Digital democracy lets you write your own laws*

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December 2013

True democracy is not just about casting a vote every five years. It means citizens being fully involved in the proposal, development and creation of laws. The Commission on Digital Democracy currently being established will consider what part technology can play in helping people to take an active part in the way the country is run.

The commission is setting its sights on "Parliament 2.0", a vision of the future in which citizens participate in online elections, electronic referendums and richer relationships with their political representatives.

In recent years we've seen technology help people become more involved in debate about all aspects of society. So it is clear that it can play a much greater role in political participation too. As the Commission gets started, it's a good time to think about what we want our digital democracy to look like. There is inspiration to be found all over the web.

Wikipolitics

Technology can enable direct participation in the democratic process, without relying on representatives and without the citizen even needing to leave the comfort of their home.

One particularly useful tool in the quest for a digitally engaged electorate will be online forums. These can be built to manage discussions about proposed legislation in a structured way, making it easy for citizens to participate meaningfully.

Politicians and policymakers can use online forums to crowd-source expertise and the views of citizens on their plans – and to refine their proposals based on what they get back. This "direct democracy" would allow for laws to be based on genuine citizen deliberation rather than merely aggregating the preferences of citizens into a single vote at the beginning of each electoral cycle.

Wikipedia is an example of how this system might work, but it also shows some of the problems that can arise when technology and democracy mix.

Wikipedia has relatively little mechanism for coordinating edits, instead allowing editors to work on their own. Despite this decentralised approach, the quality of articles is generally very high. On the down side, edit wars and sock puppetry – when individuals use multiple user identities to create the impression that their views are shared by others – are an enduring concern.

To help make Wikipedia a trustworthy source, editors can build their reputation by establishing a track record of constructive behaviour. Wikipedia has a hierarchy of users for administrative purposes, based on community approval, but all users are considered to have equally valid opinions regarding Wikipedia content. The emphasis is on building consensus; an arbitration committee deals with disputes that remain unresolved.

Reddit, rate it, vote it

More formal mechanisms are to be found elsewhere online that could help provide the kind of format and structure that might be needed to produce good legislation. In Yahoo! Answers, for example, readers can vote up and vote down contributions made by others. Writers who are voted up gain points that indicate their good reputation. Other question-and-answer forums, such as Reddit and Stack Overflow, use similar mechanisms. This kind of collaboration can be further improved using the kind of real-time simultaneous editing provided by Google docs.

But again, there are perils. Time wasters, product pushers and disruptive trolls are bad news in online forums and can disrupt the way they operate. In the context of digital democracy, the potential for damage is even higher.

We will need to develop mechanisms that would make it possible for everyone to get involved in Parliament 2.0 in a fair and transparent way. This includes preventing abuse by lobbyists, special-interest groups, and extremists, who may try to thwart the mechanisms for non-democratic purposes. Unlike in traditional voting, which provides each person with one vote, we can't assume that everyone will participate in digital democracy equally. That makes it quite difficult to define fairness. It is also difficult to balance accountability (needed to prevent trolling) and privacy (needed to allow free expression).

Online voting

Computer scientists have made great progress in figuring out how online elections could be made secure. One important idea is to design systems

that enable *outcome verifiability*. This would allow citizens to check that the outcome of an election really does match the votes cast.

To ensure free and fair elections, we also need a property called *incoercibility*. This means voters cannot sell their vote, or be forced to vote in a particular way. Online voting systems with these features are being developed by researchers around the world and this will soon change the way we participate in elections.

The hope is that, if well-designed and implemented, mechanisms for digital democracy could be built that would greatly increase societal inclusiveness and cohesion, as well as lowering the costs of making democracy work.

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