E-Democracy

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Abstract: Democracy means majority rule. This raises some interesting questions. In a truly democratic society, when a majority of citizens vote for one candidate to govern them, then that person would be the elected governor of those people. Following this line of reasoning, if the majority of people do not vote for a leader, does democracy mean not having a leader? This paper examines how e-Democracy can bring about a truer form of Democracy. We examined how e-Democracy may change pluralistic-representative-pseudo democracies into pure democracies. It was found that there are just two main things standing in the way of having true democracy. These are securing the voting process and representatives wanting to give citizens that power.

Key words: E-Democracy, Democracy, E-Voting, Electronic Voting

INTRODUCTION

"Democracy is dead without information" G.K. Chesterton [1].

Democracy can be defined as a government in which the supreme power is vested in the people and exercised by them directly or indirectly through a system of representation.

Putting an "e" in front of democracy means nothing more than using information technology tools to facilitate, improve and ultimately extend the exercise of democracy. E-democracy has both a tactical side and a strategic side. On the tactical side, information technology has advanced communication and the access to information arguably better than any known medium. But something even more fundamental is at hand. The underlying core principle of democracy is an informed and engaged citizenry. Most governments get passing marks for "informing" citizens via digital communication. But the vast majority has a long way to go to "actively engage" citizens or to effectively exert global influence using digital media.

There are about 117 democratic governments in the world. This study concentrates on the United States democratic form of government.

* The population of the United States is approximately 293 million [2].
* Only 44% of them (130 million Americans) are registered to vote [3].
* Only 50% of registered voters (65 million Americans) actually vote [4].
* 48% of those who voted (31 million Americans) in the last Presidential election voted for George W. Bush [5].
* Bush won the Presidency with 48% of 50% of 44% of Americans' vote.
* 31 million of 293 million equalling 10.58, the current leader of America was only voted for by 1 out of 10 of its citizens!

In the 2000 American presidential election, 500,000 more people voted for Al Gore than voted for George Bush [7]. However, Bush won because of the Electoral College. Under this system, each state is assigned a number of votes, based upon the state's population. All of a state's votes go to only one candidate. For example, California has a very large population. Whoever wins the popular vote in California will get 55 Electoral College votes. Whoever wins a small state like Delaware will get only 3 Electoral College votes. Thus, for just these two states, if a candidate was to lose California by 1 person's vote and was to win Delaware by 100,001 votes. Even though that candidate got a hundred thousand more total votes, he/she would be behind in the ballot by (55-3) 52 votes.

The reason the Electoral College exists is because voters many years ago would have been familiar with their local politicians and would not have known much about politicians from other states and across the rest of the country [8]. This thought might have been relevant a couple hundred years ago when the Electoral College was created, however the media today is not only capable of letting voters across the nation thoroughly know the ideologies of each candidate, but every minute detail about each of the candidates. The 2000 campaign season saw the net play a starring role, with millions of voters visiting candidate web sites and political portals (Election.com, Voter.com), signing up for political and advocacy email lists, engaging in interactive discussion forums and in a few cases, even casting ballots online [9]. There is no reason with our current state of readily available information that a country of any size cannot have a leader elected by popular vote.

Modern society, with its size and complexity, offers few opportunities for direct democracy… most communities have grown too large for all the residents to gather in a single location and vote directly on issues that affect their lives [10]. This has given rise to

"representative democracy", where citizens elect politicians to represent their voice in government. What were the last 5 legislative proposals your representative in government voted for on your behalf and which way did he/she vote (for or against)? Do you know anyone who would be able to answer this question? We therefore neither live in a true democracy, nor a representative democracy. There were 3,697 bills voted on in 2003 in the U.S. House of Representatives [11]. Figuring bills have been voted on during 5 out of every 7 days (5/7 * x/365 => 261 days of voting) yields (3,697 bills / 261 days) 14 proposed laws voted on for each weekday in 2003! And this does not figure in the many days of Congressional Recess (holidays) [12]. Very few people can name just one of the bills voted on yesterday by their Representative in government. Our representative democracy is neither representative, nor democratic. With e-Democracy, citizens will not have to gather in a single location. People could vote from work, school, home (with a computer and an internet connection), and even Internet cafés. A survey was done in 1996 to look into the reasons people do not vote [13]. People's reasons for not voting in the election prior to this study included the following:

1. Could not take time off from work/school
2. Sick/disabled/family emergency
3. Out of town
4. Had no way to get to the polls
5. Lines too long at the polls

E-Voting: The people who claimed these reasons for not voting represent the majority of those who did not vote. Logic follows that the majority of those who did not vote could have voted if an electronic internet-worked means was available. Of course there are inherent problems that could arise in an internet-worked electoral system:

"A virus could wait until the cryptography was "opened" by the voter when the ballot arrives, to enable the voter to log his choices, and then in a nanosecond after the voter has made his choices but before the vote is actually cast, the virus could change the voter's choices and ride back encrypted, disguised as the voter's actual ballot. Because any election system must separate a voter's choices from the identity of the voter in order to protect ballot secrecy, the voter would receive verification only that his ballot had been received - not what his choices were. Thus the voter would think his ballot choices had been received and recorded when actually someone had successfully stolen his vote. The vendor and officials would simply have no mechanism to detect such a theft. In this manner, elections could be manipulated wholesale, if the virus author was successful in infecting sufficient numbers of computers" [14].

If the voting is cast through web sites, those sites could be spoofed to reveal personal identification numbers and passwords of voters, then the vote could be automatically recast with those values to a different candidate. The servers hosting the electoral sites could also fall victim to various denial of service attacks. It is a very daunting prospect having a very important nation-wide day of using an inter-networked system that has to be secure from attack. If it can be done, what would the process of casting a vote be like? First there is the matter of registering people to vote. Since every individual in most tax-paying countries already have unique keys (social security numbers in America, Nat Insurance numbers in the UK, etc…), these unique keys could be used as an entry to login at an election. As soon as a person with one of these keys becomes of "voting age", their unique key could automatically be activated to vote. This would eliminate the process of registration altogether.

If every citizen of legal voting age is automatically registered, the first pro-active thing the citizen would need to do is obtain a password so that others cannot simply run a brute-force program to enter every possible unique key and vote on others' behalf. This password could be posted on the legal-voting-aged birthday of the citizen. While logged-in, the voter would simply vote [15] and the voter's effort would then be finished until the next election. There would be no need to keep tabs on voters' addresses and have voters re-register every time they change their address. Without a need for an Electoral College, it would not matter which state the voter resided in. With e-Democracy citizens could directly elect their governors. However, there is one question that must be asked in this electronic era where the world is as small as the speed of your Internet connection. Since we elect politicians to vote on our behalf because it was inconvenient for all the citizens to gather to vote on every issue, why not now in this new digital age can we not vote on every issue ourselves? Representatives could still be elected to propose laws (and a means should exist for non-representatives to propose laws if those proposals are given enough support), but the voting could be carried out electronically by referendum every week. The citizens would be more aware of every bill, as they would have the opportunity to vote on every issue. Giving citizens this power would probably do more to beat voter apathy than any other proposal out there [16].

Interactive e-Democracy: Until a secure way can be thought of and implemented for citizens to safely vote online, how can electronic means be used to implement e-Democracy? The Centre for Democracy and Technology [17] has a scheme called "Adopt Your Legislator" which sends citizens electronic mail notifying them when their national representative in government is about to vote on a bill affecting online civil liberties. They also send regular electronic mails regarding upcoming policy decisions and urge its members to contact the government to let their views known. This sounds very promising for all those who want to get involved, however quite often when people phone or write their representatives in government, the call and the letter stops at the person who takes the call and opens the letter. It goes no further. Politicians seek help for votes from other politicians. It is a very "scratch my back, and I will scratch your back" kind of

world. E-Democracy can take this power out of the hands of the current legislators and realistically put voting of every issue into the hands of the citizens.

On the Queensland, Australia website (www.qld.gov.au) citizens have an impressive array of opportunities to interact with the government. The "Get Involved With Government" choice links citizens to their representatives, to Queensland agencies and to Parliament. The 'Queensland Agencies' link gives citizens background information on an issue, current law or proposed legislation and invites direct citizen comments which goes to committee and then eventually to Parliament to help formulate policies and standards on a variety of legislative issues. The 'Queensland Parliament' link empowers a citizen to make a formal, direct request to Parliament in the form of an e-petition with the object of "persuading Parliament to take some particular action." Citizens can also review existing e-petitions and add their own signatures in a show of support, or express their objections. The site also surveys users about the e-petition process itself-a built-in quality control and improvement mechanism.

Likewise, the Scottish Parliament was an early innovator in epetitioning. Citizens can create an e-petition or comment or add their support to an existing e-petition-all electronically (www.scottish.parliament.uk/epetitions/index.htm). The International Teledemocracy Centre aims to develop and apply advanced information and communication technology to enhance and support the democratic decision-making process. Their mission is to promote the application of Information and Communications Technologies (ICT) by governments and parliaments worldwide in order that elected members and supporting staff can conduct their business more effectively and efficiently. In 2001 the European Commission adopted an "Interactive Policy Making" (IPM) project to improve the European Union's governance. Through its website, "Your Voice in Europe" (http://europa.eu.int/yourvoice) the IPM collects and analyzes citizen and business input to evaluate existing EU policies and to solicit consultations on new initiatives. The purpose is to make EU policy-making more transparent, comprehensive and effective, giving stakeholders an active role in the policy making process.

CONCLUSION

E-Democracy can bring about much truer forms of democracy than that which we have today. There seems to be just two things standing in our way of having this true democracy which are securing the voting process and representatives wanting to give citizens that power. Having a true democracy comes down to just these two things. Unfortunately these things are akin to saying "when pigs fly and when fish sing" as:

* A secure Internet voting system is theoretically possible, but it would be the first secure networked application ever created in the history of computers. [18]

* What do all men with power want? More power. [19]

However, if these problems can be overcome, e-Democracy could give us a true democracy for the first time in history. By this we mean that we'll have a true democracy for the first time in terms of nation-states larger than a few towns and apart from the current very occasional referendum. This could only be achieved via our inter-networked world. Electronic voting has the potential to not only modernize electoral processes but also to improve the interaction between citizens and their governments through e-participation platforms based on information and communication technologies (ICT).

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