least one public hearing to receive comments.

(b) The use or acceptance of a digital signature shall be at the option of the parties, *except that the Secretary of State and all county elections officials shall permit the use of digital signatures for the purposes of voter registration, petition signing of all types allowed by the Elections Code, voting in any election, including the application for and casting of an absentee ballot, and for identifying and authenticating submissions to the Secretary of State for posting on the state electoral server. Nothing Except as specified in this subdivision, nothing in this section shall require a public entity to use or permit the use of a digital signature.*

(c) Digital signatures employed pursuant to Section 71088 of the Public Resources Code are exempted from this section.

(d) "Digital signature" means an electronic identifier, created by computer, intended by the party using it to have the same force and effect as the use of a manual signature.

SEC. 4. The provisions of this measure are severable. If any provision of this measure or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

Here are the remarks I delivered to the California State Democratic Platform Committee during a public meeting they held in Los Angeles on November 11, 1995:

Remarks Delivered to the California State Democratic Platform Committee, November 11, 1995

I'm Marc Strassman, executive director of the newly-formed Campaign for Digital Democracy. Here's the initiative I wrote:

Title: Virtual Voting Rights Initiative

Summary: Establishes Digital Electoral System enabling citizens to register to vote, sign official petitions, and vote directly from telephones, computers, and other electronic devices by means of digital signatures. Provides anti-fraud safeguards and punishes violators. Provides space on digital network file servers for candidates to use in informing voters of their qualifications and positions and for proponents and opponents of initiative measures to argue their cases. Allows state to contract out all or part of the work necessary to implement this measure. Could reduce electoral costs if used widely enough.

This is a proposal that lays the groundwork for a direct electronic democracy. It allows us to use the same paradigms and skills that we use in our professional and personal lives in our political lives. In addition to on-line registration, petition signing and voting, it mandates the creation and maintenance of a state server on which candidates and initiative committees can put multimedia documents for distribution to everyone online.

I would like to get the support of the Democratic Party of California and each of you individually in getting the 433,000 valid signatures this initiative will need to get on the ballot a year from now. Lengthily discussions with the Office of the Secretary of State have yielded this piece of paper. It includes the entire text of the Virtual Voting Rights Initiative, my own summary and title, some legal incantations, a circulator's affidavit, and space for one person to sign his or her name. As soon as the Attorney General provides us with his summary and title, a document a lot like this will be loaded onto the Internet at the address: <http://www.vvri@cddemocracy.org>. You and millions of others will be able to download it to your own computer, print it out, sign it, fill out the circulator's affidavit and mail it to our headquarters, where it will be sorted by county and delivered to the appropriate registrar of voters office.

So write down "<http://www.vvri@cddemocracy.org>" and start looking for it around December 15th. In the meantime, you can send e-mail asking to go on our mailing list to our campaign webmaster, not at our war room but at our web room. Send it to "jason@source.net."

In 1962, our last speaker wrote the Port Huron Statement, where he said that all of us

have the right "to participate in the decisions that affect our lives." In 1962, a lot of American citizens couldn't vote at all, let alone vote virtually. Today, in the context of a world where technological power drives our economy and our entertainment and almost everything else that affects our lives, I think it's finally time that we, individually and collectively, took hold of the levers of that power ourselves and used it to shape the world more to our own design. Don't you?

Many factors contributed to the failure of the Virtual Voting Rights Initiative to attract the 433,269 signatures it needed to qualify for the November, 1996, ballot. But the strength of it as an idea enabled it to attract a respectable amount of media attention, starting with this long and accurate article in the Capital Weekly in Sacramento by Jim Davis.

Will Californians Soon Be Voting Online Via A Digital Electoral System?

Monday, December 4, 1995

by Jim Davis

Imagine a day when instead of driving to your precinct to walk in to a booth and vote, you instead take a seat at your computer, dial a number on your modem, and on the screen you instantly have access to the voting guide and ballot pamphlet. After signing in with your "digital signature," you mark your choices and exit the system. Voila! You are finished voting.

Such a dream may become a reality if a group called Campaign for Digital Democracy (CDD) has its way. CDD's Executive Director, Marc Strassman, recently filed an initiative at the Attorney General's office that would enable citizens to register to vote, sign petitions, and vote not only on-line, but from telephones and electronic kiosks. Space on network file servers would also be provided for all candidates and the proponents/opponents of initiatives so that interactive "web sites" could be accessed by the public.

Strassman in a phone interview said "There's so much discussion about the political process as fundamentally and necessarily corrupt because of the money needed to run for office...From my understanding of the system, candidates present themselves to vested interests who give them money and then they are beholden to them. When nobody votes, power is more concentrated with these vested interests....What this initiative is about is getting as much of the government back into the hands of people as possible." A spokesperson for the Department of Information Technology said that there are some initial reservations about security and how the infrastructure of such a system would be funded, but that the administration would have to further review the initiative before taking a position on it. The Secretary of State's Office will likely formulate its position after the measure has received Title and Summary.

The Secretary of State's office would be responsible for designing, developing, and installing a "digital electoral system for the collection, storage and processing of electronically generated and transmitted digital messages to permit any person to register to vote, sign any petition, and vote in any election, including applying for and casting an absentee ballot, using that system."

We want to apply technology to...get people more directly involved in the political process," he says, using a special election in March of 1995 in Los Angeles as an example. Reportedly, only 19% of the people voted in the election at a cost of \$13 per vote, a cost Strassman thinks is too high. He believes that a "virtual" voting system would increase participation in such elections and would eventually be a very cost effective method.

What that system would look like is anybody's guess but the measure does state that the message, validated by an "electronic signature," could originate in any type of device ranging from home computers to personal digital assistants (PDA's like Apple's Newton) to interactive televisions, cable television systems, or even utility company power lines. The signals would be carried over "secure digital networks" that meet "prevailing industry standards for these networks."

The whole measure takes up only a page and a half of single space type, but implementing the measure would obviously be quite a lengthy and complicated project. While the present system is not fraud proof and a new, computerized one is not likely to be either, the question is then how easy would it be to perpetrate fraud in perhaps a more subtle but still effective manner?

Strassman acknowledges that massive fraud, like an extra 100,000 votes in one district, would be easier to spot than voting illegally in a number of precincts. But he feels that with the safeguards he has in mind, such a system is not only possible, they already exist.

"People in Los Angeles, New York, and Tokyo are transferring billions of dollars over computer networks everyday. If that system weren't secure, they wouldn't use it," Strassman notes. Credit and debit card systems that consumers already use every day operate on secure networks, although having one's card stolen will permit fraud. And think too, about the state's lottery system, which has to record millions of transactions a day and randomly pick a winning number without being susceptible to tampering. These systems are complex and aren't infallible, but are in place and work reliably.

The security of the virtual voting system that Strassman proposes revolves around the use of "digital signatures" which are based on the mathematics of public key cryptography. Each individual could be issued a code at the Department of Motor Vehicles which consists of a personal code that only the individual knows and public code. These are combined to form a signature on the "virtual ballot," which is then transmitted to a central database. The information can only be deciphered by someone with access to the public code; if a transmission has been tampered with in the process of transmission, the digital signature is altered as well, alerted the registrar to the problem. Such digital signatures are already authorized by state law, Strassman notes, in the case where the state and a contractor both agree to forgo a handwritten signature to seal a contract. In this case, the state would now be required to accept digital signatures in the case of petitions and ballots.

Finally, to test the security of the final system, Strassman proposes that either of the two companies approved to do security checks of all federal high security computer systems test California's system. These companies are paid, essentially, to try to break in to federal computer systems to find potential flaws; Strassman notes they are like the Underwriters Laboratory for computer systems. Such a "seal of approval" would go a long way in assuaging fears of the new system--that and a demonstration system that Strassman is trying to bring together to show how his system would work.

With a "virtual voting system" in place, it may also one day have impacts beyond the realm of politics. Commerce as we know it is already being transformed by the Internet--with the widespread use of digital signatures, people could take SAT's online and shop online. The expenditure of time and money to build the system is large, but Strassman is certain the benefits to the economy in the long run would ensure California's leadership in the creation and application of technology that could be used (and sold) around the country. Strassman himself owns a communications company in Los Angeles which is developing a virtual software store on the Internet for people to shop in that would allow software to be downloaded into a home computer--but such a venture depends on the development of encryption codes to ensure secure transactions, just as the voting system would need.

Still, for Strassman, who once ran for Congress, the political impact is what is most important. Perhaps merely by trying to qualify the initiative, he may have an impact on the political process. Since the Campaign for Digital Democracy is a small operation with no outside funding (yet), CDD has developed an electronic petition, the likes of which may not have been tried yet. The plan is to put the petition online and have people print the petition out, sign it, and turn it in to the campaign headquarters. While most initiative campaigns use a combination of volunteer and paid signature gatherers (at a cost of \$700,000 to over \$1,000,000, depending on the type of initiative), CDD's campaign promises to be an entirely volunteer effort via the Internet.

Such an effort is not without its travails. Since it hasn't been done before, nobody is willing to say whether or not such petitions will be accepted. Requirements that the text of the initiative and signatures of circulator and petitioner be on the same piece of paper (along with other format requirements) were a challenge, but CDD will have all the information on standard letter size paper. After a person prints the "ballot for one" out, as Strassman calls it, they sign the petition as both circulator and petitioner. There may be a legal battle over whether or not such petitions are valid, but if they are accepted, true grassroots initiatives will be more affordable and common than ever--and government may ultimately be more accountable to the people.

Strassman's belief is simple: "Everyone who is qualified to vote, ought to vote. We ought to make it as easy as possible for every one to participate in democracy."

Campaign for Digital Democracy is located on the Internet at <http://www.source.net/cddemocracy>. You can send E-mail to CDD via

Jason@source.net.

There was minor coverage of the Virtual Voting Rights Initiative campaign. Bob Rosengarten, the editor, included this blurb in the January 22, 1996 issue of his "independent, nonpartisan news analysis bulletin," CALPEEK:

CALPEEK Takes Note of Virtual Voting Rights Initiative

*** Elections. Electronic Registration & Voting.** The key sponsor is Marc Strassman of the Campaign for Digital Democracy. Deadline is June 3. Statute. Contact: (XXX) XXX-XXXX.

(For rights, contact Bob Rosengarten at 310-659-0205.)

I expected to get a lot of support from college student/voters eager to use their Internet connections to vote. These two articles from the student newspapers at UCLA and USC marked the high point of the VVRI's visibility on college campuses, and of student interest in it.

Virtual voting initiative boosts accessibility

Daily Bruin News
Monday, January 22, 1996

By John Digrado
Daily Bruin Staff

In an effort to bring democracy out of the polls and into the living room, the newly founded Campaign for Digital Democracy unveiled an initiative late last week that would create a "virtual voting booth" on the World Wide Web.

The Virtual Voting Rights Initiative would add sections to the California Elections code that would require the Secretary of State to "design, develop and implement a digital electoral system," a move that would allow the citizens of California to vote via the Internet, telephone and other digital platforms.

"The goal is to create a political community linked by computers so voters can decide together what they want in policy," said the Campaign for Digital Democracy Chairman Marc Strassman. "It's very low cost, very participatory. It's fast and relatively cheap."

The initiative would allow computer users to download voting software from the Internet and, after a series of user identifications, cast their ballots from the comfort of their homes.

Voters without access to the Internet would be able to call a toll-free number and vote over the telephone, from networked kiosks and eventually through cable and interactive television, proponents said.

"It's faster and less inconvenient (than going to the polls)," Strassman said. "If more people vote, you have a more democratic government."

Some students agreed with Strassman, citing that the increased accessibility of the system would lead to a more active role in government.

"It'll be good for students because most people on campus have Internet access," said Tom Soong, a fifth-year sociology student. "People will have more access to (the political system)."

Though the initiative may go to the voters on the November 1996 ballot, voters may not approve the measure due to concerns over the security of the ballots cast.

"I wouldn't support it. If it's over the 'net, it's not totally safe," argued Steve Drew, a fourth-year history student. "It kind of destroys the idea of the secret ballot."

Others expressed concerns about votes being forged by hackers, effectively stuffing the virtual ballot box.

"If votes could be changed, then that's a problem that needs to be dealt with," Soong said.

Supporters of the initiative said that they recognize the potential problems that could arise should the system be hacked.

"We don't have the answer to it yet," Strassman said. "We'll have to see what happens, but we have to spend a lot of time and effort to protect against violations of (the system's) integrity."

The initiative calls for the use of digital signatures and public key cryptography to safeguard the Virtual Voting System from fraudulent voting.

Proposed penalties for hackers caught compromising the system include a \$3,000 fine as well as a one to three year exile from any public computer network. Fraudulent use of others forms of the system carry the same ramifications.

"There are a lot of things running around the world, all of which can be compromised by computer hackers," Strassman said. "This is a problem that is far broader than voting in cyberspace."

Despite the apparent drawbacks, Strassman hopes to obtain the approximately 700,000 signatures required to place the measure on the November ballot and put the issue directly to the voters. Should the measure pass, the system is anticipated to be in place for the 1998 primary elections.

Voters that want to sign the petition can visit the Campaign's World Wide Web site at <http://www.cddemocracy.org>.

Electronic voting initiative may reach ballot

Legislation would provide for voting by phone, computer

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This article was published in Vol. 127, No. 9 (Thursday, January 25, 1996), beginning on page 1 and ending on page 2.

By Timothy Maestas
Staff Writer

Eligible Californians may be able to vote via computers, telephones and any other device capable of transmitting secure digital signals, said a spokesman for the Campaign for Digital Democracy.

Drafters of the Virtual Voting Rights Initiative are trying to get the plan on the Nov. 5 state ballot, said Marc Strassman, president of Transmedia Communications and co-drafter of the initiative.

The initiative would allow people to sign official petitions, register, and vote electronically, Strassman said. The group is currently circulating a petition in support of the initiative over the World Wide Web.

"The Web site is a taste of what people will be able to do if the initiative is passed," Strassman said.

"Tasting" involves downloading petitions to be printed, signed, and sent to the organization, which hopes to relay the required 700,000 signed copies of the form to the appropriate county Register of Voters by their April 29, 1996 deadline.

Since the petition's early January premiere on the Internet, some 267,000 petitions have been signed and received by the organization.

The establishment of a Virtual Voting System is to make it easier for more people to vote, Strassman said.

"The system would bring government closer to the people and make it easier for people to exercise their will and power as government," he said.

While no one has come out publicly against it, the initiative is viewed by some as being unrealistic.

"I don't oppose it," said Tony Bernhard, Yalo County clerk and recorder. "I just don't take it seriously."

Bernhard doubts the proposed system's ability to translate the voter's message properly.

"I don't think registering on-line is technologically possible now or in the near future," he said, adding that the act of placing all of California's 58 county election offices onto one system would be difficult and costly.

"To make voting easier is always a good idea," said Michael Gooley, president of the Trojan Democrats. "But it is usually higher income people who have access to computers. In one sense it would be beneficial, yet it excludes those with less money."

Strassman said digital signatures employing public key cryptography will be used to protect the Virtual Voting System from fraud.

But Lesley Vuilleminot, a senior majoring in theater and education, doubts the security of the Internet.

"I am sure there are people capable of breaking whatever security system will be in place," she said.

California Republican Party spokesman Todd Harris said, "As a matter of principle, the party would be very suspicious. It is in the best interest of the Republican Party to get more people involved in the democratic process as long as it is done in a fair and fool-proof manner."

Strassman said that the cost of constructing the system would be in the hundreds of millions, and that the employment of California engineers and technicians in its construction and maintenance could benefit the state economically.

*In April, 1996, the **National Journal** carried an article about electronic democracy written by Graeme Browning, now the Communications Director for the Center for Democracy and Technology. She interviewed me over lunch at the Beverly Wilshire Regent Hotel, across from Rodeo Drive in Beverly Hills, the place where Julia Roberts and Richard Gere appeared to be staying in "Pretty Woman". This excerpt from her magazine article was later lifted in its entirety to become part of Browning's book, **Electronic Democracy**.*

Voting Booths for the Millennium

from the National Journal, April 1996
from **Electronic Democracy**, 1996

By Graeme Browning

...In fact, like the members of the Democratech Party, some American net enthusiasts believe that computer-aided "direct" democracy may be a better alternative for government in the Information Age than traditional representative democracy.

Marc Strassman, a freelance television producer in Los Angeles, launched a "Campaign for Digital Democracy" in December 1995 in an effort to gather enough signatures to put an initiative on electronic voting on California's statewide ballot in the fall of 1996. Strassman's initiative would have allowed "any otherwise eligible Californian" to register to vote, sign official petitions, and vote through computers, telephones, personal digital assistants, interactive television "and any other device capable of originating and transmitting a secure digital signal."

Strassman said he believe the initiative had merit because California voters already use IBM punch cards to cast their ballots. "It's not like computers aren't used in voting now," he said. "I figured, 'Let's just take the power of this technology and move it into the political arena.'"

Almost nobody signed Strassman's petition, which was available only on the Internet. Even though his initiative died, Strassman still maintains the digital democracy campaign's Website. Of e-voting, he says, "I still believe it's a good idea. I just don't think it will happen right now."

Early on, it became apparent that the initiative was not going to qualify for the ballot. By the end of April, 1996, I was ready to admit defeat.

Elections Initiative Not Moving

from The Seiler Report
A Newsletter of California Elections
April 30, 1996

An initiative proposal to require the secretary of state's office to create an electronic system to permit electors to register, vote, and sign petitions electronically will not qualify for the November ballot, according to proponent Marc Strassman of the Campaign for Digital Democracy. His initiative requires electronic signatures to be unique to the user and to be capable of verification. It would also require the state to offer space to candidates and ballot measures proponents and opponents to communicate with the public electronically.

Mr. Strassman told TSR he plans to re-file the initiative next year and to conduct the petition drive as a limited version of this proposal: Voters will be able to download off the Internet copies of the initiative petition and sign and return them.

An initiative constitutional amendment needs 693,230 valid signatures to qualify; an initiative statute requires 433,269.

While I may not have been able to emulate as much of President Kennedy's accomplishments and behavior as has President Clinton, I did get discussed on the same page of the Reader's Digest Association Newsletter for September, 1996, as the martyred President's alleged theft of the 1960 election, which made Camelot possible.

Press # C-A-N-D-I-D-A-T-E?

from Reader's Digest Association Newsletter
September, 1996

A review of **Kennedy & Nixon** by Christopher Matthews

Did Kennedy really beat Nixon in 1960? As Christopher Matthew's book shows, the official results of that election (Kennedy 49.7 percent, Nixon 49.5 percent) and the ensuing charges of voter fraud leave some room for doubt. It seems that the fear of stuffed ballot boxes, "cemetery votes," and miscounts will forever shadow our most sacred democratic right. But why in this age of cellular phones and supercomputers are we still pulling levers and filling ballot boxes? Why hasn't high-tech mania caught up with the chore of casting and counting votes?

Some experiments are in fact under way:

- * Push-button politics. In New Mexico, officials are attempting to implement a vote-by-phone system favorably tested in 1992. A similar "televoting" system in Canada allows opinionated voters to leave voice messages in addition to casting their votes.

- * Vote 'n' shop? Some Iowa and Texas counties have tried setting up satellite absentee voting stations where the people are--in senior citizen centers, libraries, even shopping malls. Simply press a few buttons, sign your name, and you can get back to locating that perfect blue sweater. Meanwhile, your vote has already been registered back at the election board.

- * Double-click to vote yes. A California computer consultant, Marc Strassman, has created the Campaign for Digital Democracy, which is urging California to implement a computerized election system. Log on to a special Web site, click on the photo of your candidate, enter you security code, and you're done. You've made your voice heard.

The kink in many of these convenient voting systems remains the same old problem of guarding against fraud. A recent congressional hearing found that developing the computer software for a tamperproof electronic voting system would cost upward of \$10 million. What say ye: Yea or nay?

This is the article that made all the difference. Not only are my ideas portrayed as the logical extension of my hero R. Buckminster Fuller's thinking more than a half century ago, but it was this piece that came to the attention of California Assemblymember Kevin Murray. Assemblymember Murray's reading of this article generated the legislative campaign we will examine in the next chapter.

For "None of the Above" Press 7

from State Legislatures, the magazine of the
National Conference of State Legislatures

September, 1996

By Anneliese May, NCSL

In 1940, inventor Buckminster Fuller called for citizens to be able to use the telephone to vote on "all prominent questions before Congress." Today, a proposed ballot initiative in California asks citizens whether voters should be able to register to vote, sign petitions and vote through computers, telephones, kiosks, interactive television or any other device capable of transmitting a "secure digital signal."

No state has used phone or computer voting yet, but New Mexico is in the process of developing a multimillion-dollar televote system. The state is working with Sandia National Labs to develop the system. Televoting would be like absentee voting. Citizens wishing to vote by phone would have to apply ahead of time and would have two to three weeks to phone in their votes before Election Day. New Mexico hopes to sell the technology to other states once its effectiveness has been proved.

Citizens of Boulder, Colo., voted in an initiative in a 1993 election that would have allowed them to vote using their telephones or computers. The measure failed, but locals are once again considering putting the electronic voting proposition on the ballot. The original initiative did not specify whether electronic voting would be conducted on Election Day or during the absentee balloting period.

Boulder's city council struggled with many controversial issues surrounding electronic voting when the measure was first proposed in 1993. Security, voter fraud and voter coercion were big concerns, as was the possibility of disenfranchising that segment of the community that lacked the needed technology. The initiative's supporters pointed out that every vote would be published, voters could compare their votes to the published results. The proponents also noted that phone voters are no more susceptible to coercion than absentee voters.

There is debate over whether electronic voting would increase voter turnout. Proponents of electronic voting generally emphasize that the elderly, poor and disabled would most appreciate the benefits of voting by phone or computer. On the other side are

those who doubt that electronic voting would attract potential voters. They point out that the current process is quite simple, yet less than half of the registered voters turn out in most elections.

The main issue in the electronic voting discussion is the conflict between direct and representational democracy. Proponents of electronic voting see it as a way to bring government back to the people. Advances in communications allow people to voice their opinions on any issue almost instantaneously. Electronic voting supporters would take advantage of the technology to permit the public to decide issues itself. Critics wonder what this will do to representative government. If the public can vote on any national issue merely by picking up the phone or logging into a home computer--what is an elected representative's place in the process? Electronic voting opponents also argue that some issues are too complex to be solved by feeling the nation's electronic pulse. Clicking a box on a computer screen oversimplifies the policymaking process, they contend.

The "virtual voting rights initiative" put these issues on the table in California this year, but failed to collect enough signatures for a place on the ballot. Marc Strassman, the initiatives proponent and the head of the Campaign for Digital Democracy, notes that California voters currently record their votes on computer punch cards, "so it's not like computers aren't used in voting now." He also points out that electronic voting is considerably cheaper than the current voting and tallying methods. Los Angeles' 1995 municipal elections cost almost \$13 per vote; Boulder's 1995 election cost approximately \$2 per vote. In comparison, phone-in voting is estimated to cost 25 to 75 cents per vote initially and will cost less as installation costs are amortized.

Although the merits of electronic voting are still being debated, the technology is available today. Considering that respondents to an October 1994 survey in MacWorld indicated that the single service that consumers most want from the national information infrastructure is electronic voting, it promises to be a topic for discussion in political and technical circles for several election cycles to come.

Chapter 3

AB44

After he read the article about the Virtual Voting Rights Initiative in State Legislatures, California Assemblymember Kevin Murray asked his staff to get a copy of it for him. In late November, 1996, I sent him a copy of my failed initiative. On December 2, 1996, he introduced AB44 into the State Assembly and his office notified me that he had done so.

AB44

CALIFORNIA LEGISLATURE--1997-98 REGULAR SESSION

ASSEMBLY BILL

No. 44

Introduced by Assembly Member Murray

December 2, 1996

An act to add Sections 107 and 3024 to the Elections Code, and to amend Section 16.5 of the Government Code, relating to elections.

LEGISLATIVE COUNSEL'S DIGEST

AB 44, as introduced, Murray. Digital electoral system.

Existing law provides that a digital signature, as defined, may be used in a written communication with a public agency with the same force and effect as the use of a manual signature if specified requirements are met.

This bill would require the Secretary of State to design, develop, and implement a digital electoral system for the collection, storage, and processing of electronically generated and transmitted digital messages to permit any eligible person to register to vote, sign any petition, and vote in any election using the digital system. A willful manipulation of the digital electoral system would be a crime, thus imposing a state-mandated local program.

The bill would require the Secretary of State and all county elections officials to permit the use of digital signatures for voter registration, voting, and signing of petitions. This additional requirement on county elections officials would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates that do not exceed \$1,000,000 statewide and other procedures for claims whose statewide costs exceed \$1,000,000.

This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 107 is added to the Elections Code, to read:

107. (a) The Secretary of State shall design, develop, and implement a digital electoral system for the collection, storage, and processing of electronically generated and transmitted digital messages to permit any otherwise-eligible person to register to vote, sign any petition, and vote in any election, including applying for and casting an absentee ballot, using that system.

(1) The identity of the person submitting the digital message shall be established and the submission shall be authenticated as being the work product, political product, or actual and attributable

communication of this identified person by the use of that person's digital signature, as defined in subdivision (d) of Section 16.5 of the Government Code.

(2) Each message may be originated in any electronic device, as long as the message is readable by an industry standard digital file server that shall be designated by the Secretary of State as the state electoral server and, in order to be valid and accepted for its intended purpose, shall be transmitted through a secure digital network that meets prevailing industry standards for these networks. Originating devices may include, but are not limited to, the following digital platforms: computers, touch-tone telephones, freestanding kiosks with touch screens, keyboards, or mice, personal digital assistants, interactive televisions, virtual personal assistants on phone networks, cable television systems, phone company or other fiber-optic networks, or utility company powerlines.

(b) No person shall willfully manipulate the digital electoral system specified under subdivision (a), either by destroying data in it, interfering with the operation of the system, transmitting false or inauthentic data, using the digital signature of another person without the consent of that other person, or securing the digital signature of another person by deceit, fraud, threat, coercion, subterfuge, trick, misrepresentation, or by buying the digital signature for money or any other valuable consideration and using it to enter and transmit false or inauthentic data. Any person who violates this subdivision shall be prohibited from using any public computer network for no more than three and no less than one year and shall be punishable by a fine of three thousand dollars (\$3,000), or by imprisonment in the state prison for 16 months or two or three years or in a county jail not exceeding one year, or by both the fine and imprisonment.

(c) The Secretary of State shall provide each candidate for elective office and each committee supporting or opposing a ballot measure with a reasonable amount of space on the state electoral server in order to provide candidates and committees with the means to store and make accessible multimedia documents including text, graphics, audio, video, and interactive forms and intelligent agents in order to provide the candidates and committees with a means to communicate with the electorate and to provide citizens and others with a means to obtain information about the candidates and ballot measures and to communicate their own views, opinions, suggestions, ideas, and comments to candidates or committees. Generally accepted industry standards shall be ascertained and employed in providing for the formatting, collection, and storage of the documents to be used for this purpose and for making them accessible through public computer networks and online services under the terms of this section. The identity of the sender and the authenticity of the submission to be posted on the state electoral server may be established by the use of digital signature, at the discretion of the submitting person or group.

(d) The Secretary of State may research, design, develop, purchase, and deploy the hardware, software, network resources, and training for his or her staff, county election staff, and the general public necessary to implement the provisions of this section. The Secretary of State may contract with one or more private vendors to wholly or partially provide the data collection, storage, processing, encryption, decryption, and authentication and the network resources required to implement the provisions of this section.

SEC. 2. Section 3024 is added to the Elections Code, to read:

3024. Any person may vote by means of the digital electoral system authorized by Section 107 during the same time period that absentee ballots are permitted to be cast.

SEC. 3. Section 16.5 of the Government Code is amended to read:

16.5. (a) In any written communication with a public entity, as defined in Section 811.2, in which a signature is required or used, any party to the communication may affix a signature by use of digital signature that complies with the requirements of this section. The use of a digital signature shall have the same force and effect as the use of a manual signature if and only if it embodies all of the following attributes:

- (1) It is unique to the person using it.
- (2) It is capable of verification.
- (3) It is under the sole control of the person using it .
- (4) It is linked to data in such a manner that if the data are changed, the digital signature is invalidated.

(5) It conforms to regulations adopted by the Secretary of State. Initial regulations shall be adopted no later than January 1, 1997. In developing these regulations, the secretary shall seek the advice of public and private entities, including, but not limited to, the Department of Information Technology, the California Environmental Protection Agency, and the Department of General Services. Before the secretary

adopts the regulations, he or she shall hold at least one public hearing to receive comments.

(b) The use or acceptance of a digital signature shall be at the option of the parties, *except that the Secretary of State and all county elections officials shall permit the use of digital signatures for the purposes of voter registration, petition signing of all types allowed by the Elections Code, voting in any election, including the application for and casting of an absentee ballot, and for identifying and authenticating submissions to the Secretary of State for posting on the state electoral server.* ~~Nothing~~ *Except as specified in this subdivision, nothing in this section shall require a public entity to use or permit the use of a digital signature.*

(c) Digital signatures employed pursuant to Section 71088 of the Public Resources Code are exempted from this section.

(d) "Digital signature" means an electronic identifier, created by computer, intended by the party using it to have the same force and effect as the use of a manual signature.

SEC. 4. The provisions of this measure are severable. If any provision of this measure or its application is held invalid, that invalidity shall not affect other provisions or applications that can be given effect without the invalid provision or application.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may be incurred by a local agency or school district because in that regard this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 5 of Article XIII B of the California Constitution.

However, notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

Notwithstanding Section 17580 of the Government Code, unless otherwise specified, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.

AB44 was almost an exact duplicate of the Virtual Voting Rights Initiative. What was added was a background and summary statement, legal boilerplate relating to the fact that the bill would require expenditures by the counties, and an increase in the punishment for committing electoral fraud over the electronic voting system.

What AB44 Added to and Changed in the Virtual Voting Rights Initiative

CALIFORNIA LEGISLATURE--1997-98 REGULAR SESSION

ASSEMBLY BILL

No. 44

Introduced by Assembly Member Murray

December 2, 1996

An act to add Sections 107 and 3024 to the Elections Code, and to amend Section 16.5 of the Government Code, relating to elections.

LEGISLATIVE COUNSEL'S DIGEST

AB 44, as introduced, Murray. Digital electoral system.

Existing law provides that a digital signature, as defined, may be used in a written communication with a public agency with the same force and effect as the use of a manual signature if specified requirements are met.

This bill would require the Secretary of State to design, develop, and implement a digital electoral system for the collection, storage, and processing of electronically generated and transmitted digital messages to permit any eligible person to register to vote, sign any petition, and vote in any election using the digital system. A willful manipulation of the digital electoral system would be a crime, thus imposing a state-mandated local program.

The bill would require the Secretary of State and all county elections officials to permit the use of digital signatures for voter registration, voting, and signing of petitions. This additional requirement on county elections officials would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates that do not exceed \$1,000,000 statewide and other procedures for claims whose statewide costs exceed \$1,000,000.

This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason.

With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

VVRI

Any person who violates this subdivision shall be prohibited from using any public computer network for no more than three and no less than one year and shall be fined three thousand dollars (\$3,000).

AB44

Any person who violates this subdivision shall be prohibited from using any public computer network for no more than three and no less than one year and shall be punishable by a fine of three thousand dollars (\$3,000), or by imprisonment in the state prison for 16 months or two or three years or in a county jail not exceeding one year, or by both the fine and imprisonment.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may be incurred by a local agency or school district because in that regard this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 5 of Article XIII B of the California Constitution.

However, notwithstanding Section 17610 of the Government Code, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code. If the statewide cost of the claim for reimbursement does not exceed one million dollars (\$1,000,000), reimbursement shall be made from the State Mandates Claims Fund.

Notwithstanding Section 17580 of the Government Code, unless otherwise specified, the provisions of this act shall become operative on the same date that the act takes effect pursuant to the California Constitution.

After he introduced AB44, not much happened for several months. Finally, in the Spring of 1997, Assemblymember Murray met with California Secretary of State Bill Jones. Secretary of State Jones expressed some interest in AB44 and said that he would support its passage if it were amended by Assemblymember Murray to call for a study of electronic voting in California, rather than for the implementation of an electronic voting system for the state. Assemblymember Murray agreed. The resulting, amended version of AB44 looked like this:

AB44 as Amended at the Request of California Secretary of State Bill Jones

AB 44 Digital electoral system.

BILL NUMBER: AB 44 AMENDED 06/24/97

AMENDED IN SENATE JUNE 24, 1997
AMENDED IN SENATE JUNE 16, 1997
AMENDED IN ASSEMBLY MARCH 31, 1997

INTRODUCED BY Assembly Member Murray

DECEMBER 2, 1996

An act relating to elections.

LEGISLATIVE COUNSEL'S DIGEST

AB 44, as amended, Murray. Digital electoral system.

Existing law provides that a digital signature, as defined, may be used in a written communication with a public agency with the same force and effect as the use of a manual signature if specified requirements are met.

This bill would require the Secretary of State to assign a task force to study the creation of a digital electoral system, as specified, and report to the Legislature by March 1, 1999, on the results of the study.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

SECTION 1. (a) The Secretary of State shall assign a task force to conduct a study on the creation of a digital electoral system. The digital electoral system may include the collection, storage, and processing of electronically generated and transmitted digital messages to permit any eligible person to register to vote, sign any petition, and vote in

any election, including applying for and casting an absentee ballot.

In conducting the study, the Secretary of State shall do all of the following:

(1) Consider the potential costs of a digital electoral system, including, but not limited to, the development of hardware, software, network resources, and training for agency staff, county election staff, and the general public necessary to implement the system.

(2) Create, and be assisted by, an advisory committee composed of technical experts, county election staff, consumer advocates, and all interested parties, to research the design, development, and security of a digital electoral system.

(3) Determine the appropriate interagency agreements and make recommendations concerning statutes and regulations to be adopted in order to implement the system and a reasonable timeframe for the implementation.

(b) The Secretary of State shall report in writing to the Legislature no later than March 1, 1999, on the results of the study required by this section.

The amended version of AB44 was passed by the State Assembly. Assemblymember Murray sent me a thank-you note to mark its passage.

**Thank-you note from Assemblymember Kevin Murray
Upon Passage of the Amended Version of
AB44 in the Assembly**

Kevin Murray, Assemblyman, Forty-Seventh District
Chairman, Assembly Transportation Committee
Chairman, Legislative Black Caucus

April 17, 1997

Marc Strassman
Campaign for Digital Democracy

Dear Mr. Strassman,

I would like to express my appreciation for your efforts to promote AB 44, a bill directing the Secretary of State's Office to study the feasibility of a digital electoral system. Your technical expertise has been indispensable to my staff and has clarified what technology is available to make electronic voting possible in the very near future.

Thank you again for your support and help to educate the Assembly on this bill. I will keep you updated on its progress.

Sincerely,

Assemblymember Kevin Murray
47th District

The amended version of AB44 now had to be passed in the State Senate. To help do that, I flew to Sacramento on June 18, 1997, to testify on behalf of the bill before the Senate Elections and Reapportionment Committee. Also testifying that day in favor of the amended version of AB44 were representatives of Pacific Bell, the California Teachers Association, and the Secretary of State's Office.

State Senator Betty Karnette presided over the hearing. She indicated that the bill's passage through her committee was a foregone conclusion and that I need not burden anyone with my lengthy testimony. After a few seconds, I saw she was right and simply urged them to pass the bill. Senator Karnette, Senators Herschel Rosenthal, and Senator Richard Palanco voted to pass the amended AB44. Senator Jerry Lewis voted against it and ran from the room when I asked him afterwards if he wanted to talk about why he was so "scared" of it, as he had put it during the committee's brief discussion of the bill. It passed the committee on a 3-1 vote. Here is the complete text of the statement I had hoped to make in support of the amended version of AB44, but hadn't had to.

Remarks to the Senate Committee on Elections and Reapportionment in Support of AB44 June 18, 1997

Thank you for this opportunity to testify today in support of AB44, a bill to create a task force to study the feasibility of digital voting in California.

I'd like to briefly give you some background on digital voting, tell you why I think it's a good idea for California, and urge you to support this bill as an excellent way of resolving residual issues involving the introduction of this technology into our governance structure.

Last year, the Senate, the Assembly, and the Governor enacted AB1577 by Assemblywoman Bowen. This bill said that state contractors and the state government could sign contracts with digital signatures, that is, could bind themselves legally through computer networks by exchanging encrypted bits of information that were exclusively under their control.

Also last year, I wrote an initiative that would have extended this right-to-sign-remotely to all California voters for electoral functions, such as registering to vote, signing petitions, and actually voting. Campaign for Digital Democracy, a group I started to get the measure on the ballot, lacked enough money to do so, and the initiative failed. Last December, Assemblymember Murray introduced my initiative as a bill, AB44, which was identical to the original initiative except that it included harsher penalties for fraudulent use of the digital voting system that it mandated.

That one citizen, with virtually no money, could propose an important measure like digital voting and see it pass the Assembly and be here before you today is, I think, a

powerful indicator that the democratic process is already functioning at an extremely high level in California. Passing this bill will, I think, help enable us to move it to an even higher level of responsiveness and participation.

Digital voting means using an electronic network to prove your legal identity and then filling out your ballot online and submitting it to be counted automatically. The transition to digital voting can reasonably be seen as an evolutionary, not a revolutionary, change, since current voting systems already use computers, although not always the newest or most powerful ones.

What we need now is an upgraded computer-based voting system, one that takes advantage of 30 years of the increases in power and reductions in cost that now make it possible to deliver the voting experience to voters directly in their homes and offices, just as these networks can now provide citizens with banking, shopping, chatting, recreational, entertainment, and educational experiences through the Internet.

Digital voting will be good for California because it will:

- Increase voter participation
- Reduce administrative costs
- Increase security
- Jump start electronic commerce (e-commerce)
- Increase California's digital competitive advantage

The version of AB44 that you have to decide about today will not adopt digital voting for California. It will allow the Secretary of State to undertake a study of the technical feasibility and the administrative implications of adopting such a system.

I strongly urge you to pass AB44, as amended, and help move us forward in our evolutionary journey towards having a powerful, state-of-the-art means of ascertaining the collective will of the people of California, now and for some time into the future that is hurtling towards us.

In addition to these points I want to very briefly mention some other items touching on digital voting that have passed in front of me on screens in just the last two days.

On Monday, I got an e-mail about campaign filing reform that quoted the Chair of this committee, Senator Karnette, saying, "Our current disclosure system is a technological dinosaur. It is unbelievable that California, the computer capital of the entire world, still relies on paper filings for campaign and lobbying reports." I can only say I support this sentiment, and hope you will take the necessary steps today to help research a way to do the same thing for voting that Senator Karnette's bill will do for campaign and lobbying reports, namely, make it more cost-effective and more accessible to the public through the use of the Internet.

Yesterday, CNN ran a report about Amsterdam's efforts to make itself the Internet capital of the planet. One aspect of that city's campaign was the deployment of Internet Booths.

Residents and visitors of the city enter the booth, insert a card, and access the Internet. If they want, they can get a printout from their session. Watching this was sort of reverse deja vu for me, sort of "future vu". With a smart card holding one's digital signature, and software for the digital voting system in place, this Internet Booth becomes the Virtual Voting Booth. We are not the only group of people moving forward in this area. We must move expeditiously if we want to be the political and commercial leaders of this trend.

Finally, Motorola announced yesterday that it's going to compete directly with Bill Gates and Craig McCaw and build a far-flung orbital wireless system that will be capable of providing cheap broadband Internet connectivity anywhere on earth, directly from space, starting in 2001. That means that Teledesic, Motorola, and Loral Space/Alcatel will be competing world-wide to provide this service.

It also means that if the Dutch Internet Booths were to be connected to either of these orbital broadband systems and if California is willing to pioneer the design, development, and deployment of a digital voting system along the lines we are discussing, then people everywhere will soon be able to participate in the democratic governance of their own countries and localities using electronic tools originating in California, just as they have long gotten most of their music and most of their movies from this same source. Allowing all the people in the world to govern themselves with something we here in California have made for them would, I think, be almost as worthwhile, for them and for us, as it has been for them to dance to our music and dream to our images.

Thank you.

If you have any questions about this, I'd be happy to try to answer them.

Now that the amended version of AB44 had passed the Senate Elections and Reapportionment Committee, its next stop was the Senate floor. To help it pass there, I drafted and sent this letter to all the members of that body.

Letter in Support of Amended Version of AB44 Sent to All California State Senators

Campaign for Digital Democracy

July 17, 1997

Dear Senator,

I am writing to you in support of AB44, a bill to create a Task Force under the direction of the Secretary of State to investigate the development and implementation of a system for digital voting in California.

As AB44 has made its way through the Assembly and now to the Senate floor, having been amended from a bill to establish a digital electoral system to one that calls for the creation of a Task Force to study doing so, the list of reasons in favor of its passage has continued to grow, until there are now more than half-a-dozen reasons that can each be cited as adequate and sufficient justification to support the measure.

These reasons are:

1. Lowers election costs
2. Increases voter participation
3. Improves the already-high security and integrity levels of the voting process
4. Increases accessibility for the physically- and visually-challenged
5. Conserves voters' fuel, thereby saving them money and helping to protect the environment
6. Helps accelerate the transition to a digital economy and electronic commerce through dissemination and use of smart cards, digital signatures, and certificate authorities and repositories, thereby improving California's competitive global economic position
7. Makes voting more convenient for everyone, especially harried, busy, over-scheduled multi-rolled parent/professionals and others who have little enough time to fulfill their daily responsibilities as it is, but who might be able to make time to vote by computer

or phone, but who now can't find the time to do so by traditional means if it means searching for their polling place, waiting in line, hurriedly voting, and then having to get home in time for the next domestic crisis or back to the office for the next professional one

As Point #7 suggests, it is altogether possible that the oft-lamented low turn-out rates of recent years are not due solely to the oft-cited reasons of apathy and cynicism, but are due, at least in part, to the fact that so many potentially-voting citizens simply are too busy to go to the polls to vote, just as they are too busy to go to their bank, stand in line, fill out forms, and submit them to the teller, a process that has much in common with voting at the polls. The speed, convenience, accuracy, and trustworthiness that motivate people as bank customers to use ATMs and Bank-by-Phone and Direct Deposit, that allow and encourage them as investors to buy and sell securities by phone and over the Internet, that already let them make airline reservations online and will soon provide them with the means to perform an increasingly diverse and comprehensive array of financial, work-related, health-related, and personal transactions over the Internet, by phone, or both, ought to be available to them in the particularly significant domain of politics as well, and a digital electoral system, when it finally comes online, will do that for them.

While there are, then, good reasons to go ahead with digital voting, the version of AB44 that you will be soon be voting on does not order the implementation of a digital voting system for California. Instead, it creates a Task Force, under the direction of the Secretary of State, to study the feasibility of developing and deploying such a digital voting system.

This Task Force will be charged with the responsibility of investigating the technical, financial, and administrative aspects of designing, building, and putting into practice an electronic electoral system. It will be asked to "determine the appropriate interagency agreements and make recommendations concerning statutes and regulations to be adopted in order to implement the system and a reasonable timeframe for the implementation" and to "consider the impact of a digital electoral system on voter participation rates."

So while digital voting is, in my opinion, a win-win-win, etc., proposition, AB44 is designed to examine in depth any and all possible downsides to the concept, with a view towards exposing and ameliorating them in the pre-planning stage, so that the eventual digital electoral system can be developed and brought online with a minimum of difficulty and an abundance of benefits for everyone concerned, principally the State of California and its voting citizens.

For all these reasons, I respectfully urge you, as a member of the California Senate, to vote in favor of AB44 when it reaches the Senate floor and thereby move us one step closer to giving the people of California the best possible tools for our own self-government, which is a long-standing tradition in our state and one which this bill will allow us to carry forward vigorously into the future.

Sincerely,

Marc Strassman
Executive Director
Campaign for Digital Democracy

A few days after I sent this letter out, I got a thank-you-note from Senator Karnette.

Letter from State Senator Betty Karnette

California State Senate

Betty Karnette
Senator
Twenty-Seventh District

July 17, 1997

Marc Strassman, Executive Director
Campaign for Digital Democracy

Dear Mr. Strassman:

Thank you for your letter urging my support of AB 44 (Murray). This bill requires the Secretary of State to assign a task force to study the creation of a digital electoral system.

I supported this bill in the Senate appropriations Committee and the Senate Elections and Reapportionment Committee. AB 44 will now be heard in the Senate.

I appreciate you taking the time to write and welcome your views. Please let me know if I may be of further assistance.

Sincerely,

BETTY KARNETTE

BK/dm

While waiting to the bill to reach the Senate floor, I reached out nationally in an effort to ground my efforts in California within the context of a national effort to create a uniform system for the use of digital signatures in electronic voting systems. I sent this letter to the President of the National Association of State Information Resource Executives, asking that her group begin thinking seriously about adapting digital signatures for use in digital voting.

Letter to Carolyn Purcell, President of NASIRE, Regarding the Use of Digital Signatures in Electronic Voting Systems

Transmedia Communications

July 4, 1997

Carolyn Purcell, President
NASIRE
167 W. Main St., Ste. 600
Lexington, KY 40507-1324
FAX: 606-231-1928

Dear Ms. Purcell,

I am writing to suggest that the work NASIRE is currently doing to facilitate and standardize the implementation of digital signature technology in the fifty states be expanded to include a standardized option for digital voting.

I am the author of the original version of AB44 in California, a copy of which is included. The core provision of this legislation called for the state to recognize digital signatures as a valid substitute for the physical signatures that are now required for registering, petition signing, and voting. Once this basic provision is implemented, digital voting becomes a matter of working out the technical details, something that my software development company, Transmedia Communications, is currently focusing on intensely.

After some political negotiations in Sacramento, this legislation was amended to call for a task force to study the feasibility of digital voting. This amended version has already passed the State Assembly and the Elections and Reapportionment Committee in the Senate, with a tentative budget of around \$125,000. It is expected to pass in the Senate Appropriations Committee, in the full Senate and be signed into law by Governor Wilson.

For my part, in addition to continuing to lobby for the passage of this bill and to complete the R&D for the actual digital voting system, I am now beginning to reach out into additional jurisdictions to suggest that legislatures there consider versions of digital voting for their own states. This week, I wrote to the National Conference of Commissioners of Uniform State Laws asking that they consider drafting a uniform or model law implementing digital voting for consideration in the several states.

Today on the Web, I discovered the existence of NASIRE. Since most of my recent non-technical work has involved efforts to find and encourage individuals and institutions who are working to pave the way for the establishment and maintenance of the certificate authorities (CAs) that will be required for digital voting to work, I was very pleased to see that your organization is already actively working to do exactly this.

I would be glad to help your efforts in this area in any way I can, such as additional research or lobbying. Furthermore, I would like to discuss with you at your convenience the inclusion of provisions, along those included in the original version of AB44, that would allow states that so desire to include language in the legislation they use to encourage CAs to authorize digital voting as well.

Of course, implementing digital voting would not *necessarily* be included in the CA enabling legislation, but if NASIRE, in conjunction with NCCUSL, could produce a uniform or model approach to this issue, those states that wanted to go forward in this area would be able to proceed expeditiously and in step with other states that also wish to proceed along these lines.

And all of this, substantively and procedurally, could serve as a model for the adoption by other countries of digital voting regimes for themselves.

As for why states might want to allow for digital voting, I will begin by mentioning the slogan I saw on the Massachusetts page on your site: "Better online than in line."

Other reasons to adopt digital voting include:

1. energy conservation
2. increased participation levels
3. lower overall costs
4. improved security levels
5. faster counts

Furthermore, I believe that digital voting is a "killer wedge app." By this I mean that the introduction of digital voting, with its need for smart cards, digital signatures, and CAs, would necessarily jump-start e-commerce in general, by creating a critical mass of infrastructure and consumers knowledgeable in the use of the e-commerce tools that underlie and are, in fact, technically indistinguishable from, the tools of digital voting. Moving forward from the Massachusetts slogan cited above, my slogan for this process is "Vote Today; Shop Tomorrow."

For all these reasons, I would like to see your group take the lead in providing individual states with the means to move ahead in this area as easily and as soon as possible. Please look over the attached documents, and please feel free to contact me for further discussion of these subjects.

Sincerely,

Marc Strassman
President, CEO, Transmedia Communications
Executive Director, Campaign for Digital Democracy

Attachments: California AB44 as introduced
California AB44 as amended

Here's what she had to say back:

**Response of Carolyn Purcell, President of NASIRE,
Regarding the Use of Digital Signatures in
Electronic Voting Systems**

NASIRE

NATIONAL ASSOCIATION OF STATE INFORMATION RESOURCE
EXECUTIVES

July 17, 1997

Marc Strassman
President, CEO
Transmedia Communications

Dear Mr. Strassman:

Thank you for your letter dated July 4 regarding digital voting. We are pleased to hear of your interest in the area of electronic commerce and digital voting in particular. NASIRE is interested in hearing about other initiatives and how those efforts might relate to our activities.

While we feel the issue of digital voting is an important aspect to the electronic commerce arena, NASIRE is unable to commit to this initiative at this time due to the activities and priorities already established by our Electronic Commerce Committee. We appreciate your consideration of us and hope you will keep us informed of your future activities in case our situation should change and we might be able to participate in future initiatives.

I am taking the liberty of forwarding your letter to CIO's of Massachusetts and Georgia, for their information and consideration.

Sincerely,

Carolyn Purcell
NASIRE President

cc: Louis Gutierrez, Chief Information Officer, Massachusetts
Mike Hale, Chief Information Officer, Georgia

The day before I wrote Ms. Purcell, I sent the letter below to the Uniform Law Commissioners in Chicago, asking them to consider getting involved in an effort to draft a uniform law allowing for electronic voting.

Letter to Uniform Law Commissioners Regarding Drafting of a Uniform Law on Electronic Voting

Campaign for Digital Democracy

July 3, 1997

Uniform Law Commissioners
676 North St. Clair, Suite 1700
Chicago, IL 60611
FAX: 312-915-0187

Dear Commissioners,

I'm the Executive Director of the Campaign for Digital Democracy, a group that is working, now principally in California, to bring voting technology up-to-date by providing for digital voting over the Internet and phone networks using digital signatures.

As our efforts in California move forward (an amended version of the bill I provide below has passed the State Assembly and one Senate committee, and is expected to pass in the Senate and be signed by Governor Wilson) I am starting to consider how to proceed in other states. I sent a copy of the bill to the appropriate staff person in the Massachusetts legislature yesterday, but I figure there must be a more efficient way to spread the word about digital voting than researching and approaching the states one by one.

Then I read about and was reminded about your group while reading the text of the White House report on e-commerce that was released on Tuesday. Well, I thought, why not approach this group and help them produce a uniform or model digital voting bill that incorporates all the essential aspects of this procedure and then submit that to the several states?

Then the legislating infrastructure represented by your organization and its members could help to get the bill adopted nationwide. This would help establish a national (and even an international) standard for creating and operating the digital certificate authorities (CAs) that are necessary for digital voting (and e-commerce generally) to operate, thereby greatly facilitating the development of both digital voting and electronic commerce across a multitude of jurisdictions.

That way we could hear from the experts, solicit public opinion, have the discussion about how to structure a digital voting law, and do the drafting one time for many states, although each state would, of course, be free to go through all or part of the process again on their own as they considered the model bill for adoption in their area.

So I'm e-mailing you now, and attaching and enclosing a copy of the original AB44 from California (which I wrote) for your consideration. If you'd like to discuss this proposal for drafting a uniform law on digital voting, please give me a call.

Sincerely,

Marc Strassman
Executive Director
Campaign for Digital Democracy

Attachments: AB44, as introduced
AB44, as amended

K. King Burnet, Chairman of the Scope and Program Committee for the Uniform Law Commissioners, replied as follows:

**Response of K. King Burnet, Chairman of the Scope
and Program Committee for the Uniform Law
Commissioners, Regarding the Drafting of a
Uniform Electronic Voting Law**

State of Maryland
Commission on Uniform State Laws

October 8, 1997

Marc Strassman
Executive Director
Campaign for Digital Democracy

Dear Ms. Strassman:

I am the Chairman of the Scope and Program Committee for the Uniform Law Commissioners to whom you addressed your letter of July 3, 1997. The Scope and Program Committee of the Conference will take this matter up at its meeting in January 1998.

The Conference has started work on matters which contain some similar issues. One of these is Electronic Contracting where the questions of security and identification of sender are involved. From that we have learned of the great differences in technological approaches and the need to continue to permit the marketplace to identify and develop new technologies. We have also learned that any security system can be penetrated. The Conference has concentrated principally on areas of commercial law, probate law, with an occasional foray into family law and other areas. We have never taken up a project involving voting laws. Nonetheless, you can be assured that this matter will receive our Committee's attention in January. Should you have any further materials, please send them to me.

Sincerely yours,

K. King Burnett

KKB:lb

cc: Gene N. Lebrun

*The amended version of AB44, with a slight additional amendment, passed the Senate.
Here is what it looked like then:*

Amended Version of AB44 as it Finally Passed the Senate

AB 44 Digital electoral system.

BILL NUMBER: AB 44 AMENDED 06/24/97

AMENDED IN SENATE JUNE 24, 1997

AMENDED IN SENATE JUNE 16, 1997

AMENDED IN ASSEMBLY MARCH 31, 1997

INTRODUCED BY Assembly Member Murray

DECEMBER 2, 1996

An act relating to elections.

LEGISLATIVE COUNSEL'S DIGEST

AB 44, as amended, Murray. Digital electoral system.

Existing law provides that a digital signature, as defined, may be used in a written communication with a public agency with the same force and effect as the use of a manual signature if specified requirements are met.

This bill would require the Secretary of State to assign a task force to study the creation of a digital electoral system, as specified, and report to the Legislature by March 1, 1999, on the results of the study.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

SECTION 1. (a) The Secretary of State shall assign a task force to conduct a study on the creation of a digital electoral system. The digital electoral system may include the collection, storage, and processing of electronically generated and transmitted digital messages to permit any eligible person to register to vote, sign any petition, and vote in any election, including applying for and casting an absentee ballot.

In conducting the study, the Secretary of State shall do all of the following:

(1) Consider the potential costs of a digital electoral system, including, but not limited to,

the development of hardware, software, network resources, and training for agency staff, county election staff, and the general public necessary to implement the system.

(2) Create, and be assisted by, an advisory committee composed of technical experts, county election staff, consumer advocates, and all interested parties, to research the design, development, and security of a digital electoral system.

(3) Determine the appropriate interagency agreements and make recommendations concerning statutes and regulations to be adopted in order to implement the system and a reasonable timeframe for the implementation.

(4) Consider the impact of a digital electoral system on voter participation rates, public accessibility, potential for voter coercion and undue campaign influences during the elections process, and other issues related to the conduct and administration of elections.

(b) The Secretary of State shall report in writing to the Legislature no later than March 1, 1999, on the results of the study required by this section.

The Republicans in the Assembly tried to kill the amended version of the bill when it came back to that chamber for "concurrence". On its first vote, the bill got 19 votes, less than the 21 it needed for passage in the 40-member house. On a second vote, it got 21 votes. In addition to authorizing the study of electronic voting, the bill came with a budget of \$125,000 to carry out its mission.

Now it needed the signature of Governor Pete Wilson. In help get it, I sent a letter to the Governor.

Letter to Governor Pete Wilson in Support of Electronic Voting Task Force Bill

Campaign for Digital Democracy

September 9, 1997

The Honorable Pete Wilson
Governor of California
FAX: 916-445-4633

Dear Governor Wilson,

I am writing in support of AB44, a bill that will authorize Secretary of State Bill Jones to create an Electronic Voting Task Force to investigate the feasibility of using the Internet and telephones for voting in California.

As the creator and chief proponent of the Digital High School Initiative, you have already demonstrated your commitment to bringing the power and utility inherent in high technology to one place where it is crucial: the education of the young.

AB44 represents an opportunity to bring this same power and utility to another crucial area: political participation. Just as building digital high schools will benefit California's high-tech companies while empowering its students, so too will digital voting benefit these companies while empowering its voters.

I think you should support digital voting because it will:

1. Lower election costs
2. Increase voter participation
3. Improve the already-high security and integrity levels in the current voting process

4. Increase accessibility for the physically- and visually-challenged
5. Conserve voters' fuel, thereby saving them money and helping to protect the environment
6. Help accelerate the transition to a digital economy and electronic commerce through dissemination and use of smart cards, digital signatures, and certificate authorities and repositories, thereby improving California's competitive global economic position
7. Increase voting convenience, which could conceivably encourage many very busy people who aren't necessary cynical or apathetic about the political system, but who just don't have the time in their day to vote by traditional means

AB44, rather than immediately implementing digital voting, instead calls for a thorough study of its feasibility, which should allow for a thorough consideration of any and all objections to it on technical or administrative grounds. I strongly urge you to take the national lead here, as you have in education, and sign this bill.

Sincerely,

Marc Strassman
Executive Director
Campaign for Digital Democracy

Here was the Governor's response:

Veto Message of Governor Pete Wilson for AB44

Subject:

Message on bill ab_44 : billroot:[current.ab.from0000.ab0044]veto.txt

Date:

Sat, 18 Oct 1997 06:25:26 -0700 (PDT)

From:

Senate-News-Reply@SEN.CA.GOV

To:

Recipients, of, bill, ab_44, messages

BILL NUMBER: AB 44

VETOED DATE: 10/13/97

To the Members of the California Assembly:

I am returning Assembly Bill No. 44 without my signature.

This bill would require the Secretary of State to assign a task force to study the creation of a digital electoral system and to report the results to the legislature.

I am supportive of reasonable approaches to campaign and election reform. As such, I have recently signed Senate Bill 49 (Karnette, Ch. 866) which will establish an electronic filing disclosure system. The provisions of that bill will allow technology to be introduced into the campaign finance system in a reasonable and thoughtful manner yet provide adequate safeguards against misuse.

Unfortunately, I cannot say the same for AB 44. This bill calls for a task force to study establishing a digital electoral system that would, among other things, allow individuals to register to vote, sign an initiative petition and cast their vote through the use of digital technology. The use of such a system will compromise voter confidentiality and generate significant opportunities for fraud. Since the digital system would be available only to those with access to computer terminals, it would not replace the current system.

Accordingly, the use of two systems would complicate voter verification procedures, further compromising the electoral process.

Although current encryption technology is making advances in providing a more secure environment to prevent tampering by third parties, no one can yet guarantee a completely safe, tamper-proof system. Without such a guarantee, a study is premature.

Cordially,

PETE WILSON

Assemblymember Murray summed up the situation in this thank-you-note/message of condolence shortly after the veto:

Letter from Assemblymember Kevin Murray Upon the Veto of AB44 by Governor Wilson

Kevin Murray, Assemblyman, Forty-Seventh District
Chairman, Assembly Transportation Committee
Chairman, Legislative Black Caucus

October 29, 1997

Marc Strassman
Campaign for Digital Democracy

Dear Mr. Strassman,

Thank you for your support of AB 44.

As you know, AB 44 which directed the Secretary of State's Office to convene a task force that would study the possibilities of a "digital electoral system", encompassing voting electronically via the Internet or other available technology was vetoed by Governor Wilson.

The government has made significant advances in meeting public demand for information through Internet technology. Californians were able to view immediate updates on statewide races at the Secretary of State's web site during the 1996 November election. We should be looking towards the next step of allowing citizens to vote on-line. Electronic voting not only presents a cost-effective option to the expense associated with ballots but it also has the potential to increase voter participation.

The Governor vetoed AB 44 based on the speculative compromise of voter confidentiality and increased voter fraud, citing that a study of a digital electoral system is "premature". It seems appropriate to me that California, a state leading in technology, research how to improve participation in the election process through technology. Without this bill, the state falls further behind in being able to provide the most important government service of all on-line -- the ability to vote.

Thank you again for your support and activism on this issue.

Sincerely,

KEVIN MURRAY

State Assemblymember
47th Assembly District

KM:ab

Following Governor Wilson's veto of AB44, I drafted three responses to his action. One was a memo that I faxed to Romulo Lopez, the chief consultant of the Assembly Elections Committee, who had played a major role in the consideration of the bill. The second was an op-ed piece that was never published but which was included with the third, a long letter that I faxed to Sandy Nelson at The Wall Street Journal Interactive Edition. This is the first publication anywhere for each of these responses.

Letter Sent to Romulo I. Lopez, Chief Consultant, Assembly Elections Committee

Campaign for Digital Democracy

Romulo I. Lopez
Chief Consultant
Assembly Elections Committee
FAX: 916-327-3517

Dear Rom,

I just received an e-mail synopsis of the fate of AB44, the Digital Voting Bill.

It included these items:

From the official comment:

The object of the task force is to study the feasibility of designing and implementing a digital electoral system that would allow people to register to vote, sign a petition, and vote in any election via computer using the Internet, touch-tone telephones, and other electronic devices. The task force is required to determine an implementation schedule if this system is found to be feasible.

From the Governor's veto message:

Since the digital system would be available only to those with access to computer terminals, it would not replace the current system.

From me: No one said it would REPLACE the current system. The bill says: "Internet, touch-tone telephones, and other electronic devices." The governor says he's vetoing it because it "would be available only to those with access to computer terminals." He could just as accurately/honestly say it "would only be available to one-legged autistic brunettes with an IQ of 62 who played quarterback for Stanford in a winning season." What is the point of engaging in the political process if the highest elected official in the state can make up his facts to serve his own preconceived and self-serving notions without any reference to reality?

From Pete:

...no one can yet guarantee a completely safe, tamper-proof system. Without such a guarantee, a study is premature.

From me:

Since no one knew how to get to the moon when Project Apollo began, I suppose it was premature to study how to do so, let alone undertake the project without knowing that it was feasible. That multi-billion dollar project may have been initiated with no more assurance of success than the fact that Jules Verne's science fictional characters had managed to circle the moon in "From the Earth to the Moon" in the late 19th century. But there were political and economic reasons for assuming it was possible, so the project was approved, funded, implemented, and succeeded.

And is the existing, legacy, voting system "completely safe" and "tamper-proof"? Is anything?

Please visit SECURITY AND PRIVACY, by Evan Ravitz, director, Voting by Phone Foundation at <<http://www.vote.org/v/secure.htm>> for a discussion of some aspects of digital voting security.

Also useful is COERCION, by the same author, at <<http://www.vote.org/v/coercion.htm>> for a discussion of coercion as an impediment to digital voting.

From Pete:

Accordingly, the use of two systems would complicate voter verification procedures, further compromising the electoral process.

How would it do that?

There is, in short, no understanding of what the legislation actually said, and no logic either, to Pete Wilson's decision to veto AB44. He ignores the clearly-stated fact that the bill called for studying other means of digital voting besides "computer terminals," including telephones available to 100% of the voting-age population. He makes the nonsensical point that since digital voting hasn't been proven feasible yet, it is "premature" to study its feasibility. (Imagine what would happen to a UC freshman who made such a statement on a logic exam!) He "argues" without any factual or local basis that the "electoral process" would be compromised if more than one method of "voter verification" were used.

The truth is that he was afraid some people he didn't like would vote using such an eventual digital voting system, so he vetoed AB44, and assembled some words without logic or a basis in the facts to "justify" his preference that they not be able to do so. I

suppose because he's governor, he can get away with this.

I would like, by the way, to thank you for your help in making the concept of digital voting intelligible to those who cared to understand through your work in preparing analyses of this bill.

Sincerely,

Marc Strassman
Executive Director
Campaign for Digital Democracy

Unpublished Op-Ed Piece Concerning Governor Wilson's Veto of AB44

Unbeknownst to the general public, a bill to create a digital voting system for California, one that would allow all otherwise eligible California voters to register to vote, sign petitions and vote in elections over their telephones or computers from the comfort and security of their own homes or offices (or cars, for the matter, if they have cellular), was introduced into the California Assembly by Assemblymember Kevin Murray of Culver City in December of 1996.

After a history too boring to relate, a modified version of this bill, calling for the Secretary of State to "assign a task force to conduct a study on the creation of a digital electoral system" to "consider the potential costs of a digital electoral system" and "to research the design, development, and security of a digital electoral system", as well as to consider how to implement such a system and what its impact would be on the abysmally-low voter turnout rates in California, was actually passed by both houses of the Legislature in Sacramento.

Governor Wilson vetoed the bill, AB44, on October 13th. He gave four reasons for doing so. These were:

1. "The use of such a system will compromise voter confidentiality"
2. "[the use of such a system will] generate significant opportunities for fraud"
3. "Since the digital system would be available only to those with access to computer terminals, it would not replace the current system."
4. "the use of two systems would complicate voter verification procedures, further compromising the electoral process."

Every one of these reasons is false or beside the point or both.

Why will a secure, high-tech implementation of digital voting necessarily compromise voter confidentiality any more than the existing system? Is the Governor referring to access to information about the voting lists? These are already public records and available to all. Is he worried that voters' votes will not be private? If he is, why not support a study to see how electronic voting, which has so many advantages, like saving the state money and making it easier for people to vote, can be made as absolutely secure and private as possible?

Like the current system doesn't generate significant opportunities for fraud? Should we eliminate all government operations involving information or money because they "generate significant opportunities for fraud"? People walking down the street generate significant opportunities for criminal behavior against them, not to mention opportunities to become involved in civil law suits. Would the governor then want the state to make

sure everyone stayed home all the time to avoid the risk of fraud? Should home shopping be banned because of the possibility of fraud?

Reason number three is the best example of the Governor's total ignorance. AB44 as introduced and AB44 as passed both have always provided for electronic voting over the telephone systems to which over 90% of the voters in California have access. Precisely because the author of the bill understood that not everyone has access to a computer terminal, provision was made to deliver all the advantages of digital voting over the Internet to voters who wanted to use their telephones for this purpose instead.

Interactive Voice Response (IVR) is a powerful technology that allows phone networks to be used for all sorts of commercial purposes. A digital voting system for California would be able to adapt this tool to give Californians something more basic even than computer access: access to the decision-making apparatus that constitutes the mechanism of their own democratic self-governance.

How can the Governor of the largest state in the US make a decision about vetoing a bill based on complete ignorance of what's in the bill? In its present form, it's only 353 words long. Surely the Governor, or one of his aides, could have read this one-page bill. Surely, anyone reading it would know that it calls for a studying the creation of a "digital electoral system," not an "Internet electoral system." Perhaps the Governor doesn't understand the difference, or has missed hearing about "digital convergence" and how it is facilitating the integration of telephony, computing, entertainment, education, and commerce because of the power and flexibility of digital information processing techniques. When Web-TV equipped digital televisions, digital cellular telephones, Global Positioning Satellites, DBS television signal distribution, powerful mobile computers and a vastly-expanded Internet allow us in our personal and business lives to be in constant, instantaneous, secure, multi-lingual, intelligent agent-assisted and authenticated touch with family, friends, and business associates, will the Governor still oppose using digital voting systems for some new reason, for example, that it makes voting too easy, too secure, too likely?

As for the complication of "voter verification" techniques and the ensuing compromises this would allegedly generate in the electoral process, one need only realize that the current "voter verification" technique consists of someone walking into a polling place, giving his unverified name and address to underpaid, temporary, modestly-trained poll workers who in almost every case have no idea who he or she is and being handed a ballot after signing "his" or "her" name on the rolls. How such a process would be "compromised" by requiring electronic voters to use a digital signature or other means of secure verification in order to vote is hard to imagine. Shouldn't the same high standards of identification and authentication that will be required to make a digital voting system work also be required of those who walk into polling places and make claims about their names and addresses?

Even if all the alleged reasons put forth by Governor Wilson were true, that a digital electoral system might compromise voter confidentiality, generate more opportunities for

fraud, complicate voter verification procedures, and compromise the electoral process, wouldn't it make sense to conduct a study to determine whether and to what extent these fears are justified, and to investigate how to minimize or eliminate them to the extent that they are? Well, hey, that was what AB44 called on the Secretary of State to do, to study the feasibility of digital voting in its technical and human dimensions. So why did the Governor veto it?

I certainly don't want anyone to accuse me of being a cynic, but maybe it comes from a fear, not of compromised confidentiality, or fraud, or complexity, but of letting more people vote. In the last presidential election, 48% of registered voters voted. That's not 48% of *eligible* voters, but of *registered* voters. In the last municipal election in the City of Los Angeles, where some members of the Commission on Charter Reform, a group that will be re-writing and submitting to the voters (how many?) a new constitution for the second-largest city in the United States, were selected, **13%** of the registered voters voted.

Democracy in the United States, and in California, may not be dead, but it is not exactly alive and kicking either. One of the principal motivations behind current efforts to develop and implement digital voting, in California and elsewhere, is to involve the millions of eligible non-voters who are more comfortable with MTV and the telephone and the Internet than they are with polling places. If I can say this without impugning the aesthetic sensibility, moral integrity, or even the intelligence, of anyone involved, it just may be that for people who don't read books or magazines, who don't write letters, who bank at their ATM, use debit cards at the supermarket, pay for gas by sliding credit cards into pumps and get their political information from Tabitha Soren or the local Action NewsTeam and their political "debates" over talk radio and who are too busy and hassled to stand in line at a polling place when they use digital (telephone *and* internet) networks to talk, shop, learn, do business, and have fun, it might be an acceptable, even an attractive, alternative to be able to vote by phone or over the Internet, the same way they (we) do so much else as the 20th century grinds to a close.

But maybe Governor Wilson is not interested in encouraging these millions of people to vote. Maybe he's perfectly content to let the people who elected him Governor through a "legacy" voting system and who he somehow fantasizes will elect him President of the United States continue to be "the voters" without the need for any new blood in the system. He's certainly entitled to his preferences, and even his fears.

But for the millions of us who don't bother to vote, not just because almost every elected official is hopelessly compromised by the need to accept cash from rich individuals and corporations to buy the TV time needed to reach the dwindling number of citizens not yet terminally apathetic about the whole mess, not just because of the obscurantism and opaqueness that makes the working of government so tedious and off-putting, but because we don't have time to get into a state of Norman Rockwellesque deep nostalgia by going down to the polls to wait in line with people we don't know so we can be given a ballot by people who don't know us, where we can't even express our political views because it's against the law to campaign inside the polling place, and then vote for

candidates we only know through the advertising their powerful supporters have paid for in order to associate their chosen candidates with what their focus groups have told them it is we want to hear so we can elect them and they can give their supporters what they paid for, all carried out by punching little holes in A COMPUTER PUNCHCARD that will, if it's going to be counted in Los Angeles County, very likely end up sitting for weeks in randomly-placed boxes while waiting for the county's existing digital technology, not a *legacy* but an *antique* IBM 360 punchcard reader, to be fixed by the last living technician who remembers how to do so, it's beginning to seem as though there might be a better way to do this, without, in the words of Governor Wilson, "further compromising the electoral process."

To continue running a voting process with antiquated equipment, procedures and paradigms, while rejecting an bill passed by the California Legislature to study a better way of managing this critical element in the life of our democracy in the name of protecting virtues that are being routinely violated under the present system is an act of massive hypocrisy and hubris. Somehow, we need to move into democracy's future, even if Governor Wilson seems strongly determined to carve out a political market niche for himself as the King Canute of his generation, trying, but ultimately failing, to stop the adoption for the political system of the same technologies, processes and paradigms that have already profoundly transformed our commercial and personal lives, a movement that can no more easily be stopped than could the tides rising around that ancient British king, now a timeless symbol of futility.

Sincerely,

Marc Strassman
President
Campaign for Digital Democracy

Letter to Sandy Nelson at The Wall Street Journal Interactive Edition In Response to Governor Wilson's Veto of AB44

Campaign for Digital Democracy

October 28, 1997

Sandy Nelson
The Wall Street Journal Interactive Edition
FAX: 212-416-3548

Dear Ms. Nelson,

Thanks for providing some long-delayed coverage for our efforts to bring digital voting to California and elsewhere:

California has gone a step further than most states. A citizen-sponsored Virtual Voting Rights Initiative was introduced in 1996. Bills have been approved in the state House and Senate that authorize a study of voting on the Internet with a report due back to the legislature in March 1999.

I'm the citizen who wrote and unsuccessfully circulated the Virtual Voting Rights Initiative in 1996. It was then picked up by Assemblymember Kevin Murray of Culver City and converted almost unchanged into AB44, which he introduced in December of 1996. After negotiations between Democrat Murray and Republican Secretary of State Bill Jones, AB44 was amended into a study of digital Internet and telephone voting feasibility and, as you correctly report, was approved by both house of the California Legislature. I am attaching for your information copies of the original AB44 and the amended version, which was, after being passed, vetoed by Governor Wilson, who said that it was too early to study the feasibility of digital voting. I am also attaching an op-ed piece I wrote in response to his veto, which I would be glad to see published in the paper or interactive edition of the Journal, or in both. I urge you to contact Governor Wilson's office (State Capitol, Sacramento, CA 95814; telephone 916-445-2841) to get a complete copy of his veto message, issued October 13, 1997, to get the full experience of the ignorance, political expediency, and fear that seem to be driving his behavior.

Campaign for Digital Democracy, the group I founded and direct, and which is working to establish a digital voting option over the Internet, by telephone, or through any device linked to a network and capable of generating and transmitting a secure digital signal, does not believe that designing, developing and implementing such a system will be as

expensive and slow as opponents and doubtful supporters seem to believe. Nor that it will be that difficult to make the system secure at a level far above that which is now generally the case in the "legacy" voting process. Convincing the general public, professional skeptics of anything technological, or those who perceive themselves to be threatened politically by the move to inexpensive and widely-accessible digital voting are separate, and essentially non-technological, issues which will no doubt make up the bulk of the emerging debate on this subject and for which I have not yet developed either the logical arguments or the non-logical explanations that will satisfy those whose method is to reject reason in order to defend their own pre-ordained conclusions and to reject changes they fear will disadvantage themselves and their side, while wrapping their fear and self-interestedness in specious and fact-free discourse that serves, they think, to adequately camouflage their ruthless efforts to preserve a status-quo that works for them.

As for the issue of cost, it was the considered expert opinion of the Office of the Attorney General of the State of California, engraved at their request on every copy of the Virtual Voting Initiative I circulated in 1996, that it would cost "hundreds of millions of dollars" to design and build a digital voting system for the State of California and "tens of millions of dollars" to run it in each election. Mary Green of Sandia Labs now says it will cost ten million dollars to build it, and hundred of millions to deploy it nationally.

The small, privately-held start-up company I founded and run, Transmedia Communications, is currently working with a well-known set-top box company, a world-class smartcard manufacturer, and several IVR (interactive voice response) firms to build a prototype Digital Voting System (tm) that will securely and cost-effectively provide for telephonic and Internet-based digital voting at a cost significantly below those I've cited above. By significantly, I mean by orders of magnitude.

On the political side, I've been informally consulting on this issue with officials from a number of states, West Coast, East Coast, and in between, and I'm beginning to detect a little more excitement, understanding of the issues involved, and a desire to find solutions to the outstanding problems blocking the realization of digital voting so that real progress can be made in making it easier for voters to vote electronically. I will be proposing to these officials that we create a Uniform Digital Signature and Voting Law through multi-state discussions, a law that could then be adopted by each state. This would eliminate much of the difficulty in adopting digital voting nationwide as discussed in your article. Since digital voting and the adoption of digital signature technology and its related institutions are closed linked, it may be possible for digital voting to ride into place on the coattails of the move to digital signatures. Or vice versa.

The implicit irony underlying your article resides in the conflict between the paragraph that says:

The rapid popularization of the Internet has sparked an interest in on-line voting. In a poll of 1,012 Americans conducted on behalf of AT&T's WorldNet Service during the 1996 elections, about 45% of respondents said they would prefer to vote via computer than in person.

and this one:

"The will to change the laws, the desire to change the laws -- that has to be there first," Mr. Taft says. "There is no huge grass-roots outcry for changing the election system in Ohio, which makes me say it's going to be some time before this happens."

Well, that's the whole point. You quote a survey showing that almost half the people want to vote online. Then you quote a politician saying there is no demand for online voting. Why should politicians who don't know what the people are thinking be in charge of making the laws governing how the people choose their leaders and make other collective decisions? Maybe something like direct digital democracy, mediated by a Digital Voting System, could solve that problem. Why should politicians, very few of whom understand, let alone appreciate, the power and potential of networked computing, be the ones standing in the way of its use to facilitate the operations of the democratic process? If self-serving opportunists like Pete Wilson or out-of-touch politicians like Mr. Taft of Ohio remain in charge of creating the political future when all they know how to rely on for guidance are the paradigms of the past and their own perceived self-interest, how can we expect to move forward in this area? When technically ignorant and politically short-sighted people are making crucial decisions about the technology we need to govern ourselves, what hope is there of progress?

The only way this technopolitical logjam is going to be broken is by more and more articles like the one you've just written, which will make it clear to technology company executives, political observers, and voters that bringing the technology of politics up to current best-practice levels is imperative in order to remove the barriers that an antiquated electoral system already poses and will continue to pose to the ability of the nation to take full advantage of the same advantages already enjoyed by the many sectors of the economy that are already leading the way into the technological future.

Digital democracy is also significant because it not only borrows most of its concepts and techniques from e-commerce generally, but because implementing a digital voting regime, with the required smartcards and digital signature repositories, will mean that the economy and its participants will be that much better equipped to engage in all the efficient and productive activities characteristic of an e-commerce economy. Online business activity could be facilitated, medical records could be securely accessed, educational systems could be built and used securely, and on and on, once people have become used to using their smartcards and digital signatures in the voting process. This is a powerful reason for moving ahead rapidly to institute digital voting.

Voting cannot be allowed to remain a technological backwater while the power of governmental and private institutions to surveil, market research, entertain, advertise and sell grows exponentially through the effective use of the same digital technologies that could also be used in our own self-governance, were we allowed to do so. Such a disproportion between a commercial sector powered by powerful engines of digital

persuasion and a political sector mired in inefficiency and the resulting apathy would create a profoundly non-democratic form of social existence, a combination of **1984**, **Brave New World**, and **Gattaca**, a place with plenty of shopping (under omnipresent digital eyes) but not much freedom.

Maybe that won't be so bad, at least for some people. Maybe we should all welcome it, and maybe we should abandon any hope of creating democratic tools and new political forms for the 21st century. But if we do want to preserve and expand democracy, to embrace and to extend it, I can think of no better way to do so than by giving voters a chance to vote over the Internet and by phone, despite the doubts of those who will be swept away when they can, and to do so as soon as possible.

Again, thanks for writing an excellent article.

Sincerely,

Marc Strassman
Executive Director, Campaign for Digital Democracy
President, CEO, Transmedia Communications

Attachments: AB44 as introduced
AB44 as amended
Letter in support of AB44 to California State Senators
Op-ed response to Governor Wilson's veto of AB44

I had written to the Governor of Hawaii about electronic voting during the campaign to get AB44 passed into law in California. After the veto, he wrote back.

**Letter from Benjamin J. Cayetano,
Governor of Hawaii,
Regarding the Use of Electronic Voting in His State**

Executive Chambers

Honolulu

Benjamin J. Cayetano
Governor

November 21, 1997

Mr. Marc Strassman
Executive Director
Campaign for Digital Democracy

Dear Mr. Strassman:

Thank you for your informative letter regarding digital voting. The State of Hawaii currently uses digital processing in limited areas such as signature verification for voter registration and absentee voting. The notion of expanding our system to include digital voting is intriguing; however, it is not feasible for our state at this time. Hawaii is currently experiencing difficult economic times and, consequently, cannot commit our limited resources to the development of such an untested yet innovative idea.

Hawaii has, in the past, had favorable public response to the use of direct recording electronic voting machines but security and reliability concerns have always been an issue. The Internet and telephone have not proven to be an extremely "secure" or "reliable" media. It is encouraging to hear that the California legislature is considering an in-depth study of this idea. We look forward to reviewing the report, should our legislature approve to fund it.

Please feel free to forward a copy of the study, or any additional information you feel would be appropriate, to Mr. Dwayne D. Yoshina, Chief Elections Officer for the State of Hawaii. He will be happy to learn of new ways to vote and to count such votes.

Aloha,

BENJAMIN J. CAYETANO

cc: Dwayne D. Yoshina, Chief Elections Officer

Chapter 4

Media Campaign for Electronic Voting

By the end of 1997, I had conclusively demonstrated that I could attract press attention to my efforts, even if I couldn't convince a cautious governor to embrace the future. I therefore began a campaign to educate the media, the public, and the politicians by explaining, over and over again, what electronic voting involved and why it would be a beneficial to voters, government, and the e-commerce community. The result was a series of articles in major newspapers about me, Campaign for Digital Democracy, and electronic voting.

Article from Inter@ctive Week, February 23, 1998: Webpreneur Puts Pols On The Web

By Will Rodger

Internet or no, political discourse remains largely a lopsided proposition: Politicians act, reporters report and voters base their decisions on what they read and hear from the media.

But suppose someone could get beyond the horse-race politicking to the meat of the issues - hold, if you will, a never-ending, electronic debate on issues of the day. Suppose further that this someone set up a way for ordinary citizens to "vote" with electronic money, funneling cash to candidates on both sides of any issue.

Would that improve accountability? Would that increase the information we need to make smart political decisions?

Marc Strassman is convinced that it would - and a whole lot more. So he's started the Virtual Political Action Committee, the first Web site devoted to in-depth discussion of specific politicians' positions on the politics of cyberspace.

"I'm trying to bring the Net into government in the largest, philosophical sense," says Strassman, a 50-year-old political entrepreneur and producer at bookradio.com, a Web site devoted exclusively to reviews and chat about literature and thoughtful nonfiction.

"I see a dialectic between the Internet and government."

To be sure, Strassman's site isn't the glitziest. A front page with a banner reading "Strong Encryption Legislative Fund of the Virtual Political Action Committee" leads to one form for contributions, another online form for volunteers to sign up and a separate page for candidates' positions on the issues. But with time, Strassman says, it could become a real forum for substantive debate of issues that are often too complex for a thorough airing in one or two newspaper stories.

Take, for instance, encryption - so far the only issue up for discussion on the site.

Many crypto-wise Netizens know that Rep. Robert Goodlatte, R-Va., sponsored a bill called the Security and Freedom through Encryption (SAFE) Act. Not all know, however, about a series of amendments that, among other things, would fund a federal center for breaking the very codes the bill is supposed to protect. Though mathematical theory suggests "brute force" approaches to encryption are doomed, many computer scientists and political analysts alike feel distinctly uneasy about supporting something that could render the bill meaningless.

Goodlatte didn't insert the amendment. But deciding how to deal with it - whether killing it in conference, on the House floor or just letting it ride - is bound to be a matter of intense debate if SAFE moves forward before the close of Congress this fall.

Strassman's solution: an area for "digital luminaries" to offer comment and counterpoint to the candidates' positions.

"If we need someone to add commentary, that's fine," he says. "There really isn't any reason we couldn't present other views."

Legislators tied closely to the politics of encryption have begun to take notice.

Goodlatte and Sen. Conrad Burns, R-Mont., sponsor of the leading Senate measure to lift export controls on encryption technologies, are expected to submit

statements on encryption to the site within days.

"It's interesting that there's an organization out there that's dedicated to helping elect officials who are committed to liberalizing encryption export controls," Burns spokesman Matt Raymond says. "Other organizations have approached us, but none have been dedicated to electing officials who are for liberalized encryption."

Whether other candidates will step forward and be counted remains to be seen, however.

Jonah Seiger, principal at Mindshare Internet Campaigns in Washington, D.C., and a former spokesman for the Center for Democracy and Technology, says some politicians may shy away from outside forums like VPAC.

"There's actually a bigger, meta-question here," Seiger says. "It's these ideas of forums on special issues. I think the jury's still out on the question. The reason is every candidate has the ability to do it himself."

Instead of relying on outside groups to set the agenda for discussion, many candidates will put together comprehensive sites themselves or with technical assistance from companies like Mindshare. As long as they can do that, they may shy away from outside groups, Seiger says.

Though he concedes forums run by third parties can boost credibility, candidates still need to stand on what they believe and stick to it. "Transparency is very important - you can't hide on the Net," Seiger says.

Though dedicated exclusively to encryption issues, VPAC won't stop there, Strassman says. Over time, he expects to expand into issues like domain names, copyright on the Net and digital signature legislation. In the near term, he hopes to get VPAC members to use unique digital identifiers housed in "smart cards" for online voting and micropayments at the site. He's even got a patent pending on an online voting system.

"It's a grain of sand," he says, "around which a pearl

can form."

The Virtual Political Action Committee can be reached
at www.vpac.org

Support building for online votes

By Jon Matthews
Bee Capitol Bureau
(Published May 18, 1998)

On some future Election Day, Robert Barnes would love to arrive home from work, flick on his computer and -- with simple clicks of a mouse -- be able to vote for the candidates of his choice.

"You could have your voter handbook delivered over the Internet, along with your ballot," said Barnes, a San Francisco political consultant who is already planning to send candidate e-mail to hundreds of thousands of Californians in the coming weeks.

But while many are enthusiastic about the idea of voting via the Internet, others believe the idea is premature or even potentially dangerous. They say it could leave out low-income voters without computers, produce massive security problems or, at worst, threaten the role of the state Legislature and the entire principle of representative government.

"If you go to a system where everybody could vote by computer and modem, then there is no reason why you couldn't go to the next step and have everybody vote from home on all major pieces of legislation. Instead of the Legislature or Sacramento City Council making decisions about where to spend budget dollars, you would just put it up on the screen and have everybody vote on it," said Tim Hodson of the Center for California Studies at California State University, Sacramento.

The idea of Californians voting from their home computers has been around for years. But the debate has been encouraged by the explosive growth of the Internet and its ability to provide voters with reams of information about candidates and elections. A recent Field Poll showed that 42 percent of registered voters now have an e-mail address, and 62 percent report that they regularly use a computer at home, work or school.

"California pretty much leads the way in terms of high-tech," poll director Mark DiCamillo said.

So, if millions of Californians trust their computers for everything from banking to ordering books to e-mailing their legislators, why can't they also vote online?

Marc Strassman, founder of the Campaign for Digital Democracy, believes voting by computer can and should happen. He said a "digital electoral system," adding the Internet and touch-tone telephone voting to traditional balloting, would make elections far more accessible to voters and less expensive for taxpayers, and allow a

faster and more accurate count of ballots on election night.

Voters confronting the huge June 2 "blanket primary" election ballot may wish they were able to vote by computer and cross-check information about candidates and issues while online, said Strassman, a Los Angeles resident who also hopes to profit from an Internet election system by developing and selling high-tech software.

As for the security issue, "We could build a system as good or better than the existing system within six months," he said, adding that voters without computers could still cast their ballots by traditional means.

Backers of Internet voting, or at least further study of the idea, point to several developments, including:

The ability of U.S. astronaut David Wolf to vote while on a 1997 orbiting mission aboard the Russian space station Mir. Texas passed a special law to allow such out-of-this-world voting, which involves a laptop computer.

Ongoing work by the Pentagon on a pilot project to allow some overseas military personnel to vote via the Internet. The Missouri Legislature last week was debating legislation to allow that state, among others, to participate, according to a spokesman for Secretary of State Bekki Cook.

Back in California, Gov. Pete Wilson last year vetoed a bill calling for formal study of a "digital electoral system" that would allow registration, voting and signing of initiative petitions. Republican Wilson, in his veto letter, said no one could yet guarantee online security, and that such a system would "compromise voter confidentiality and generate significant opportunities for fraud."

Some Democrats, like Barnes, contend that Republicans generally don't embrace programs intended to increase voter participation. Others predict that too many Internet votes would come from white, upper-class males, or that political activity of all kinds will jump on the Internet because of frustration with the Legislature and government in general.

But a wide range of officials and scholars raise caution flags about Internet voting, at least with current technology.

"I hate to rain on people's parade (but) the three biggest problems are security, security and security. And the fourth one is expense," said Bill Kimberling, deputy director of the Office of Election Administration at the Federal Election Commission.

Kimberling said he knows of no state that is conducting general voting by Internet.

The office of California Secretary of State Bill Jones is working on a project to allow electronic voting from the traditional voting booth -- as opposed to voting from a home computer -- and is close to approving a couple of systems, a spokesman said. Voting from remote terminals or via the Internet will also be studied by a task force.

Sacramento County Registrar of Voters Ernest Hawkins is among the election officials who have reviewed the Pentagon's Internet pilot project, and he said he was impressed with the level of security. But Hawkins said the old punch-card ballot system still used widely in California is very accurate, and that he has concerns about quickly moving to a fully computerized or Internet-based system.

"Even if the technology was absolutely perfect, if you don't have the public confidence, you don't have anything," Hawkins said. "I need to feel confident before I can suggest something, that the public accepts this."

Geoffrey Cowan, dean of the Annenberg School for Communication at the University of Southern California, said that on the positive side, the Internet is a tool for genuine citizen participation in the political process, with many people organizing and contributing to an informed dialogue.

But he called more "worrisome" the idea of Internet voting, or gathering ballot initiative signatures via computer, because the Internet is still too young and studies show that a full range of citizens -- by race, economics and ideology -- is not yet fully represented online.

"In television terms, (the Internet) is still in 1947 or 1948. And you wouldn't have especially enfranchised television viewers back in 1947," he said. "I do worry about the idea of direct democracy on the Internet. But you also have to guess that the phenomenon of that direct democracy would itself change the nature of who uses the Internet."

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An article ran in the Jewish Journal of Greater Los Angeles lamenting the lack of political participation among young Jews. I responded with this letter to the editor.

Letter to the Editor of the Jewish Journal of Greater Los Angeles, June 5, 1998

June 1, 1998

Robert Eshman
Managing Editor
The Jewish Journal
FAX: 213-368-1684

To the Editor,

I was despondent to read ("Is Youth Served?" May 29) about so many young Jews who had "zero clue" about politics, but very glad to hear that one of them had suggested to your reporter that the government should "allow voting via the Internet."

As the author in 1996 of the Virtual Voting Rights Initiative, which in 1997 became Assembly Bill 44, which when passed by the California Legislature called for establishing a Task Force to Study Electronic Voting, I am glad to hear that popular awareness is finally catching up with technological capability in terms of using powerful, modern networked computer systems to empower everyone to vote over the Internet.

Twentysomethings and others who want to be able to vote securely, privately, and easily from their desktop or laptop, home or office computer, should look into and/or sign up with the organization that is leading efforts in California, nationally, and internationally to create a 21st century democratic process that makes it as easy, rather than as difficult, as possible to vote.

This organization is the Campaign for Digital Democracy. Those interested in getting more information should send their e-mail address to info@vpac.org or sign up as Virtual Volunteers at the website of CDD's sister organization, The Virtual Political Action Committee, which can be found at: <http://www.vpac.org/>.

Perhaps Israel, which is a high-tech country with a highly-literate population and where politics is like an all-pervading mist, could become the first country to adopt electronic voting over the Internet.

My software development company, Transmedia Communications, has a preliminary patent for an Electronic Voting System and is already marketing it in the form of an Electronic Proxy System for use by corporations for stockholder elections.

Perhaps when contemporary technology, with all its flexibility and power, is used for the core processes of democracy, such as voting and the signing of initiative petitions, then contemporary voters will begin to get involved.

Anyone interested in hearing the electronic voting message delivered for the first time to a national audience, however briefly, between inane quips by the quizmaster's sidekick can do so during my broadcast appearance on "Win Ben Stein's Money," on the Comedy Central cable channel at 7:30 pm on Wednesday, June 17th. (At least in LA. If you're elsewhere, check your local listings.)

Marc Strassman
President
Transmedia Communications
Executive Director
Campaign for Digital Democracy

On March 27, 1998, I competed as a contestant on "Win Ben Stein's Money," a parody of a quiz show that nevertheless awards real prizes. I had managed to squeeze in part of a plug for electronic voting between answering questions and bantering with the host and second banana, so I sent this notice to the Democracy Wire mailing list so others might see the first national exposure of the idea, even if it was on the Comedy Central cable channel.

Democracy Wire Post on "Win Ben Stein's Money"

DO-WIRE@TC.UMN.EDU

Electronic Voting System Appearance on Comedy Central

Dear Democracy Wire Mailing List Member,

It's not often that a serious issue of political significance gets discussed on a silly game show. But on June 18th, on Comedy Central, such a thing will indeed take place.

I'm the Executive Director of Campaign for Digital Democracy, an advocacy group working to establish the right of all otherwise-eligible voters to cast their ballots (and sign initiative petitions) over the Internet.

I'm also the author of the Virtual Voting Rights Initiative, which, slightly modified, became Assembly Bill 44 in the California Legislature's 1997 session, where, after being amended into a study rather than an implementation of electronic voting, was passed by both houses, only to be vetoed by Governor Pete Wilson, well-known opponent of anything that makes it easier for more people to vote, such as Motor Voter.

Since then, I've been working on the technical aspects of the Electronic Voting System, which I now have a preliminary patent for. I've also been working to spread the word about how electronic voting can save money for the jurisdictions that use it and increase the often woefully-low turnout rates in these jurisdictions as well.

I recently had the opportunity to appear on the "quiz show," "Win Ben Stein's Money," which runs on Comedy Central. Without revealing whether or not I did in fact win any of the lawyer-author-actor-pitchman's money, I can say that I did manage to briefly bring up the subject of electronic voting, during the part of the program where I engage in meaningless banter with Jimmy the second-banana.

I'd like as many people as possible to hear this exchange, since

electronic voting, while perhaps more significant in the long run, does not have the visibility of certain other political "issues," such as Monica Lewinsky's recent make-over in Vanity Fair.

This episode of "Win Ben Stein's Money," (#8064) is scheduled to run, here in Los Angeles, at 7:30 pm on Thursday, June 18, 1998. Its exact transmission time may vary in other cities, on other cable systems, but I assume it will be running everywhere it runs on the evening of June 18th, on whatever cable channel Comedy Central uses in each city and on each cable system.

Innovative political ideas are not widely discussed in any medium these days, and it is perhaps not accidental that this one sees the light of *day on a quiz show/quiz show parody that aspires to wackiness.*

Everyone with nothing better to do on Thursday night is cordially invited to watch "Win Ben Stein's Money" and then visit the website of CDD's affiliate organization, the Virtual Political Action Committee (VPAC) at <http://www.vpac.org/> and sign up as a Virtual Volunteer so that you, too, can someday use this very computer you're sitting at now, to vote for the candidates and initiatives of your choice.

Sincerely,

*Marc Strassman
Executive Director
Campaign for Digital Democracy*