

Six Models for the Internet + Politics¹

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Many agree that digital technologies are transforming politics. They disagree, however, about the significance and character of that transformation. Many of the pioneers of understanding the distinctive dynamics of new digital media platforms—social media and collaborative production—are quite optimistic about the potential for the Internet to dramatically increase the quality of democratic governance. On the other hand, some political scientists who have examined actual patterns of political activity and expression on digital platforms come away skeptical that digital platforms will bring equality or inclusion to democratic politics. We bring these two opposed perspectives in this article by developing six models of how digital technologies might affect democratic politics: the empowered public sphere, displacement of traditional organizations by new digitally self-organized groups, digitally direct democracy, truth-based advocacy, constituent mobilization, and crowd-sourced social monitoring. Reasoning from the character of political incentives and institutional constraints, we argue that the first three revolutionary and transformative models are less likely to occur than the second three models that describe incremental contributions of technology to politics.

Politics is the strong and slow boring of hard boards.”

Max Weber, *Politics as a Vocation* (1919)

Many agree that information and communication technologies (ICTs) are transforming politics. Singh’s contribution to this volume, for example, suggests that ICTs possess a transformative power that may lead to profound changes in the identity of actors and issues in global politics (Singh 2013). Singh and others

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disagree, however, about the significance and character of that transformation. In particular, in one pole of this disagreement are those who approach the question steeped in the culture and perspective of the OpenSource community. Many of the pioneers of understanding the distinctive dynamics of new digital media platforms—social media and collaborative production—are quite optimistic about the potential for the Internet to dramatically increase the quality of democratic governance. We're thinking here of scholars such as Yochai Benkler, Clay Shirky, and Beth Noveck.² On the other hand, some political scientists who have examined actual patterns of political activity and expression on digital platforms come away skeptical that ICT platforms will bring equality or inclusion to democratic politics.³

In this article, we contribute to this debate by offering six different possible models of interaction between ICTs and politics. These models all begin from a highly stylized image of political decision making through citizens, interest groups, and governments.⁴ Then, we place ICTs at different points in this model—reflecting positions found in various arguments in the digital politics literature—and reason about whether or not that placement is a sensible way to consider the role of ICT in politics and what the effects of ICT on politics might be. We use several empirical case studies of the use of ICTs in accountability politics to illustrate some of these models. We do not mean these models to be exclusive or fully comprehensive. Rather, they capture some of the ways in which ICTs intervene with and affect political systems.

The aims of this article are twofold. First, we develop a more clear understanding of the emerging interactions between ICT and governance by taking both the perspectives from technologists and from scholars of politics seriously at the same time. As we have said, scholars who live on “technology street” tend to be optimists about the transformative possibilities of ICTs for democracy. Those living on “political science street” tend to be quite skeptical because they think technology optimists are inattentive to the mainsprings of politics: interests and institutions. As a result, the two sides talk past one another. Each, the other thinks, just doesn't “get it.” This article works right at the intersection—taking insights into both seriously and locating a truth that is in-between claims that the whole world is different and that nothing new is under the sun. These models enact that interdisciplinarity by beginning with a simple institutional schematic that is familiar to any scholar of politics (but not to technology scholars). We then reason about the likely effects of ICT by locating different kinds of digital interventions that take seriously the new dynamics of digital communication (e.g., lowered communication costs and self-organizing possibilities, crowd sourcing, collaborative production, many-to-many and asynchronous communications) that ICT scholars emphasize, but that are less familiar to political analysts. Second, we hope that these models will provide useful mental maps for scholars and practitioners that will help them to locate just how some digital intervention or application fits into the larger institutional panoply of a political system with its own barriers and competing pressures.

This article's organization is straightforward. The next section begins with a simple model of politics. The six sections after that describe six different locations of ICT intervention in that political system. The first three suppose fundamental reorganizations of the political model, whereas the second three describe incremental contributions of ICT. We argue that we are less likely to see ICT

²Benkler (2006); Shirky (2008); Noveck (2009). But for a counterpoint, see Morozov (2011).

³Hindman (2009); Schlozman, Verba and Brady (2012, pp. 483–534).

⁴In this article, our stylized scheme models politics principally within democratic societies. We hope to extend this treatment to cover international dynamics and nondemocratic societies on a later occasion.

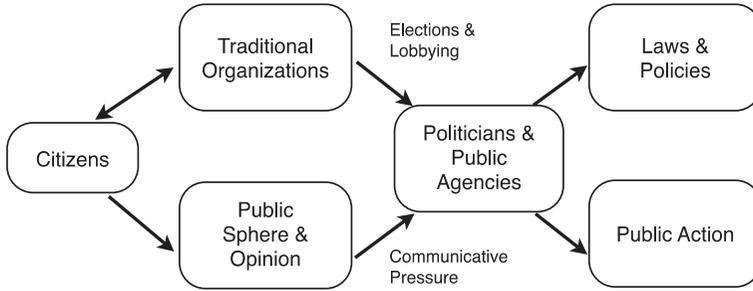


FIG 1. Stylized Political Model

and governance transformations along the lines of the first three models and the second set of three is more likely, although less profoundly transformative for democracy.⁵

A Simple Model of Democratic Politics

We begin with a simple model of democratic politics, depicted in Figure 1 below.

The model is a simple conveyor belt image of politics. The belt begins with citizens who have interests and views about politics, policies, and politicians. Citizens form into interest groups and social movement organizations—sometimes called pressure groups—that advocate for specific interests and policies. Once born, these groups reciprocally recruit and mobilize citizens to advocate more powerfully. At the same time, citizens form and express their views in the public sphere in which they discuss public concerns with one another in coffee shops, op-ed pages, water coolers, and town squares (and of course increasingly on the Internet).

These traditional organizations and the public sphere are located outside of government. In a democratic society, however, they determine the personnel and content of government. Through the mechanisms of elections, lobbying, and communicative pressure (of which the pressure of public opinion is one kind), they exert pressures that determine which politicians hold office. Between elections, traditional organizations, and public opinion also exert pressures on the public agencies that compose government. Government action is at the end of this conveyor belt. Government acts in one of two ways: by passing laws and policies, and by acting directly in the world although agency actions.

This model of politics leaves much out, to be sure. Its general idea of politics imagines that the point of democracy is to translate views of citizens into laws and public action. That claim is itself too much for some but too little for others. The conveyor belt model is controversial for some who hold another ideal or even definition of democracy—such as a minimal conception in which competitive elections are enough, whether or not such political institutions translate citizens' views into public policy. On the other hand, the conveyor belt says too little for other scholars of democracy because it does not distinguish between important democratic conceptions such as deliberative and aggregative conceptions.

⁵One important caveat is that the scope of this article is limited to the effects of ICT on politics and not, conversely, the effects of politics on ICT. There is a large literature in the sociology of science and technology that examines the political, social and legal determinants of technological development. For two very different treatments of the political and social determinants of technological development, see David Noble's *Forces of Production* (2011) and Tim Wu's *The Master Switch* (2010). This article takes the current state of ICT as given and does not explore the other direction of causation (from politics to technology).

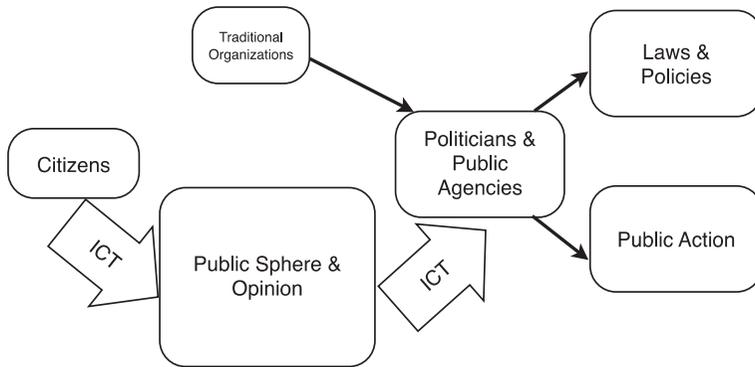


FIG 2. The Internet Enhanced Public Sphere

But the utility of the model for our purposes here lies not in capturing or defending some particular view of democracy, but rather in laying out the general pieces of institutional machinery with which *any* claim about the effect of technology on politics must account. One difficulty, in our view, with some of the claims about the potential benefits of digital technologies for democracy is that they are excessively attentive to the novel dynamics that technology enables but inattentive to the institutional dynamics of political systems. We deploy the simple schema in Figure 1 above as our way of bringing basic political considerations back-in.

The Muscular Public Sphere (Model 1)

Digital technologies accelerate the flow of communication, and some of the first claims about the benefits of the Internet for politics were claims about transformations of the public sphere. These technologies enable many-to-many communication (whereas radio and television are one-to-many broadcast technologies), lower the costs of acquiring vast amounts of information, and lower the costs of creating and expressing all sorts of views, including political views.⁶

The implicit diagnosis is that the existing, pre-Internet, public sphere is democratically deficient because it affords too few speakers and too narrow a range of messages. Content is controlled by a few large corporate entities, derisively known as the Mainstream Media, or simply “MSM.” From this perspective, the Internet will improve democracy by making the public sphere more accessible and less concentrated. Increasing accessibility of the public sphere on the production and consumption sides means that media content will better reflect the considered and informed views of citizens not least because more citizens participate in producing those media messages.⁷ As ICTs foster interaction among citizens, new meaning formation is also likely to increase (Singh 2013). Although it is not often articulated, this view implies that the public sphere will exert increasing force on political decision making.

The implications of this digital transformation of the public sphere are depicted in Figure 2 above.

In the developed democracies, however, the Internet does not seem to have dramatically improved democracy in these ways. The more optimistic predictions have fallen short for several reasons.

⁶See e.g., Benkler (2006, pp. 212–272), Shirky (2008).

⁷The effort to relax strict intellectual property limitations is an important component of this approach. See, e.g., Sell (2013).

First, critics argue that the digitalization of the public sphere has not made it dramatically more egalitarian. Research has shown repeatedly that digital content production and consumption follows a “power law” or “long tail” distribution in which the vast majority of content in any particular domain or site (and for sites overall) is produced or consumed by a small proportion of individuals and that the vast majority of users consume and produce just a little of the overall content. The digitalization of the public sphere may well introduce new voices and new content. However, far from flattening the hierarchy of content production, Matt Hindman showed that the most popular political bloggers had more elite resumes than the regular columnists of the *New York Times* and *Washington Post*.⁸

Second, other critics argue that the digitalization of the public sphere have not made it much more deliberative. In *Republic.Com*, for example, Cass Sunstein argues that individuals cluster into like-minded, homogenous groups on the Internet. This clustering will increase polarization and decrease democratic deliberation as discussion across lines of party, race, class, and perspective decrease.⁹ The result is a type of “echo-chamber” effect where people seek out and therefore only hear like minded viewpoints.

This article cannot settle these debates about whether or not the Internet has made the public sphere more egalitarian or deliberative. The very existence of these debates, however, shows that the Internet has not obviously and dramatically increased the democratic quality of the public sphere above its quality in the pre-Internet era.

Therefore, we do not think that Model 1 accurately depicts the effects of ICT on the public sphere. It is too sanguine. Digitalization may give voice to some who were excluded, and it will certainly change the character of public discourse. Some argue that those changes mark improvements in the democratic quality of the public sphere and others point to new biases and pathologies. More research, as they say, is needed. However, from the current vantage point, it seems that improvements in the public sphere will not be the pivot of a digital revolution that ushers a new era of egalitarian democracy in the developed democracies.

There is, however, a large possible exception to this claim: nondemocratic countries. In many of these countries, governments deliberately diminish the size of the public sphere and control its contents. Many authoritarians seem to have a more difficult time controlling political discussion on the Internet than they do controlling radio and television. Bruce Bimber shows, for example, that discussion of politics as a proportion of all Internet communication is much higher in societies without a free, quality press than in those with freedom of expression and robust (mainstream) media. If he is right, the virtual public sphere is a functional substitute for the absence of a free public sphere of which high-quality press is a part (Bimber 2003). Indeed, the role of social media such as Twitter and Facebook in revolutions in Egypt, Tunisia, and elsewhere in the Middle East has received much attention.¹⁰ As Hussain and Howard show in their contribution to this volume, mobile phone use and other ICT tools consistently contribute to the success of social movements and regime fragility in the context of the Arab Spring (Howard and Hussain 2013). In China, for instance, bloggers discuss social problems, uncover corruption, and even pressure state officials to change policies (Hassid 2012). In nondemocratic societies, then, the digitized public sphere will be dramatically more democratic in terms of who speaks and what they say than the public sphere without the Internet as long as it is difficult

⁸Hindman (2009, p. 104). Benkler (2006, pp. 216–217).

⁹Sunstein (2009, pp. 46–96). One response to Sunstein has been that political bloggers do indeed link to and address opponents' views: Hargittai, Gallo and Kane (2008).

¹⁰See, for example, Howard and Hussain (2011, 2013); Khondker (2011).

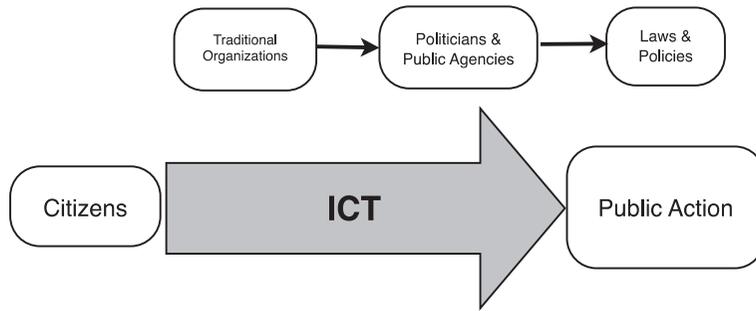


FIG 3. Here Comes Everybody

for authoritarians to control content on the Internet. As others in those societies come to recognize this quality, the digitized public sphere may indeed become more muscular, as depicted in Figure 1, simply because pre-Internet nondemocratic public spheres are so emaciated.

If we are right, digital communications may have created revolutionary opportunities in places like Egypt and Tunisia but will not have similar effects in places where free expression is relatively secure like India, Latin America, North America, and Europe.

Here Comes Everybody (Model 2)

A second model emphasizes production rather than communication. On this view, ICTs enable individuals to come together to achieve all kinds of common purposes and so dramatically reduce the costs of organization. At the limit of this logic, ICTs render traditional organizations irrelevant. Clay Shirky offers the most articulate and provocative expression of this view (Shirky 2008):

Newly capable groups are assembling, and they are working with the managerial imperative and outside the previous strictures that bounded their effectiveness. These changes will transform the world everywhere groups of people come together to accomplish something, which is to say everywhere. (p. 23)

This vision drew political analogies from nonpolitical projects that have engaged volunteers to accomplish all sorts of tasks. The LINUX network around Linus Torvalds has produced a capable and popular computer operating system (Weber 2004). The Search for Extraterrestrial Intelligence has engaged many thousands of individuals in using the unused computing cycles of their personal computers to process observatory radio signals to look for nonrandom anomalies (Benkler 2006). Most famously, Wikipedia relies on many hundreds of thousands of writers and editors to produce the largest encyclopedia in existence (Reagle 2010).

Applied to our basic conveyor belt political model, then, the “Here Comes Everybody” view looks like Figure 3.

As ICT enable groups of people to more readily self-organize to accomplish common goals, more effectively than conventional organizations, the importance of traditional organizations—including advocacy groups and government itself—recedes.¹¹ If it comes to pass, this transformation would mark two kinds of gains for democratic governance. For participatory democrats, the advance is the

¹¹Shirky (2008, pp. 21–24). The early sidekick example, I take it, is meant to show that people can initiate self help and need not rely on traditional organizations like the police (id., 1–14).

direct engagement of citizens in producing a range of public goods and acting for themselves. According to the “Here Comes Everybody” view, citizens who organize themselves through ICTs can accomplish many tasks more effectively, efficiently, and quickly compared with traditional hierarchical organizations.

As Model 6 below shows, digitally enabled self-organization can be an impactful tool for constituent mobilization, particularly in times of political emergency or crisis. However, digitally enabled self-help is less likely to be effective for continuous collective action and commitment in times of political normalcy. There are at least three reasons for this.

First, effective public action in most domains requires inputs—money, authority, capacity—that self-organized individuals frequently lack. The Internet may be able to help individuals organize neighborhood watch patrols, park cleanups, wiring schools for Internet access, and other modern forms of barn-raising. Most of those tasks, however, would be more ably accomplished if concerned individuals could call upon the resources and capacities of existing infrastructure such as local police departments, parks services, and school systems. There is a world of difference, for example, between the initial vision of an organization like See-ClickFix, which developed software that allows individuals to report and visualize local problems like dangerous intersections and potholes and projects like the British FixMyStreet and Boston CitizensConnect, which use ICTs not just for citizen reporting and visualization, but also connect those reports to the appropriate city service agencies.¹² A participant at one recent technology and policy conference put it this way: “I see, ‘See-Click-Fix’ without government is only ‘See-Click.’”

A second difficulty is that the “Here Comes Everybody” approach as a method of solving public problems and providing public goods is likely to be plagued by free rider problems.¹³ Small groups of individuals may be able to satisfy their own interests. But because of the motivational issues, even civically minded self-help groups will “under-produce” public goods because many people will free ride-off of their efforts. For any Internet-organized park cleanup, there will be many more people who benefit from the clean park than people who participate in cleaning it up. One thing that government does—and what the self-help model by definition cannot do—is tax those other park users to pay for an appropriate level of clean-up.

A third difficulty is that self-organized production over digital channels has been most effective when the things being produced consist mostly of information, and the production process involves the manipulation of information. Wikipedia, LINUX, SETI, and so on are projects in which digital engagement produces digital products. Many public goods, however, do not consist primarily of information, but of bricks-and-mortar and human interactions (education, policing, social service work). While ICTs can contribute to the production of such public goods through coordination and information sharing, its impact is likely to be less profound than when the things being produced are essentially informational (e.g., encyclopedias, software).

For these three reasons, we think digitally facilitated self-help is an interesting phenomenon and that there will be many important examples that fill gaps in public services and public action. However, this dynamic will be limited, and it is unlikely to displace the role of traditional public agencies and civic organizations

¹²For more information visit SeeClickFix: <http://seedclickfix.com/>; FixMyStreet: <http://www.fixmystreet.com/>; and Boston CitizensConnect: <http://www.cityofboston.gov/doi/apps/citizensconnect.asp>. SeeClickFix has evolved now so that it does not just provide the reporting and visualization platform, but works with a number of city governments to tie those platforms to the appropriate city agencies.

¹³Shirky (p. 52–3) acknowledges that “In the current spread of social tools, real examples of collective action—where a group acts on behalf of, and with shared consequences for, all of its members—are still relatively rare.”

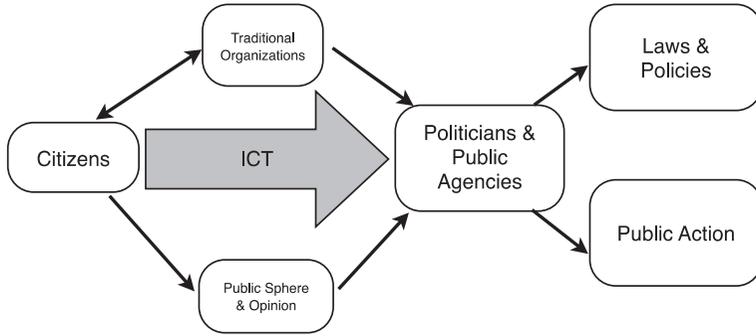


FIG 4. Direct Digital Democracy

in providing public services and solving public problems that require continuous commitment and actions.

Direct Digital Democracy (Model 3)

As the beginning of the digital age, many scholars¹⁴ and practitioners¹⁵ have thought that a central contribution of the new ICTs to democracy would be to create direct connections between citizens on one hand and politicians and policy makers on the other. On this view, ICT takes out the “middle men”—the intermediaries of traditional organizations and media—between citizens and government and so ushers an era of direct and participatory digital democracy as depicted in Figure 4.

The difficulty with this view is that, again, it is inattentive to individual incentives and institutional imperatives. ICT has great potential to enable citizens to communicate directly with government. This has been true for some time.¹⁶ But that potential remains largely unrealized because most policy makers and politicians have little incentive to create direct digital democracy. In other words, the failure to realize e-democracy is not in the first instance a technological problem, but a political one. Solutions, for those desiring greater direct e-democracy, require political innovations much more than technological ones.

A recent study of websites operated by the 75 largest American cities demonstrated that the majority of them provides citizens with ample public information—contact information for public officials, description of the activities of municipal departments, online council agenda minutes, downloadable forms, etc. However, municipal web sites only rarely contain more than such “billboard” information (Mossberger, Wu and Jimenez 2010). The explanation, of course, lies in political incentives rather than technological barriers. Most politicians do not offer rich modes of digital exchange with their constituents, clients, and citizens because policy makers see little gain, and perhaps much risk, in that exchange.

Recently, we have seen both the Obama White House and a number of administrative agencies implement richer tools for dialog with and feedback from citizens. Shortly after Obama’s election, for example, the White House web site featured an “Open For Questions” process in which users could nominate questions to ask the president and vote on the importance of questions that others

¹⁴See, for example, Ben Barber’s discussion of “teledemocracy” in *Strong Democracy* (1984, pp. 275). See also, Rheingold (2002); Shane (2004); Coleman and Blumler (2009).

¹⁵See e.g., Noveck (2009, p. 517); O’Reilly (2010).

¹⁶See, for example, Benjamin Barber’s discussion of teledemocracy in his *Strong Democracy* (1984).

had posed. Later on, the Office of Science and Technology Policy implemented a series of tools for on-line input into the open government policy. In the United States, however, such tools are not “empowered” in that they do not grant to users actual decision-making power—they are consultative tools. Rather, ICTs are most often used for e-government purposes—opening up and optimizing access to public information, and improving the speed and quality of governmental service provision (Shkabatur 2011). While these improvements are clearly positive and laudable, they do not force public officials to share their decision-making power with their constituents.

Sometimes, however, politicians and policy makers do possess a more participatory-democratic orientation. In some of those cases, the use of digital technologies to create additional avenues of direct engagement can be very powerful. Beginning in the late 1980s, the practice of participatory budgeting has spread to many cities throughout Brazil and other countries in Latin America (Wampler and Avritzer 2005; Baiocchi, Heller and Silva 2011). To supplement face-to-face practices of participation, the Brazilian city of Belo Horizonte initiated an e-participatory budgeting program in 2006. Citizens who participated in the e-participatory budget platform could discuss, vote for, and collectively allocate \$11 million USD equivalent to the city-wide public works projects that they judged to be most important. In that year, 172,938 people cast electronic votes. That figure amounts to a stunningly high 9.98 percent of the city’s electorate (Peixoto 2008). One of the authors of this article has found that a number of German cities have created empowered ICT platforms, but that no US government has conferred actual decision-making power to participants in an electronic venue (Shkabatur 2011). The German Pirate Party offers another illuminating example of the potential of e-participation. The party was started by a group of Internet activists as an online campaign against intrusive copyright legislation in Europe and later took shape as a more consolidated political unit. Running on an agenda of Internet freedom and full transparency, the party participated in German elections and won seats in local governments and state parliaments in the country. The party relies on the software program *Liquid Feedback* to virtually suggest debate and vote on policy proposals in real time (Kron 2012). Although electronic participatory budgeting and the German Pirate Party show that ICT can indeed create direct connections of voice and influence between citizens and politicians, they are currently exceptions that prove our rule against such connections.

Digital communication can amplify direct engagement between citizens and their governments in policy making. In order for it to do so, however, politicians and policy makers must want to engage directly with their citizens. This is sometimes, but seldom, the case.

Truth-Based Advocacy (Model 4)

In a fourth model that we call “truth-based advocacy,” ICT platforms are mechanisms by which organized advocacy groups bring salient, often surprising, facts to light in credible ways that tilt public opinion. These platforms amplify the impact of truth in a way which informs and buttresses activism both through traditional means, such as voting, and nontraditional means such as online campaigns and social media outlets. As these new and important truths are acknowledged in the public sphere, they exert pressures that change the actions of politicians and other policy makers, resulting in new policies and public actions. The most recent high publicity example of truth-based advocacy is Wikileaks. Figure 5 below depicts truth-based advocacy schematically.

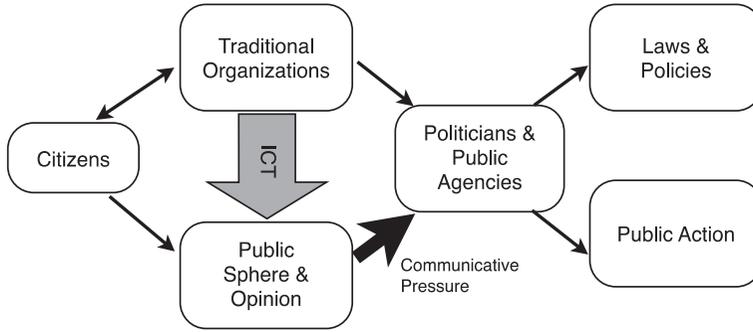


FIG 5. Truth-Based Advocacy

Our examples of ICT models of truth-based advocacy work ostensibly as traditional news outlets through a new medium. However, these truth-based advocacy groups do circumvent traditional media outlets through using technology in new and innovative ways (Benkler 2011) both on the end of user interaction as well as information aggregation.

Information in truth-based advocacy efforts typically flows through both traditional news outlets as well as through new media platforms. These truths can thus reach traditional media users as well as new audiences. They exert communicative pressure on existing governmental institutions. However, the impact of this aggregate pressure is incremental, not revolutionary, as these government institutions are intrinsically slow and resistant to change. These platforms are able to be effective in so far as they are viewed as noncorrupt, honest, and reliable indicators of information in an environment where information is perceived as tainted as a result of corrupt government. Truth-based advocacy organizations are essential because it is never clear which information will be honest or disclosed; therefore, all information becomes potentially tainted. This fear of non-transparency may help illustrate the large splash made by Wikileaks, which confirmed some existing suspicions surrounding a culture of lack of disclosure in politics.

Consider three real-world examples of truth-based advocacy from low- and middle-income countries.

Founded by Vivek Gilani in 2004, *Mumbai Votes*¹⁷ attempts to address systematic flaws in the way citizens relate to the democratic process in India. Some Mumbai politicians are known to pay off slumlords to ensure that an entire neighborhood supports a candidate. There is further corruption in “paid news”, whereby advertisements are cleverly embedded within news reports, rendering many news stories illegitimate. *Mumbai Votes* aims to contribute to the quality of political representation in two ways. First, it addresses the lack of information available to voters about the quality and history of candidates. Second, *Mumbai Votes* keeps citizens informed of what their officials are doing after they are elected into office. The organization presents this information in ways that are easily digestible by average citizens. With the help of students, *Mumbai Votes* aggregates large amounts of information, makes it presentable, and puts it in context. Through presenting the aggregated information in a comprehensive and easily accessible way, *Mumbai Votes* uses its ICT platform to enable users to receive information in a credible and reliable way.

¹⁷<http://mumbaivotes.com/>.

The Fair Play Alliance¹⁸ began informally in 2003 as a project of journalists Zuzana Wienk and Peter Kunder to receive information through Slovakia's recently created Freedom of Information Act (also known as 211). They created an online database that contains information about flows of money between the public and private sectors, allowing *Fair Play Alliance* to trace a donors' funding to a political campaign back to procurement contracts back to that specific company. Building off of this initial database, *Fair Play Alliance* serves as a watchdog organization in Slovakia that uses technology to analyze and effectively communicate information to citizens, journalists, and governments. In a country working to build political infrastructure in the wake of the Velvet Revolution, there are low levels of government trust amongst citizens and high levels of corruption. In this political atmosphere, *Fair Play Alliance's* Zuzana Weink has become a household name in Slovakian politics and the frequent guests of news shows. In 2009, she was nominated for US Secretary of State's International Woman of Courage Award.

The Kenyan Budget Tracking Tool exposes public spending corruption. Most of the development projects in Kenya are sponsored through a governmental instrument called the Constituencies Development Fund (CDF)—an annual budgetary allocation that amounts for a minimum of 2.5% of the yearly national revenue. The establishment of the CDF has led to a substantial allocation of resources to the development of poor and rural areas in Kenya. However, corruption prevents much of this money from reaching its intended beneficiaries. Activists and NGOs have been aware of this problem, but lacked sufficient evidence to prove that multiple development projects only existed on paper. The Budget Tracking Tool aims to close this evidentiary gap, by providing to all interested parties detailed information on the CDF budget. NGOs, civil groups, and community representatives send to the Budget Tracking Tool information requests with regard to the CDF allocations to their constituencies. In return, they receive detailed information, share it with their community, and assess whether the funds were indeed invested in the designated projects.

These case studies exemplify a typical truth-based advocacy dynamic. Publicly credible and politically neutral civil society organizations utilize ICT tools to aggregate large amounts of information on publicly salient issues, present it in an accessible way on an online platform, and disseminate to other civil society actors. This platform then provides a valuable evidence base for public campaigns and other advocacy efforts. ICTs add credibility to these endeavors, as all information is transparently stored on an online platform and can be scrutinized at any time.

Constituent Mobilization (Model 5)

ICT have already demonstrated themselves to be powerful tools for political mobilization and advocacy (Rheingold 2002; Chadwick 2006; Shirky 2008). They played an important role in political campaigns, starting with Howard Dean and increasing in Barack Obama's 2008 presidential campaign (Karpf 2012). They also enabled social activists to launch effective online campaigns in support of their causes.¹⁹

Since the beginning of 2011, ICT have been performing key functions in the pro-democracy Arab Spring protests (Sifry 2011; Tufekci 2012; Howard and Hussain 2013). In Egypt for instance, social media was a primary source through

¹⁸http://www.fair-play.sk/index_en.php.

¹⁹The recent online campaign against the Stop Online Piracy Act (SOPA) and Protect IP Act (PIPA) in the United States is a prominent example of this phenomenon. For discussion, see Sell (2013), Fung and Shkabatur (2013).

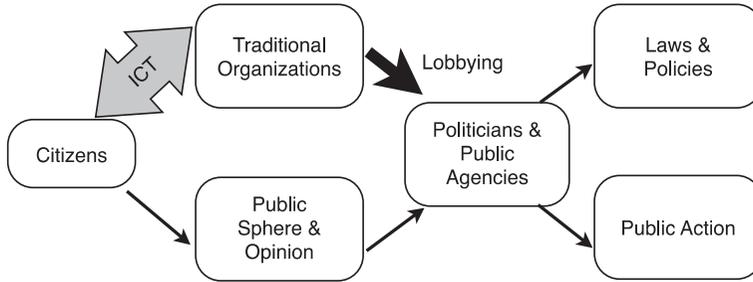


FIG 6. Constituent Mobilization

which people learned about upcoming protests. Those who received information from social media were also more likely to physically attend the protests (Tufekci and Wilson 2012). A similar dynamic occurred during student protests in Chile, as the use of Facebook was significantly associated with protest activity (Valenzuela, Arriagada and Scherman 2012). The network effects of platforms such as Facebook and Twitter allow a rapid dissemination of political messages and an effective organizational tool. Indeed, they have become essential tools of mobilization for many political advocacy groups and organizations (Trippi 2004; Chadwick 2006).

In our fifth model, a central contribution of digital communication in politics is to thicken the connection between political organizations and their members. Lowering the costs of communications allows political organizations to communicate more information to more members at a fixed cost. Conversely, digitalization lowers search costs and allows individuals to find the organizations that advance their interests and perspectives. Finally, digitalization dramatically lowers the transaction costs of some kinds of political action such as donating money to organizations and signing letters and petitions.

Unlike the first three models of Internet and politics, this fifth model is compatible with individual incentives and institutional constraints. Political organizations such as interest groups and political parties seek to mobilize their constituents with or without the Internet because such mobilization is a key resource for influencing policy makers and winning elections. Digital tools, like their precursor direct mail, amplify their mobilization efforts. Political organizations are therefore deeply interested in creating the best methods for digital mobilization, and for improving the digital tools to mobilize more people (Figure 6).

ICT platforms perform at their best for cases of precise, goal-oriented, and time-constrained actions, such as political campaigns or protests. The Brazilian platform *Cidade Democrática*²⁰ is a particularly interesting case. Unlike the cases mentioned above—the Dean or Obama Campaigns or MoveOn.org—*Cidade* does not advance a particular politician or political cause. Instead, it employs ICT to create a marketplace for mobilization. *Cidade Democrática* originates from Sao Paulo, Brazil. It enables citizens, organizations, and governmental institutions to report problems in the city and propose solutions. The platform covers a wide range of municipal issues, from environment and health to transport, education, and planning.

The underlying idea of *Cidade Democrática* is that citizens can and should assume responsibility over their living environment, take an active part in problem solving, and promote public causes that they care about. The platform is therefore best understood as a collaborative social network that allows individu-

²⁰<http://www.cidadedemocratica.org.br/>.

als who are interested in similar political causes to find each other, collaboratively develop ideas, express support to ideas suggested by other participants, spread information, and follow topics of interest. While formally citizens are the central target of *Cidade Democrática*, its primary audience in fact consists of NGOs, civil movements, and loosely structured groups of volunteers. These groups and organizations use the platform for their own advocacy needs, promoting their political causes and amplifying the amount of their supporters. As the founder of *Cidade Democrática*, Rodrigo Bandeira, explains, the platform is not meant to be a “one-stop-shop” for political change: “it is not going to be the tool for political advocacy, but rather one tool among many.”

Social Monitoring (Model 6)

Social monitoring is a method in which public agencies (and/or civic organizations) deploy digital tools to enlist the eyes and ears of citizens to better spot public problems and so bring those problems to the attention of government and the broader public. Social monitoring typically relies on crowdsourcing—a model of distributed production and problem solving—has been first championed as an effective strategy for open-source economic production (Howe 2008; O’Reilly 2010). It entails an outsourcing of functions that are normally performed by experts and professions to the broad public, and soliciting back services, suggestions, solutions, observations, or ideas. Under this model, there is no limit on the number of potential participants, each of whom makes small and discrete contributions without any monetary reward. As the amount of such granular contributions grows, large tasks that would otherwise require immense organizational efforts and last over long periods of time are effectively accomplished.

While the idea of crowdsourcing began in commerce, it has been rapidly adopted in experimental forms by democratic scholars and political activists all over the world (Noveck 2009; O’Reilly 2010; Sifry 2011). Unlike Models 1–5, crowdsourcing methods usually do not aim to thicken the citizen input side of the conveyor belt. That is, they do not aim to create more equal, inclusive, representative, deliberative or potent forms of citizen influence over government. These dynamics of crowd-sourced social monitoring are depicted schematically in Figure 7 below.

Like constituent mobilization (model 5 above), crowdsourcing is very consistent with the incentives and institutional imperatives of public and private organizations. Many such organizations must monitor the world around them (election authorities, public health surveillance, workplace health and safety, city services) as part of public services provision or regulation. Crowdsourcing seems

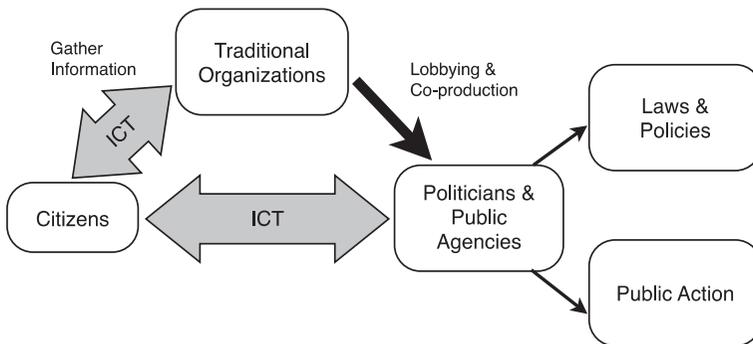


FIG 7. Crowd-Sourced Social Monitoring

to be an effective method of monitoring made possible by ICTs that complements more traditional strategies. So, we can expect to see more crowd-sourced monitoring in the future.

In the field research that informs this article, we examined four projects that employed crowdsourcing methods in very different ways: Ushahidi, Uchaguzi, Kiirti, and Reclamos.

Ushahidi, perhaps the most celebrated ICT platform in the political accountability domain, is a prime example of political crowdsourcing. Ushahidi (meaning “testimony” in Swahili) was initially launched by political bloggers to map incidents of post-election violence in Kenya in the beginning of 2008. It aggregated reports that citizens submitted via the web or mobile phones regarding violations of human rights, and tagged them on a publicly available Google map, according to predefined categories.

The success of the original Ushahidi platform²¹ was unprecedented compared with other accountability ICT platforms. It attracted more than 45,000 users in Kenya alone and exposed events that Kenyan mainstream media was reluctant to report and international media was not fully aware of. Further, Kenyan Ushahidi served as a catalyst for dozens of similar experiments around the world, in particular in the field of election monitoring (Liberia (2011), Brazil (2010), India (2010), Mexico (2009), Philippines (2009) and other countries). While all these experiments were designed according to the original Ushahidi platform, the model underwent substantial modifications. In order to strengthen the credibility and accuracy of the original Ushahidi model, the operators of each deployment attempt to verify reports by calling the reporter back or by relying on newly developed verification technologies (such as Swift-River). In addition to tagging reports that are sent by the “crowd,” the operators are also responsible for crawling the web and aggregating reports from a variety of media sources.

Despite its global acclaim and numerous replications, the Ushahidi model has failed to translate its initial appeal into either mass participation or tangible increases in the integrity of elections.²² The rate of participation on platforms that are based on the original Ushahidi platform remained low and even reports that appeared on the platform seemed rarely to result in tangible actions in the field.

Against the background of this sobering reality, Uchaguzi²³—yet another Ushahidi deployment—was redesigned to monitor the Kenyan constitutional referendum in August 2010. While Uchaguzi (meaning “testimony”) conceptually inherited Ushahidi in the domain of Kenyan election monitoring, it took a fundamentally different approach. In a sharp deviation from the diffuse and little-structured operational mode of Ushahidi, Uchaguzi was rooted in the collaboration of several NGOs. Each was responsible for a specific part of the monitoring effort. Instead of relying on a political genie that would leave the bottle and generate new and unprecedented dynamics in Kenyan politics, Uchaguzi developed partnerships with election-monitoring NGOs and the governmental body responsible for the constitutional referendum—the Interim Independent Electoral Commission (IIEC)—as the main users of the information gathered through the platform. To the extent that those who implemented the original Ushahidi possessed a theory of change, it implicitly supposed that the platform would constitute new political forces and actors—crowds to report election violence and other violations and then to hold the violators accountable. Uchaguzi, which is Ushahidi 2.0, repudiates this revolu-

²¹<http://www.ushahidi.com/>.

²²Peixoto (2012).

²³<http://uchaguzi.co.ke/>.

tionary theory of change in favor of strengthening the hand of already constituted political actors and amplifying more familiar political forces of organized accountability advocacy.

Kiirti²⁴ (meaning “report” or “reputation” in Sanskrit) is a conflict resolution platform deployed in India that is built upon Ushahidi software. Kiirti launched in Beta in Spring 2010 and is offered for free to participating NGO’s during its initial trial stage. Kiirti offers web-based, SMS, as well as phone platforms for users. The conceptual framework behind Kiirti, is that Ushahidi software can be used for citizens to mass aggregate everyday political problems ranging from environmental concerns to concerns of targeted communities such as those with retina disease in India. The Kiirti model is to work directly with the specific NGO, such as the Coalition Against Corruption, to custom build a unique website through the Kiirti interface where users can lodge complaints, which will be received by the NGOs on the back end of the ICT platform. Kiirti makes the web site customizable for each NGO based on the specific features. For instance, in the case of Retina India, Kiirti has set up a unique phone line for users. Through involving citizenry in this way, Kiirti is promoting both direct citizen engagement and awareness, which evolves Ushahidi beyond electoral initiatives.

Looking at the users of all of these ICT platforms, it is mainly professional users in the form of, NGOs, private companies, as well as journalists who use the user-generated information. Thus, suggesting that mass information will continue to be used not by the proverbial “everybody” but rather a select few to whom the information is most directly applicable toward. The average citizen may create the information, but the way this information gets related to the government follows the traditional mechanisms of institutional power. Therefore, these ICT platforms are not transforming the relationship of the citizens with their government. Rather Ushahidi and Uchaguzi are enabling professional users to work as liaisons between citizens and their government.

Conclusion

In the pages above, we offer six different models that depict alternative conceptions of the place and effect of ICTs in politics. These models are by no means exclusive or fully comprehensive. In fact, some of them even complement each other. For instance, Model 6 (Social Monitoring) can be viewed as a limited species of Model 2 (“Here Comes Everybody”), and Model 4 (Truth-Based Advocacy) can be seen as a more mature and professionalized version of Model 1 (Muscular Public Sphere). Taking a bird’s eye view, these models aim to reflect the interaction between digital technologies and politics from the perspectives of both technologists and of political analysts at the same time. Technologists stress the novel capabilities—such as dramatically lower communication and search costs, many-to-many communication, and the dynamics of crowdsourcing and collaborative production—that these new technologies make possible. Political analysts, on the other hand, are especially attentive to the importance of incentives as drivers of human action and the role of organizations and institutions in producing outcomes such as laws and public actions. Each of these models takes both kinds of considerations into account.

The result of the above analysis is that the most heady and revolutionary expectations for the transformative role of digital technology—an egalitarian and empowered public sphere, the displacement of traditional organizations by Internet-facilitated self-help through self-organization, and direct digital democ-

²⁴<http://www.kiirti.org/>.

racy—will be relatively uncommon (but not completely absent). We think that three more incremental contributions of ICTs to democratic governance—truth-based advocacy, constituent mobilization, and social monitoring—will become increasingly impactful because these uses of digital technologies amplify the efforts of organizations and individuals to achieve the aims that they already have. That is, the last three models are compatible with existing incentives and institutional constraints.

Like many others who have offered prognostications about the Internet and politics, we are probably wrong in our predictions about the fate of the six models above, and we are probably wrong for reasons that we cannot even imagine from this particular point in time. The conclusions that we offer about each of these models are thus offered as sensible but speculative, not definitive or dispositive.

However, we hope that our more durable contribution to discussions of the role of the digital communication technologies in politics is to encourage each of the two “sides” of this debate—the starry-eyed technologists and the hard-headed political analysts—to take the other more seriously. To the political analysts, there is something different about communication, organization, production, and action in the digital era.²⁵ The new ICTs do enable new kinds of exchange and collaboration that are significant for politics. To the technologists, these magical new platforms and possibilities exert the effects they have against a thick background of organizations, institutions, and political actors. The way to understand the effect of technology on politics is not to generalize or analogize from one or other digital platform—such as the collaborative production of knowledge on Wikipedia—but rather to understand some digital technology as a part and an intervention in a larger political system.

The six schematic models developed above create a vernacular with which to consider points of technological intervention and a larger political system. We hope that others will take up these models, and the hypotheses that we offer about them to show how we are wrong or incomplete. These models are all models of politics within a domestic political system—national, provincial, or local. These models are obviously not appropriate for those who are interested in other kinds of politics—transnational politics or the politics of governing multinational corporations. Extending this approach to those kinds of cases would entail first sketching some broader account of how political forces in those domains operate absent digital technology, and then reasoning about the character and effects of some technological intervention on that much larger political system.

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²⁵See e.g., Karpf (2012) for a related argument in the context of online political mobilization.

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