Research Article

Overcoming Citizen Mistrust and Enhancing Democratic Practices: Results from the E-participation Platform *México Participa*

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Abstract

This article reviews the experiences, obstacles, and lessons learned from development and deployment of the México Participa *e-participation platform as a case study for future platforms, both in Mexico and in transitional democracies with similar sociopolitical characteristics such as pervasive distrust of public institutions and limited civic participation.* México Participa *was released three months before the June 2015 midterm Mexican presidential election. Although the platform continues to operate, this article focuses on the period leading up to the election. 3,054 participants offered 336 suggestions and provided 14,033 peer-to-peer assessments. A postelection survey highlighted the need for a platform such as* México Participa *to be continually available to sustain citizen evaluation of government performance and to promote transparency and accountability.*

Introduction

Middle-income countries such as Mexico can benefit from new electronic participatory mechanisms to achieve the Sustainable Development Goals identified by the United Nations to enable economic development, foster social inclusion, and strengthen social and political institutions (UN, 2015). Information and communication technologies (ICTs) are useful tools in accomplishing these goals, including modernizing public administration and promoting transparency. As regional changes to promote e-participation continue, Mexico's alignment in the region requires the implementation of multisectoral strategies for the use and appropriation of ICTs with

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the capacity to enhance its emerging economy and generate a virtuous cycle for social development. Mexican democracy, which we consider to be in transition, can be strengthened and improvements in public policy can be advanced by an active and informed citizenry who can make their voices heard by decision makers (Becerra, Salazar, & Woldenberg, 2000; O'Donnell & Schmitter, 2013; Przeworski, Alvarez, Cheibub, & Limongi, 2000). We understand *transitional democracies* as those undergoing deep transformation in which various political practices and institutional arrangements, previously controlled by the ruling elite, enter into a phase in which the definition and functioning of those political structures and practices are subject to discussion, which is guaranteed by the Constitution and influenced through citizen participation.

According to global indicators, such as the Global Competitiveness Report (Schwab, 2015), the United Nations E-government Survey (UNPACS, 2014), and the World Telecommunication/ICT Indicators database (ITU, 2015), Colombia and Brazil have been able to position themselves more favorably than Mexico with regard to best practices in e-participation. In 2000 Brazil created the "Green Book," a guide for nationwide inclusion in information networks. This plan contained actionable programs to cultivate knowledge and technological abilities, with an emphasis on electronic governance and broadband access, among other elements. Colombia, in a similar vein, developed a normative framework in 2009 to transform the federal government's infrastructure and operations, while establishing a plan to broaden Internet access. Despite Mexico's visible achievements, such as the consolidation of a political party system and the establishment of the Instituto Nacional Electoral (National Electoral Institute), a government body designed to ensure fairness in elections, important aspects of the authoritarian system of the 20th century remain, and these elements hinder the flourishing of Mexican democracy. These include the political patronage practices of the political parties, an inefficient justice system, corruption, and feeble civic participation among citizens (CIDE, 2015; Fox, 1994).

Leading up to the 2015 Mexican midterm elections, a prototype e-participation platform called *México Participa* (Mexico Participates) sought to bring citizen voices into communication with candidates. The platform offered citizens a tool with which to express their experiences and priorities—directly and anonymously—to the candidates.

México Participa is an HTML5 platform based on a subset of this article's coauthors' previous work on the California Report Card. Launched in 2014, the California Report Card invited citizen feedback on public policy across the 58 counties of California (Nonnecke et al., 2016). *México Participa* adapted the California Report Card to the context of the 2015 Mexico midterm election, thereby serving as a case study within the context of an election year during an institutional crisis of pervasive mistrust generated by violence and impunity (Amnesty International, 2015). We investigated whether the e-participation experience in context with the above-mentioned variables would bring together citizens and candidates, and whether citizens and candidates would adopt the tool for civic purposes.

The object of this article is to analyze the experiences, obstacles, and lessons learned from the *México Participa* study to contribute to the growing understanding of best practices in e-participation for transitional democracies.

Background

According to the *Informe País sobre la calidad de la ciudadanía en México* (Informe País on the quality of citizenship in Mexico) developed by Instituto Nacional Electoral (INE, 2014), Mexico is in the midst of a complex process of building citizenship, while immersed in a setting characterized by pervasive mistrust of existing institutions and politicians. According to the survey, 7 of 10 Mexicans believe that government actors do not take their opinions into account. Therefore, the construction of a virtuous triad of transparency, accountability, and citizen participation is inhibited by this deficit. We understand *citizen participation* as activities that enable citizens to properly exercise their rights and responsibilities, beyond the act of voting (Thompson, 1970). Civic engagement and political participation improve citizens' understanding of their own interests as well as those of others (Parry, 1972).

Democracy, as understood by the United Nations Development Programme (UNDP, 2004), requires controls beyond elections, such that citizens claim their civil, social, economic, and cultural rights in an articulated

manner. Such practices suggest that citizens can make themselves heard, and that they can influence and participate in decision making. International studies using different metrics converge in their observations of widespread low levels of civic participation in Mexico (INE, 2014; International IDEA, 2012; Latinobarómetro, 2015). Vanderbilt University's "Barometer of the Americas" found that, compared with other Latin American nations, Mexicans do not participate in civic activities beyond voting due to mistrust and a sense of separation among citizens, government, and other key stakeholders such as political parties (Romero, Parás, & Zechmeister, 2015). Freedom House (2015) gave Mexico 12 of 16 possible points on its index of political pluralism and participation, which indicates, among other topics, that there is a 75% chance that people have the right to organize in different political parties or other competitive political groupings of their choice. The assessment further notes that minority groups cannot achieve full political rights due to excessive barriers and requirements for participation. This kind of civic self-organization and collaboration among citizens could not only result in a more participatory electorate, but could also combat corrupt practices, such as bribery involving both voters and candidates, to influence their political decisions.

Meanwhile, the World Economic Forum in its *Global Competitiveness Report 2014–2015* (Schwab, 2015), gave Mexico 2.2 of 7 possible points in "public trust in politicians," placing the country near the bottom of the global ranking (Mexico ranked 114 out of 144), and 3.9 of 7 possible points in "transparency in government policymaking." Taking into consideration that the minimum ranking among all countries is 2.3, this evaluation indicates a widespread lack of confidence in government and a lack of transparency. Despite the distrust of politicians, Mexicans vote in numbers similar to those observed in Western democracies. During the 2012 presidential election in Mexico, 62% of the registered voting population participated in the elections (INE, 2014). The midterm elections of 2015 reached a voter turnout of 47% (of 83 million registered voters), slightly higher than the 2009 midterm elections, with 44.61% (INE, 2014).[1] This notable voter turnout is not correlated with other forms of civic participation such as addressing congresspersons, participating in partisan activities, supporting rallies, signing petitions, or requesting public information.

Among Latin American countries, Mexico's citizens are the most dissatisfied with their government's performance against democratic indicators, with only 19% reporting satisfaction. Latinobarómetro (2015) identified the variables associated with satisfaction as ranging from the possibility for socioeconomic advancement to the right to freedom of expression. The same study reports that only 32% feel close to any political party, and only 17% feel they have political representation in Congress. Furthermore, dissatisfaction with the political regime and distrust of politicians and government institutions are the characteristic features of Mexico's electorate.

This distrust extends to another democratic layer, that of law enforcement agencies, where only 48% of respondents feel the police are effective, and only 5% believe a crime will receive punishment (INEGI, 2015a). In 2015, the Mexican government launched Justicia Cotidiana (Daily Justice) (CIDE, 2015), a platform that seeks to strengthen justice in four areas: everyday justice, family justice, entrepreneur justice, and local and community justice. The primary objective of this initiative is to develop and outline solutions through interest groups and to enhance transparency. Justicia Cotidiana was designed in a format that would be attractive to citizens who are frequent users of the Internet and mobile devices. Therefore, there is an opportunity to strengthen democracy among the electorate via e-participation tactics.

The midterm elections of June 2015 were held after an important electoral reform in Mexico that allowed, for the first time, independent candidates to run for public office without a party affiliation. The reform also allowed Mexicans living abroad to vote in midterm elections for governor in some states, as compared to previous electoral regulations that restricted remote participation to presidential elections every six years. These elections resulted in the largest number of seats for popular election in dispute in the country's history: nine governorships, 500 seats in the House of Representatives, 903 mayoral positions, and 639 local legislators. *México Participa* was released on April 15, 2015. This article shares its implementation experiences until June 30, 2015, when the Mexican midterm elections were closed.

1. In Mexico, presidential elections take place every six years, and the president cannot run for re-election.

E-participation Experiences in Mexico

Mexico is no stranger to the incorporation of ICTs into political affairs, although its introduction has been tenuous. The current federal government has set a goal of modernizing public administration in its digital agenda. Examples of this include the Instituto Electoral del Distrito Federal (Distrito Federal Electoral Institute, or IEDF), which convenes citizens to participate in various projects corresponding to the "participatory budget"[2] of each fiscal year (IEDF, 2014).

Since the 2009 midterm elections and the 2012 presidential election, various citizen initiatives have also launched, with particular attention paid to transparency of the electoral process. The project Cuidemos el Voto (We Care for the Vote) was launched in 2009 to report incidents and irregularities as determined by electoral laws. The mapping platform Ushahidi[3] (testimony, in Swahili) was used to aggregate information received via short text messages (SMS), messages of 140 characters (e.g., Twitter posts), e-mails, and reports. As mobile device penetration increases among citizens, such digital platforms have attained greater relevance in civic life.

During the 2012 presidential campaign, nongovernmental organizations (NGOs) and universities launched more than 30 distinct citizenship projects (Meneses, 2015). By 2015, universities and NGOs had initiated various projects aimed at addressing more than only electoral irregularities. Three efforts became the most prominent and the most discussed in the media (Elecciones y Ciudadanía, 2015). The Universidad Nacional Autónoma de México created Voto Informado (Informed Vote),[4] a project that compiles and publishes the views and positions of candidates in federal representative races. Using a nine-section questionnaire, candidates were asked about topics in the areas of society and democracy, the federal budget and fiscal policy, legislative agenda items, transparency, accountability, and other current policies and issues. About 80% of the 2,663 candidates completed the questionnaire, and their responses were posted on the website a few days before the midterm election.

Candidato Transparente (transparent candidate)[5] was led by the Instituto Mexicano para la Competitividad and the NGO Transparencia Mexicana along with other allies in civil society. They sought to generate public confidence in their political representatives by demanding the publication of three financial reports: assets and financial investments, conflicts of interest, and tax returns. The nine candidates for governor provided this information. In contrast, candidates for legislative positions showed a low participation rate of only 53% (Almanza, 2015). These results suggest that the strength of Mexico's democracy faces a major challenge in its federal legislative branch. The third exercise, the above-mentioned *México Participa,* an initiative of the Tecnológico de Monterrey (Monterrey Institute of Technology and Higher Education) and the University of California, Berkeley, aimed to strengthen the participatory capacity of citizens.

Literature Review

Within political science, the proposals of "deliberative democracy" posited by Robert Dahl (1992), that considers an inclusive and deliberative decision-making process, are fundamental to the debate around civic participation. Dahl extends participation beyond voting and militant party membership to include citizen influence on decision making. *E-participation* is defined as the use of ICTs in democratic processes to generate meaningful interactions across the several stages of political decision making (Gramberger, 2011; Grönlund, 2003). The literature evaluates participation from diverse perspectives such as cognitive aptitudes for participation (Coglianese, 2006), platform design (Schulz & Newig, 2015), deliberative possibilities (Strandberg, 2015), the quality of participation (Tambouris, Migotzidou, & Tarabanis, 2015), technological point of view and innovation (Epstein, Farina, Heidt, & Newhart, 2014), and the generation of data available for development (Nonnecke et al., 2015). Another approach can be characterized by defining typologies for the classification of methods and models to implement and evaluate e-participation experiences (Breindl & Francq, 2008; Casteltrione, 2015; Coleman & Gotze, 2001; Glass, 1979; Perez, Wimmer, & Moreno-Jimenez, 2014; Phang & Kankanhalli, 2008; Porwol, Ojo, & Breslin, 2014; Scherer, Wimmer, & Ventzke, 2009).

2. 3% of the budget is equally allocated to each of the 16 delegations that comprise Mexico City.
3. www.ushahidi.com.
4. www.votoinformado.unam.mx.
5. www.candidatotransparente.mx.

Studies consistently recognize a new wave of innovation in both full- and semiconsolidated democracies, as demonstrated by the case studied herein. These studies also acknowledge that such initiatives develop from within the central government, local governments, civil society, and the private sector (Buss, Redburn, & Guo, 2006). Technology is not a solution, but a facilitator; quantity is not quality; and effective promotion is a key element for electronic consultations (Coleman & Norris, 2005). The studies also share the assumption that e-participation initiatives should encompass three aspects: technical, social, and political (Macintosh, 2004). Our approach in this article emphasizes the sociopolitical aspect.

Regarding e-participation platforms, literature on efforts in Latin America has been growing since 2000, with studies that describe projects in countries such as Brazil, Peru, Colombia, and Argentina (Díaz, 2013; Griner, Porrúa, Tesoro, Sáenz, & Petrovic, 2014; Valenti, 2014). However, national and local projects that focus on amplifying and connecting citizens' interests for improved decision making have only appeared within the last five years. The Mayor's Office of Santiago de Cali in Colombia, together with the Fundación Ciudadanos Activos (Active Citizens Foundation), allows citizens to identify problems and propose solutions using Ciudadanosactivos.com, which also saves citizens time and money in the simplification of forms (Valenti, 2014). Another Colombian project, Urna de Cristal (Crystal Urn), launched in 2012, is a multichannel platform for government–citizen interaction, and its successful implementation led to a law to facilitate public services (Díaz, 2013).

In Brazil initiatives include Gabinete Digital (Digital Cabinet) in Río Grande du Sul. Since 2011 Gabinetedigital.rs.gov.br invites citizens to pose questions for the governor. The questions garnering the most votes from other users receive a direct response. This year the platform received 1.3 million proposed questions and 120,000 votes (Griner et al., 2014).

In Peru and Argentina e-participation platforms include projects whereby citizens respond to legislative proposals and suggest priorities and alternatives. The virtual legislative forum in Peru[6] is an important initiative that has been emulated by other countries in the region (Perú, Congreso de la República, 2016). During the last decade, the site has hosted 1,242 forums in which citizens have presented 759 alternatives. Recently, the Demos project in the province of Buenos Aires, Argentina was created to support community-level discussions on the most important legislative proposals (Scarabino, 2016).

Latin America is seeing a growing urgency to develop mechanisms to connect citizens with decision makers. Projects that depend on government initiative are embraced by diverse sectors, each influenced by both the young population and the democracy deficit characteristic of these countries. *México Participa,* on the other hand, was implemented by two universities in the context of a national election to provide candidates with constituent input that could be incorporated into their election proposals. It is an initiative that originates from academia, a sector that has recently begun to propose democracy-building, civic participation–oriented projects in Mexico and across Latin America.

The *México Participa* Platform

México Participa functions within the DevCAFE (Development Collaborative Assessment and Feedback Engine) platform, which was developed at the Center for Information Technology Research in the Interest of Society (CITRIS) at UC Berkeley. The platform allows for direct citizen involvement for several purposes, such as strengthening transparency in democratic governments or facilitating decision making based on crowdsourced community needs (Nonnecke et al., 2015). It provides firsthand, inclusive, and interactive feedback to detect relevant concerns (patterns, problems, outstanding issues) that may be of particular interest to key decision makers.

The platform offers a visual and interactive interface that allows participants to immediately see their position in relation to others for each issue and to evaluate the textual responses of others (see Figure 1). It also incorporates statistical tools such as Principal Component Analysis (PCA) to enable efficient identification of differentiating factors in the quantitative answers. These statistics are rapidly calculated, allowing researchers to discover and share timely knowledge in the field (Nonnecke et al., 2015).

6. http://www4.congreso.gob.pr/pvp/forosl/.

México Participa has three phases. During the first phase, the participants provide demographic data, and in the second phase they evaluate government performance on timely policy issues on a quantitative scale from 0 (strongly disagree) to 10 (strongly agree), reflecting the Mexican academic grading scale of 0 (failing) to 10 (excellent performance; see Figure 1). Finally, in the third phase (qualitative evaluation) participants provide a suggestion for a priority policy issue that should be addressed at the national level and are invited to rate the importance of other participants' suggestions, enabling participants to collectively identify priority policy issues (see Figure 2).

Implementation Method

Interventions require sensitivity to context and a citizen-driven approach. Once a problem is identified, the next step is to search for a framework to bring the ideas into action. Several methodologies are available for building e-participation platforms using best practices, and researchers are encouraged to follow or adapt them, depending on goals and context (Macintosh, 2004). Researchers must balance the need for straightforward, anonymous access to systems against the need to collect personal data for various reasons such as authentication and evaluation, while considering rights of access, protection of privacy, and data security. Also, study designers must decide how much information should be provided to assist individuals to be adequately informed on the issues and thus competent to make meaningful contributions to the public conversation.

E-participation projects require a multistakeholder approach to crowdsource ideas to design useful and meaningful questions, identify appropriate technological approaches, and lower the risk of misinterpretation during public consultation.

Based on the model proposed by Macintosh (2004), we analyzed *México Participa* through three dimensions:

1. E-enablement: Facilitating access to citizens to engage with democratic processes
2. E-engagement: Broadening public consultation to increase debate and dialogue
3. E-empowerment: Empowering citizens from the bottom up to assess and present proposals to elected leaders

The three dimensions are not consecutive stages, but reflect simultaneous dimensions of social, technological, and political practices that help evaluate the platform and improve future e-participation tactics.

E-enablement

How does one invite people to participate in an environment of mistrust? Which topics should be assessed? Which topics are most valuable to decision makers? To answer these questions, the *México Participa* team established a panel of experts from several disciplines and sectors—academia, civil society, electoral institutions, media, government. This panel was convened to discuss issues the platform should incorporate and assess via citizen feedback and to forestall possible obstacles such as minimal participation during the preelection period, intrusion of bots, and risks to platform security. The discussion with the panel of experts also focused on the kinds of questions that would be useful for candidates and, at the same time, meaningful for participants. The project's term and sustainability were important topics to establish prior to the platform's release.

Since 500 seats in Congress and more than 2,000 municipal seats were being contested, the platform asked four demographic questions of each participant: their state, municipality, gender, and age. These demographics enabled the research team to identify emerging trends and issues in specific districts, which could then be communicated to the appropriate candidates to strengthen their public service.

Six issue-based topics were identified: employment, health, education, public safety, perception of corruption, and perception of violence. A single open question was included in the qualitative phase of the platform, with the intention that elected leaders would have direct access to national perceptions about urgent problems in need of a solution. In parallel, participants would be able to evaluate others' suggestions for priority policy issues. These actions sought to generate bottom-up participation.

Prior to the launch, the platform was pilot tested to ensure reliability and validity. The tests were developed

Figure 1. User interface of México Participa: Quantitative evaluation phase.
Source: Screenshot of mxparticipa.org.

in two stages: first, with an internal team to review phrasing and the order of the questions and, second, in external control groups. Both tests ensured that the team could resolve any irregular behavior immediately.

E-engagement

To increase citizen engagement and broaden consultation, the team adapted the platform to the grading scale used in Mexican schools, 0–10, to make it more understandable for participants. This would facilitate the quantitative phase of citizen evaluation of priority policy issues: 0 (strongly disagree) to 10 (strongly agree; see Figure 1). Participants could skip any question they were uncomfortable answering or those for which they felt they lacked the expertise to answer. The questionnaire assessed satisfaction with the six following key areas in their communities, as determined by the expert panel: availability of employment with social security, quality of primary education, availability of health services, level of public safety, perception of violence, and perception of corruption.

At the end of the assessment participants could compare their responses with those of other citizens in the country and in their state via icons based on a stoplight theme (see Figure 1). Average responses were coded at three levels with the aim of contrasting comparisons within three dimensions: national, state, and personal. The groupings were coded as 0–3 (poor performance in red), 4–7 (moderate performance in yellow), and 8–10 (excellent performance in green).

Given that in 2014 Mexico had an Internet penetration of 50%, full and equitable national participation could not be reached by digital initiatives alone (INEGI, 2015b). Furthermore, to reach as many participants as possible, researchers sought broad participation by collaborating with strategic partners who assisted with community engagement and outreach within different sectors. *México Participa* benefited from national media coverage via the Instituto Mexicano de la Radio (Mexican National Public Radio), which promoted the platform through its 18 radio stations and websites. To address the uneven access to technology, Tecnológico de Monterrey announced the platform through 2,329 centros virtuales de aprendizaje (community learning centers), a network of centers operated in partnership with municipal governments and the private sector, which offer online courses targeting Mexicans of lower socioeconomic status. Additionally, a video campaign featuring the objectives of the initiative and a tutorial on how to use *México Participa* was developed and distributed through YouTube and Facebook to familiarize citizens with the platform. The two videos accumulated 1,108 views on YouTube during the evaluation period.

E-empowerment

México Participa asked participants to answer the open-ended question, What is the main problem in Mexico that must be addressed? The question was phrased to solicit firsthand feedback from citizens on priority policy issues that should be addressed by elected officials during their tenure. This process sought to realize the objective of e-empowerment by giving a voice to citizens and strengthening their participatory capacity. In Figure 2 the spheres with greater proximity represent participants who provided similar responses to the

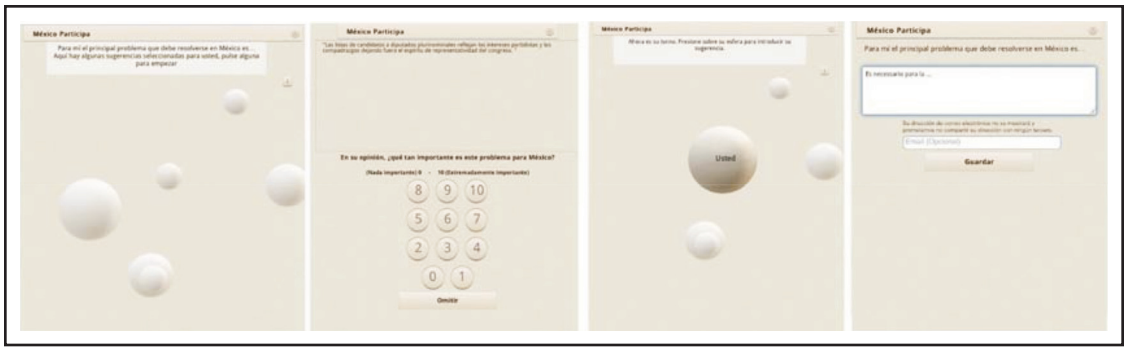

Figure 2. User interface of México Participa: Qualitative evaluation phase.
Source: Screenshot of mxparticipa.org.

quantitative questions. This mechanism allows participants to immediately discern other participants with similar opinions.

For the evaluation of others' suggestions, we also used a scale of 0–10, where 0 meant "not at all important" and 10 meant "extremely important." The platform does not show all suggestions, but, rather, selects a subset of suggestions (usually 6–7) using uncertainty sampling, where suggestions with a greater standard error have a higher probability of being shown. This algorithm effectively encourages more evaluations of the controversial suggestions to identify common attitudes and avoid biased evaluation by a small group (Nonnecke et al., 2015). Following the evaluation of two suggestions, the participant then types his or her suggestion, which will be evaluated, in turn, by other participants.

Through the Dirección de capacitación y educación cívica (Executive Department of Electoral Training and Civic Education), the INE agreed to publish the results and make them available to the elected candidates. To do so, data protection was required, and the platform stated explicitly that respondents must respect the rights of access, rectification, correction, and opposition as described under Mexican law.

Social Networks in México Participa

In urban areas with greater use of online social networks, a "learn, share, and participate" communication strategy was implemented. As a part of this strategy, 64 gubernatorial candidates were invited to participate via Facebook and Twitter. Table 1 illustrates that in the case of Facebook, 27 (42%) of candidates had an open profile that allowed posts on their timeline, 22 (34%) of candidates did not allow posts on their timelines, and 15 (24%) did not have a Facebook profile. In total, 74 posts were made to Facebook, resulting in 11 "likes," one candidate sharing the post, and one making a comment. That is, 55 (86%) candidates did not interact with the publications on their profile. In the case of Twitter, 41 (64%) candidates had an active account, and 23 (36%) had not enabled a network profile. *México Participa* sent 128 tweets, of which six were marked as favorite, 11 were forwarded to their networks or retweeted, and one candidate followed the profile of *México Participa.* Nearly 90% of the candidates made no interaction with the messages sent. *México Participa* posted 145 posts on Facebook and 1,259 on Twitter. *México Participa* gathered 532 "likes" on its Facebook page and gained 280 Twitter followers.

México Participa initiated another strategy to inform the population connected to social networks by contacting the 128 representatives in the Senate and replicating the same exercise to "learn, share, and participate." This yielded the following results (see Table 2): 62 (48%) senators had an open Facebook profile; 47 (36%) senators had a closed profile, with or without access to posts on their timelines; and 19 (16%) senators did not have a Facebook profile. 129 posts were made to senators' pages, three of which were "liked," two shared, and two commented on. Some 96% of the senators had no interaction with the posts. In the case of Twitter, 110 (86%) senators had an active profile on the social network, and 18 (14%) did not have an account. *México Participa* sent 294 tweets, of which 20 were marked as "favorite," 10 were shared among

Table 1. Gubernatorial Candidates' Social Media.

	***México Participa* Social Media Accounts**		**Gubernatorial Candidates' Social Media Accounts**				
	Total Posts and Messages	**Total Likes and Followers**	**Open Profile**	**Closed Profile**	**No Profile**	**Posts and Messages Sent**	**% Engagement**
Facebook	145	532	27	22	15	74	17%
Twitter	1,259	280	41	0	23	128	14%

Source: Prepared from social media platforms.

Table 2. Senate Social Media.

	***México Participa* Social Media Accounts**		**Senators' Social Media Accounts**				
	Total Posts and Messages	**Total Likes and Followers**	**Open Profile**	**Closed Profile**	**No Profile**	**Sent Posts Messages**	**% Engagement**
Facebook	145	532	62	47	19	129	5%
Twitter	1,259	280	110	0	18	294	11%

Source: Prepared from social media platforms.

their networks, and two followed *México Participa's* Twitter profile. 90% had no response to the messages sent.

Use of social media networks as a key outreach strategy did not yield expected engagement and response. We attributed the lack of engagement to the novelty of this kind of e-participation experiment. Nevertheless, social media networks are growing in popularity in Mexico and do offer opportunities for future e-participation engagement.

Results: Citizens' Voices in *México Participa*

México Participa attracted 3,054 participants during the period reported in this article. Of the participants, 48% were female, 51.5% male, and 0.5% identified their gender as "other." As Figure 3 illustrates, more than a half of participants were between the ages of 18 and 34 (57%).

States with the greatest participation—Mexico City, the State of Mexico, and Nuevo León—have home computer penetration rates of 58%, 40%, and 52%, respectively (INEGI, 2014), and represent three of the top five states in Mexico with Internet access. In terms of Internet penetration via smartphone, their rates are even higher: 77%, 67%, and 78%, respectively (INEGI, 2012). 70.5% of *México Participa* participants accessed the platform from personal computers, 18.8% from smartphones, and 10.7% from tablets.

Quantitative Evaluation

México Participa participants received and compared responses by others to each quantitative evaluation question, using graphical icons that made comprehension easier regardless of language and literacy barriers (see Figure 4).

Table 3 illustrates a descriptive analysis of the data to identify methods for central tendency and standard deviation across the six quantitative evaluation questions. The results demonstrate an average of four points over 10 with a low standard deviation, which indicates a uniform evaluation for this section. However, the difference between the maximum and minimum scores shows an average of 2.5 points, in which the lower range of the six issues we evaluated corresponds to "access to social services" and the higher range corresponds to "perceived violence."

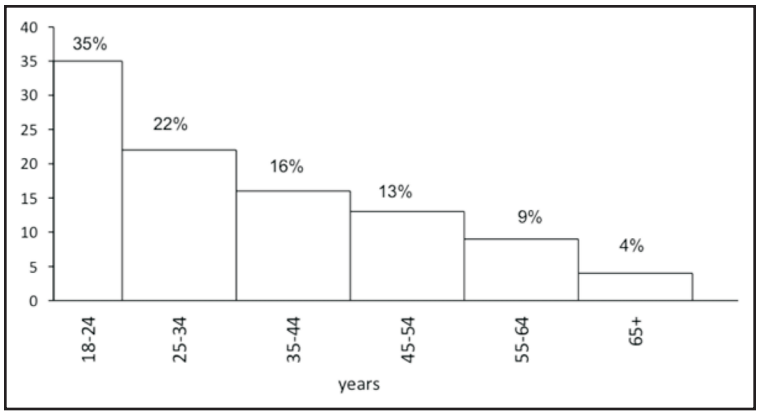

Figure 3. Participation by age. 2% left the selection of age blank.
Source: Based on database of results of México Participa.

Qualitative Assessment

Evaluation is not the same as forming an opinion and making a proposal, both of which require active participation. Nonetheless, participants made 336 suggestions and provided 14,033 peer-to-peer assessments. The three suggestions that received the highest scores in response to the question "What is the main problem in Mexico that must be addressed?" are included in Table 4.

Rating approximation refers to Wilson Score Ranking that has been applied to other problems in crowdsourcing (Nonnecke et al., 2015). The Wilson Score Ranking was calculated by taking r, the mean rating evaluation of each participant-generated suggestion and calculating the 95% confidence interval for r, using the standard error of r +/− 1.96*SE(r). The suggestions were ranked by the lower bound of r − 1.96*SE(r). Among the suggestions proposed by participants, two concepts that were also evaluated in the quantitative section were prevalent: education and corruption. Further studies will show whether there is a correlation between these two variables in the Mexican worldview.

México Participa Lessons

Based on the model proposed by Macintosh (2004), we have examined e-enablement, facilitating citizens' access in democratic processes; e-engagement, broadening public consultation to increase debate and dialogue; and e-empowerment, empowering citizens from the bottom up to assess and present proposals to elected leaders. In the first dimension, e-enablement, we identified the need for those employing e-participation tactics in emergent economies to seek strategic partners at the national and local levels in order to realize broad civic engagement and to reinforce a participative culture. In the second dimension, e-engagement, we observed that projects implemented in socially heterogeneous contexts need to be accessible and affordable for those with fewer digital skills. We found that significant disparities in digital skills and access to online resources affected participation in *México Participa*. Community learning centers served as an important bridge to these Mexicans without access to computers. Coverage by Instituto Mexicano de la Radio and other media outlets was valuable and necessary to disseminate news about the project to a country of 120 million residents. Countries facing a huge digital divide need traditional media to spread the word about initiatives that are important to civic life.

Communication campaigns should target the greatest possible percentage of the population. Platform tutorials should be short and simple for better understanding. In the third dimension, e-empowerment,

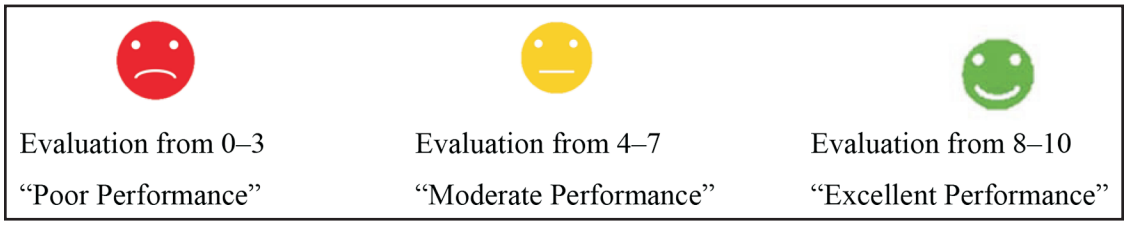

Figure 4. Visual scale display presented on México Participa.
Source: mxparticipa.org.

Table 3. Quantitative Evaluation.

Questions	Icon	$\bar{X}$	S	Min	Max
Question 1. In my town/delegation, there are opportunities for employment with social security (IMSS, ISSSTE, PEMEX, Navy, Defense, Other).		4.63	0.57	3.62	5.79
Question 2. In my town/delegation, my children and family members have access to a good public education.		4.53	0.49	3.24	5.54
Question 3. In my town/delegation, my family and I have access to good public health services.		4.36	0.49	3.18	5.25
Question 4. In my town/delegation, public security is good.		3.93	0.69	2.35	5.15
Question 5. In my town/delegation, one lives without violence.		4.02	0.71	2.68	5.64
Question 6. In my town/delegation, corruption is not a problem.		3.24	0.61	1.93	4.55

Source: Based on database of results of México Participa.
Note: 0 = strongly disagree; 10 = strongly agree.

Table 4. Top-rated Suggestions to the Question "What is the main problem in Mexico that must be addressed?"

Top-rated suggestions for priority problems	Rating
"There are three problems that the Mexican government must urgently resolve across the board, not via half measures as it has been doing in a mediocre way: corruption, insecurity and education."	0.91
"Insecurity along with corruption, unemployment or low-wage employment, lack of opportunities for youth and adults to advance, the fact that in my community concessions to foreign companies are not limited, in the health sector, there is a shortage of personnel in the clinics, in addition to materials to treat patients, and in the schools there are not enough school personnel (teachers) trained to care for children with problems in their families or with problems with bullying."	0.88
"It is the corruption."	0.88

Source: Based on responses from México Participa.

establishing incentives is important. We have learned that a main incentive for overcoming mistrust and increasing citizen participation lies within the project organizers' commitment to bring results to decision makers. Moreover, care must be taken to actually transform the information collected from citizens into concrete public policy actions.

E-participation projects should go beyond simply assessments and look further to strengthen a sense of community through participation and public dissemination of data insights. The mxparticipa.org website published the data delivered to electoral authorities and created interactive displays with the results obtained in 31 states and in Mexico City. The DevCAFE algorithm worked as we expected, but we hope further implementation steps could contribute significantly to improving the user experience.

The focus of this article is not solely to assess the *México Participa* platform, but also to share insights that can improve e-participation projects in the future. Once the election period was over, a brief questionnaire was distributed to *México Participa* users to explore their perceptions of the platform's usability and usefulness to engage in public affairs. Although we did not seek a representative sample, we sent 300 e-mails to participants and received 62 voluntary responses, a 21% response rate.

In total, 85% of respondents felt that e-participation projects are necessary for building democracy in Mexico. Participants valued using *México Participa,* with 84% indicating that the objectives were clear and 79% indicating that it was easy to use. We asked whether participants felt the platform covered the most important issues facing the nation, to which 50% answered yes, 26% said more or less, and 6% said no. Nearly 20% of respondents felt that other issues should have been included or otherwise addressed, including citizenship-building programs, the state of the national economy, transportation and urban development, government performance, and the impact of constitutional reforms in Mexico decreed by President Enrique Peña Nieto's government.

Participant evaluation of the pilot exercise provides valuable elements to be considered for future initiatives in Mexico and, as we have noted, in other contexts that share similar attributes. In particular, it was useful to confirm the value participants find in such exercises for building democracy. This kind of project opens an opportunity for sectors committed to the development of democracy, especially to decision makers in a young democracy who are unaccustomed to the shared values of transparency, accountability, and the involvement of citizens in public affairs. Such an initiative must overcome the challenge of convening a critical mass of participants from across all 32 states in Mexico. The digital divide, which can be mapped along the nexus of income and social development, is reflected in the geography of participants to date. Mexico City, the State of Mexico, and Nuevo León accounted for 52% of the initiative's participants.

México Participa took advantage of the positive appeal of the state elections for governor, which enjoy a higher voter turnout rate than congressional elections. Therefore, it is advisable to continue developing such democracy-building exercises for use during a presidential election, which always attracts higher participation.

Discussion and Final Considerations

Implementing *México Participa* during the electoral period was informative, but it is clear that in future versions the project should be sustained beyond election cycles to measure public attitudes toward priority policy issues on an ongoing basis. Our pilot project was implemented over a short period in which it was impossible to measure all the variables involved in e-participation projects (Porwol, Ojo, & Breslin, 2016) or explore the multidimensional nature of political participation (Casteltrione, 2015).

One way to tackle the digital divide could involve collaboration with more local and hyperlocal partners such as state public universities. Additionally, the recently created México Conectado (National Connectivity Program), which aims to bring Internet access to the poorest Mexicans through access points at public sites such as hospitals, schools, and parks across the country, could provide an excellent opportunity for meaningful and productive partnerships (SCT, 2015).

Along with other efforts implemented in the midterm election of 2015, *México Participa* allowed citizens to connect with candidates both despite and fully cognizant of the context of distrust caused by the corruption and insecurity that currently plague the country. Although it confirmed well-recognized patterns and problems such as corruption and lack of public safety, it also detected other concerns that inform public debate. An example is participants' concerns about education, which is linked to the previously mentioned problems (i.e., more education would lead to less corruption and impunity). It also served the purpose of generating new ideas, which offers an advantage over traditional surveys.

Perceptions regarding the key indicators of employment with social security benefits, education, health services, public safety, violence, and corruption show the same levels of citizen dissatisfaction as opinion polls conducted by other organizations and institutions (Freedom House, 2015; INE, 2014; Latinobarómetro, 2015; Schwab, 2015). In this way we can see that e-participation platforms complement other efforts, and together these tools can encourage best participatory practices and provide a significant source of data with which to evaluate development interventions.

México Participa offered feedback on significant issues to the candidates during the 2015 elections. Through an alliance with the Instituto Nacional Electoral, *México Participa* has published the results and the final report, where the data from 31 states and Mexico City can be found. Some governors have demonstrated an interest in using this participation tool in their states, which highlights the need to make these platforms

scalable, replicable, and sustainable so they can be adapted at no cost to federal, state, and local governments. The platform also needs to be adaptable to specific problems such as corruption or violence, which are main causes for concern among Mexican citizens.

Fortunately, our fears about possible abuses of the platform were not realized. The platform was used with civility on the part of citizens, and inappropriate remarks were removed immediately. By design, massive participation (by more than 200 participants with less than two-second intervals and identical parameters of response) could be detected by platform administrators. Thus, fears of hacking in countries where democracy is in transition are not a sufficient rationale to stop using participatory mechanisms. In the case of *México Participa,* misuse was scarce and rigorously detected, suggesting the integrity and willingness of citizens to get involved despite the generalized distrust of politicians and political parties. Thus, in countries burdened by institutional distrust, it is essential to rethink the governor–governed relationship as well as concrete possibilities for implementing democratic practices such as these e-participation strategies.

It is also worth mentioning the importance of these exercises for younger citizens in emerging economies. Of the 82 million voters who went to the polls in June 2015, 30% were 18–29 years old. Of this percentage, about 18 million voted for the first time (INE, 2015). In our platform, 57% of participants were under 34 years old, with 35% of all participants between the ages of 18 and 24. This highlights an opportunity to engage younger demographics in the use of e-participation strategies to strengthen democratic participation.

Transitional democracies require the development of such interventions for permanent use on specific topics to get feedback from decision makers focused on solving specific needs. Project continuity would allow stakeholders to build participatory capacities in countries with limited channels for citizen participation and weak participatory culture. It would also enable researchers to test and improve the technical mechanisms involved in such initiatives. Low levels of participation and institutional response should not be disappointing; rather, more research is needed to improve the implementation methodology and build citizen capacities to express their opinions and encourage governments to consider them.

Candidates and representatives need to take advantage of connecting with people through ICTs. They should also improve their own digital skills to meet the continual demands and requests made by their constituents. The challenges that democracy-building exercises face in transitional democracies are many, ranging from obtaining the involvement of decision makers to building confidence in the benefits of e-participation among citizens. These challenges require those who implement such platforms to spend considerable effort articulating and creating social capital for the project. A multistakeholder approach involving different actors in the project's implementation is essential to its successful execution. ■

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