How Silicon Valley Can Support Citizen Empowerment

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The 2016 U.S. presidential election stoked concerns about the potential of digital technologies to disempower citizens and erode democracy. Such concerns followed years of promises from tech companies and investors about the democratizing power of the internet. Since their founding, Twitter and Facebook have touted themselves as tools for democracy and citizen empowerment. A closer look, however, reveals that tech company incentives are often poorly aligned with the social goals they espouse and the type of good they promise to do for the world.

A new crop of companies — self-titled "civic technology" companies — are now taking the democratic mission more seriously by designing their platforms and tools with the explicit intention of promoting civic engagement. Some of these companies are nonprofits or ventures with the dual mission of making a profit and providing social benefits. Others are traditional startups financed by venture capitalists. In both cases, these companies need better metrics to ensure that their products and business designs remain aligned with their social missions.

Unfortunately, Silicon Valley companies are often judged simply on their ability to attract exponentially rising numbers of users and maintain user engagement. This standard for "success" encourages companies to work with paying customers who advertise to users and exploit their attention and data — rather than serving users in empowering ways. In turn, such standard measures are what matter to business leaders and investors. Measures of success need to change in order to encourage more tech companies to pursue democratic goals. Industry leaders, governmental and citizen users, and investors — all must create new performance standards to redefine success and hold tech companies accountable. New measures for evaluating company performance should be tied to service to democracy and to citizen empowerment.

Using Political Efficacy to Measure the Impact of Technology on Citizen Empowerment

Digital technology companies can learn from political science and psychology to adopt an approach that evaluates users' political efficacy. That is, innovators can use well-established survey measures to investigate the empowering — or disempowering — impact of users' engagement with any given digital platform or technology. The same approach can help technology companies determine whether they are fulfilling their social missions. Companies can integrate accumulated knowledge about impacts on citizens into their products, business designs, and appeals to funders and investors.

I tested this approach with SeeClickFix, a for-profit civic technology company that was founded to empower citizens by giving them a voice in local governance. Users of SeeClickFix submit requests for their local government to fix infrastructure problems like potholes and graffiti via a mobile application or website that accepts a photograph, location coordinates, and a description. The information collected is sent to the users' local public works department, allowing citizens to prioritize how the government allocates its resources. The company makes money by selling a system for efficiently processing work orders to municipalities. To evaluate this system, SeeClickFix and I collaborated on a survey of approximately 9,000 of their active users. That survey asked users about their perceptions of:

- Their internal political efficacy — a concept referring to users' ability to address problems in their local community
- Their external political efficacy — a concept meant to capture users' perceptions of their local governments' receptiveness to their attempts to address problems in their local community
- Platform political efficacy — a concept referring to whether the SeeClickFix platform helps users address problems in their local community

We matched survey responses from users with data about their experience on the platform, and specifically looked at whether the issues raised by users had been fixed by local governments, and how quickly.

Tech Platforms Can Create Positive Feedback Loops between Responsive Governments and Their Citizen Constituents

Our findings revealed that external political efficacy and platform political efficacy were correlated with whether users said the problems they highlighted were quickly fixed by local authorities. This was good news for the tech platform itself, because the core design features of SeeClickFix were, in fact, serving the goal of citizen empowerment. Use of this platform has the potential to encourage local governments to be responsive, thereby creating positive feedback loops in which citizens gain trust in governments that respond to their needs.

We also found that internal political efficacy — users' sense that they have the ability to address problems themselves — is correlated with having an older account on SeeClickFix. This means, in short, that users who are already confident in their skills as citizens were the ones more likely to be "early adopters" of a civic technology like SeeClickFix. Such citizens apparently seek out tools that will amplify their political efficacy. This result needs to be taken into account when SeeClickFix — and likely other civic technologies — seek to recruit users. Research shows that people who are non-whites and have lower socio-economic statuses also tend to register lower levels of internal political efficacy. These are exactly the citizens who need more responsiveness from government, yet they may be less likely to seek out civic engagement platforms that will increase and improve their political representation. To ensure that the entirety of a given community benefits from a new technological solution, SeeClickFix and other civic technologies must develop strategies to reach and serve those who might be less likely to look for and adopt new tools without extra outreach and encouragement.

Companies and Investors Should Hold Themselves Accountable

Digital technologies are likely to become more prevalent tools in U.S. government and democracy. Consequently, it is critical that the creators of these platforms are held accountable for good civic results — and learn to hold themselves accountable, too. Tech innovators must be held accountable for creating spaces where citizens can gather and have their voices heard. Even companies such as Facebook that were not initially launched to further civic goals have turned out to be sites where a great deal of civic and political activity happens. Such tech giants should acknowledge their responsibility to society, democracy, and citizens. And they should adopt better measures of their impact — such as measures of their impact on political efficacy. En route to power and profits, many tech innovators have been quick to tout the Internet's democratizing potential, and they should be asked to document their promised effects.

The best way to hold organizations accountable and encourage them to pursue their stated civic missions is to ask them for evidence of civic impacts — both positive and negative. Funders of civic technology efforts should not only request such ongoing documentation, but also look for evidence of each platform's capacity to incorporate new forms of evaluation into workflows. In turn, grant makers and advocacy groups should create awards for proven effectiveness in civic technology platforms — new forms of public recognition to help celebrate the organizations that do the best job of showing that they really can serve citizens and continually monitor and improve their civic effects.

Read more in Erhardt Graeff, *Evaluating Civic Technology Design for Citizen Empowerment* **(MIT PhD Thesis, 2018).**