CROWDLAW FOR CONGRESS

Strategies for 21st Century Lawmaking

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GOVLAB

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ABOUT THE DEMOCRACY FUND

The Democracy Fund is a bipartisan foundation established and funded by eBay founder and philanthropist Pierre Omidyar to help ensure that the American people come first in our democracy. The Democracy Fund is a resource for those who want to strengthen our nation's democracy. They invest in change makers whose ideas and energy can make a difference. They advocate for solutions that can bring lasting improvement to our political system. They build bridges that help people come together to serve the nation, moving us closer to the ideal of a government of, by, and for the people. Ultimately, the Democracy Fund believes that creating a vibrant, healthy political system is in the interest of all Americans and that finding achievable solutions to the complex problems facing our democracy will require voices, expertise, and ideas from across the political spectrum.

For more information, visit *www.democracyfund.org.*

ABOUT THE GOVLAB

The Governance Lab's mission is to improve people's lives by changing the way we govern using new technology. Our goal at The GovLab is to strengthen the ability of institutions — including but not limited to governments — and people to work more openly, collaboratively, effectively, and legitimately to make better decisions and solve public problems. We believe that increased availability and use of data, new ways to leverage the capacity, intelligence, and expertise of people in the problem-solving process, combined with new advances in technology and science, can transform governance.

 For more information, visit *thegovlab.org.*

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Dear Reader,

On behalf of the entire team at The Governance Lab at New York University, we are pleased to share this CrowdLaw for Congress Playbook.

CrowdLaw is the practice of using technology to tap the intelligence and expertise of the public in order to improve the quality of lawmaking. It's a practice that has been used extensively, and successfully, across the globe to increase meaningful and impactful public participation in the lawmaking process. CrowdLaw is helping to improve the quality of legislative outcomes and the effectiveness of governing.

This Playbook, which is part of a project generously sponsored by the Democracy Fund - CrowdLaw for Congress: 21st Century Lawmaking - provides readers with an introduction to the concept of CrowdLaw and a series of case studies about how CrowdLaw is being used in practice at each stage of the lawmaking process. Each of the case studies is summarized in a short "briefing note," which explains each CrowdLaw

initiative, the process and technology involved and what worked.

In addition to the Playbook, we encourage you to visit the CrowdLaw for Congress website at *congress.crowd.law*, where you will find additional content, including interviews with elected officials and legislative staff from across the globe who have successfully implemented CrowdLaw projects in their respective governments. We hope you will find this work substantive, informative, and most of all, compelling.

Should you be interested in finding out more about this work, or wish to work with The GovLab to develop or implement your own CrowdLaw project, please do not hesitate to contact us at congress@crowd.law

Sincerely,

Beth Simone Noveck
Director, *The Governance Lab*
Professor, *New York University*

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PROJECT TAKEAWAYS

Sponsored by the Democracy Fund, the GovLab's CrowdLaw for Congress (congress.crowd.law) project explores how lawmaking bodies around the world are turning to CrowdLaw or the use of new technology to foster an efficient two-way conversation with the public to the end of improving the quality and the legitimacy of lawmaking.

Drawn from research on over 100 CrowdLaw cases and myriad interviews with leading practitioners, these 20 practical how-to's demonstrate ways to introduce 21st century lawmaking techniques to engage with the public at each stage of the legislative process. For more information, please contact us at CrowdLaw@thegovlab.org.

1. Design For The Specific Stage Of Lawmaking

Design the public engagement process and choose the tools best suited to the information and tasks needed at that stage.

In Brazil, Mudamos is a tool and process designed specifically for the public to draft their own bills and get others to sign onto them. TransGov in Ghana, by contrast, is used to evaluate the implementation of legislation after-the-fact.

2. Act On Input Received

Legislatures must commit clearly and publicly to act on input received, even if the commitment is merely to consider and give feedback on a proposal.

In Taiwan, the Yuan (Taiwanese Legislature) will consider any issue that goes through the vTaiwan process. In Brazil, the Camara dos Deputados is constitutionally obliged to review citizen proposals with the requisite supporting signatures.

3. Both Sides Must Engage

It is not enough for the public to engage; government has to play an active role for CrowdLaw to succeed.

In Connecticut, the CityScan project succeeded because local governments committed to fix the issues citizens pointed out in this social auditing process. In Madrid, the prohibition on government providing feedback on proposals has resulted in lower quality submissions and no successful citizen proposals making it into law.

4. Make Platforms and Processes Easy To Use

To maximize engagement, platforms and processes must be simple and easy to understand with substantial guidance.

The UK Parliament's Evidence Checks process uses a website and no special tools. The Madrid City Council provides Kit Decide: instructional materials that teach people how to participate and create a proposal.
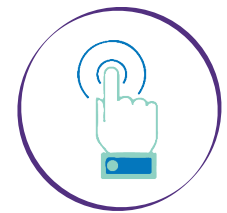
5. Train Public Servants

Ensure staff are well supported to facilitate constructive discussion and collaboration, especially to navigate conflicting views.

In Taiwan, over 2000 civil servants have been trained in public engagement. In Chile, the Chamber of Deputies' Law Evaluation Department staff are trained to run citizen focus groups to evaluate the impact of legislation.

6. Manage Conflict

Build time into the process for divergent views to be expressed and consensus to emerge naturally.

The vTaiwan process includes multiple deliberative phases: proposal, opinion generation, reflection and, only then, ratification.
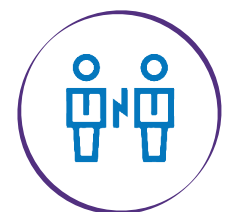
7. Strive For And Measure Diversity

To enhance diversity, collect data (e.g. age, gender but also the number of frequent users, number of votes or proposals, participation rates by location, occupation).

In Estonia, the online Rahvakogu process attracted mostly educated, wealthier males, which is why the organizers designed a second step using a random sample of the population.

8. Collaborate And Share The Work

Involve universities, community organizations and nonprofits willing to share the work of running an engagement process.

The main challenge Mexico City's collaborative constitution drafting process faced was lack of trust in the process. The City partnered with well-known brand Change.org to attract participation.

9. Create Space For Sharing Ideas In The Public Interest

Commit to sharing ideas and insights to enable deliberation and the implementation of public input.

The terms of service of Reykjavik's Better Reykjavik make clear that, "When a user presents an idea on the Better Reykjavík forum, it is automatically considered the public property of the residents of Reykjavík" in order to enable deliberation and amendment.

10. Define The Topic Clearly And Ask Specific Questions

Limit the scope of the consultation and clearly articulate the issues to create focused and relevant participation.

In Estonia's Rahvakogu process, limiting discussion to political reform led to concrete and specific proposals in a short time frame. In the UK Parliament's Evidence Checks process, guiding questions keep participation on topic.

11. Use Hi-Tech Solutions When Needed

Use the latest technologies to enable participation efficiently and at scale.

In Taiwan, the Pol.is tool uses artificial intelligence to cluster citizen opinions and enable the public to identify and discuss problems with thousands of participants. In Brazil, they are turning to the blockchain to enable verification of the signatures on citizen petitions.

12. Use Low-Tech Solutions When Not

Offer complementary face-to-face alternatives to online engagement to build community and ensure inclusion.

The Virada Legislativa is a one-day, in-person event — a draft-a-thon — for Brazilian citizens to draft legislation together.

13. Offer Multiple Ways To Participate

Create different channels for engagement, a choice of tasks to undertake and both selection and self-selection mechanisms.

In Mexico City, the Crowd constitution crafting process Constitución CDMX offered four different options for the user to participate, including surveys, petitions, proposals and live events. In Estonia, they combined online self-selection with an offline selected random sample of the population for more legitimate decisionmaking.

15. Advertise Opportunities To Participate

Conduct targeted outreach to attract better participation. For example, use social media and blogs on NGO websites, and leverage the lists of relevant organizations.

The Government of India uses social media, online articles, radio broadcasts, and live events to promote MyGov. The platform operates a Facebook account, Instagram page, YouTube channel, and Twitter feed with over 1.4 million followers, accounting for the platform's 7.8 million users.

17. Make CrowdLaw Relevant

Create the incentive to participate by ensuring that there are definite ways for public input to be used and taken into account in lawmaking.

In Mexico City, the guarantee by the Mayor that any proposal that received enough signatures would be included in the constitutional draft spurred participation and satisfaction.

14. Turn Good Participation Into Great Participation

Invest in efforts to improve the quality of submissions by offering technical assistance and guidance.

In Iceland, the Mayor's Office's project managers analyze, evaluate and improve proposals together with the public. In Brazil, a volunteer team of crowdsourced lawyers assist in the analysis of citizen submissions to the Mudamos citizen initiative app.

16. Building CrowdLaw Into Everyday Practice

Transform CrowdLaw practices into a normal part of governing rather than a one-off event.

In Reykjavik, where over half the population is on the City's CrowdLaw platform, the Mayor's Office commits to implementing the top ideas from the Better Reykjavik platform every month. This has resulted in over 600 projects being implemented.

18. Share Outcomes

Share real-world impacts publicly by communicating how public feedback is used in law and policymaking.

MyGov India gives credit to members of the public by name for their contributions. In the USA, regulatory agencies sometimes write up a summary of how public input was taken into account in drafting a regulation.

19. Define Measurable Outcomes

Measure the impact of CrowdLaw practices on the quality of lawmaking rather than adopting participation only for its own sake.

In Taiwan, it is possible to measure the connection between public input and the passage of 26 major pieces of legislation on the digital economy. In Mexico City, there is documentation of public proposals used in the drafting of the new constitution. In Iceland, they count precisely how many projects were developed with public co-creation.

20. Give Power To Real People

Whether in the USA, Ghana or Brazil, people have good ideas, professional know-how and lived experience to share and will do so willingly. Just as members of the public contribute to writing Wikipedia entries, restaurant reviews on Yelp or sharing health advice on Patients Like Me, CrowdLaw is demonstrating how members of the public can and will share their collective intelligence and be capable and keen participants in the lawmaking process.

If, after reviewing the materials, you are interested in experimenting with any of the Crowdlaw strategies for 21st century lawmaking, the Democracy Fund will support the creation and development of the technology, the process and the evaluation for U.S. Congress Members, Committees and their staff — at no cost to you. If you are interested in learning more, please check out crowd.law and contact us at *crowdlaw@thegovlab.org*.

PROBLEM DEFINITION

The arc of the lawmaking process begins with defining which problems to tackle. In the vTaiwan process, hundreds of thousands are translating broad issues into actionable problems. Such online participation enhances the level of information in the legislative process.

vTAIWAN

USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

https://vtaiwan.tw/

BRIEFING NOTE

Owner: g0v.tw, a collaboration between the Digital Ministry, the Parliament and a volunteer civil society organization.

Location: Taiwan

Years in Operation: 2015-present

Implementation Level: National

Platforms: Web, Offline

Method: AI-based insight generation

Participatory Task: Ideas, Opinions, Expertise

vTAIWAN I USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

vTaiwan is a four-stage online and offline process for moving from issue to legislative enactment while building consensus among diverse stakeholders. It has been used to craft 26 pieces of legislation relating to the digital economy collaboratively between the government and the public vTaiwan relies on a series of existing open source tools (meaning they can be freely modified and customized, as needed). The process begins with anyone, from public officials to everyday citizens, proposing an issue and a relevant government agency agreeing to steward and participate in the process. Since 2017, each Ministry is obliged to appoint a Participation Officer responsible for engaging in the process.

1. **Proposal Stage -** Offline and online discussion of which problems to address using Discourse for discussion, sli.do for document sharing and Typeform for frequent questionnaires.

2. **Opinion Stage** - Discussion then moves to an online process of getting input, taking advantage of an artificial intelligence (AI) tool known as Pol.is to collect and visualize participants' views, which becomes the basis for determining the extent of consensus about the nature of a problem. During this stage participants post their statements about the problem and can vote to Agree, Disagree, or Pass on statements written by others or indicate if the statement is important to them. As voting progresses an algorithm is used to sort participants into opinion groups, capturing what each group feels most strongly about, how a group perceives what the problems are and areas where people are divided and where there is consensus. Presented as a visualization, this "opinion landscape" is made available to the public and the relevant government agencies. This so-called "crowdsourced consensus-mining" makes the process of obtaining information about the "dynamics of the issue, the facts of the matter, what is at stake, and who is involved" efficient and scalable.

3. **Reflection Stage -** Following the opinion stage are two in-person stakeholder meetings where notes are taken online using HackPad and, to extend participation and maximize transparency, livestreamed online with a chatroom where anyone can comment. The goal is to determine if the issue is ripe for advancement.

4. **Ratification Stage -** In some cases, the issue is resolved with a guideline, policy, or statement from the competent government agency. This often includes a point-by-point explanation of why

All the steps are combined onto a single set of webpages on the vTaiwan website so that the public and public servants alike can easily track the progress of an issue. Taiwan's Digital Minister stresses that the process is flexible and the path often deviates from this roadmap. Some issues have taken as few as three months to settle while others have taken over a year.

What Are The Outcomes?

In Taiwan, 200,000 people have participated in this open policymaking process to define the problem around such complex issues as Uber, telemedicine, online alcohol sales and other hard topics. More than 80 percent of processes once initiated lead to "decisive government action." The Taiwanese have used the process to formulate 26 pieces of national legislation. Since 2017, each Ministry is obliged to appoint a Participation Officer responsible for engaging in the process.

What Does It Cost?

The vTaiwan process uses a number of different tools, most of which are free. Pol.is is free to use and also open source. The vTaiwan process was supported pro bono by the organization that develops and maintains pol.is, which provides support at negotiable fees. The entire process is run and maintained by volunteers with support from the government's Digital Ministry**.

What Are The Benefits?

▸ Joint ownership between government and civil society builds trust and reduces the risk of failure while sharing the workload.

▸ Flexible and transparent process enhances legitimacy.

▸ Combination of online and offline fosters participation by diverse audiences.

What are the risks?

▸ Focus on generating consensus may conflict with the need for urgent response.

▸ Not all Ministries or public officials are convinced of the efficacy of the process.

▸ Online process tends to favor discussion of technology-related topics.

vTaiwan has facilitated productive discourse among thousands of people at a time on a range of key issues. The process has helped resolve disputes between groups, ease concerns among citizens, and ultimately shape more effective and representative policies.

For more information, please contact: *crowdlaw@thegovlab.org*

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AARP and All Our Ideas

USING WIKI SURVEYS FOR IDENTIFYING PROBLEMS AT SCALE

https://aarp.crowd.law/

BRIEFING NOTE

Owner: AARP and The Governance Lab.

Location: USA

Years in Operation: 2019-present

Implementation Level: National

Platforms: Web

Method: Pairwise wikisurveys (AllOurIdeas)

Participatory Task: Opinions

AARP and All Our Ideas | Using Wiki Surveys for Identifying Problems at Scale

How Does It Work?

AARP, the nation's largest nonprofit, and The Governance Lab (The GovLab) launched an online consultation to better understand AARP members' concerns about "big health data." They used a wiki survey tool, which tabulates the inputs even of tens of thousands of people without the need for those running the consultation to do extra work to extract meaning for citizen responses.

Big health data refers to the ability to gather and analyze large quantities of information about health, wellness and lifestyle. Big health data includes information from health care providers as well as data from sources such as apps that track our sleep and exercise habits and the purchases we make.

Fig. 1: The aarp.crowd.law home page

Doctors, healthcare organizations, insurance companies, financial service providers, product and service companies, and governments at every level are keen to use such data. Increasing the use and sharing of data could enable better diagnoses, more targeted prevention and treatments, faster research and cures, the creation of new tools to help us make healthier choices, and economic growth from the creation of health data businesses. At the same time, the collection, sharing, and use of big health data could reveal sensitive personal information over which we have little control. This data could be sold without our consent. It could be used by entities for surveillance or discrimination, rather than to promote well-being.

AARP and the GovLab started the Big Health Data public consultation in order to "tap into the previously untapped know-how in the population to help AARP make more informed recommendations to Congress about how health data should be treated" on the basis of people's lived experience, family history and professional expertise. The project was designed to gauge AARP members' concerns on which big health data issues were most important to them. Rather than asking participants an open-ended question like "What are your concerns regarding the use of big health data," which would likely lead to off-topic answers and make it difficult to process the results, this project asked participants to help prioritize a pre-populated list of concerns.

In order to do so, The GovLab used All Our Ideas — a " wiki survey" tool developed by researchers at Princeton University that can be used to help a community identify and prioritize problems as part of a law or policymaking process. (We also showcase how a wiki survey has been used for solving problems at scale as was the case of Governador Pergunta in the State of Rio del Sul, Brazil).

Rather than give respondents a lengthy and time-consuming survey, the wiki survey presents participants with two randomly selected items from the list and asks them to select the one which is of greater concern or importance to them. Thus, for example, AARP asked its Members: "Which is your greater concern regarding big health data?" The GovLab and AARP prepared 63 statements in response, such as: "Big health data may lead to the encouragement of self-diagnosis over seeing a doctor" or " Companies can use big health data without having to tell anyone what they are doing with it or being accountable for it."

Respondents answer as many or as few randomized pairings as they want. They can also choose to pick "I can't decide." Respondents are also allowed to submit their own answer choice, which, after

approval by the administrator of the wiki survey, will be added to the list and displayed to future respondents.
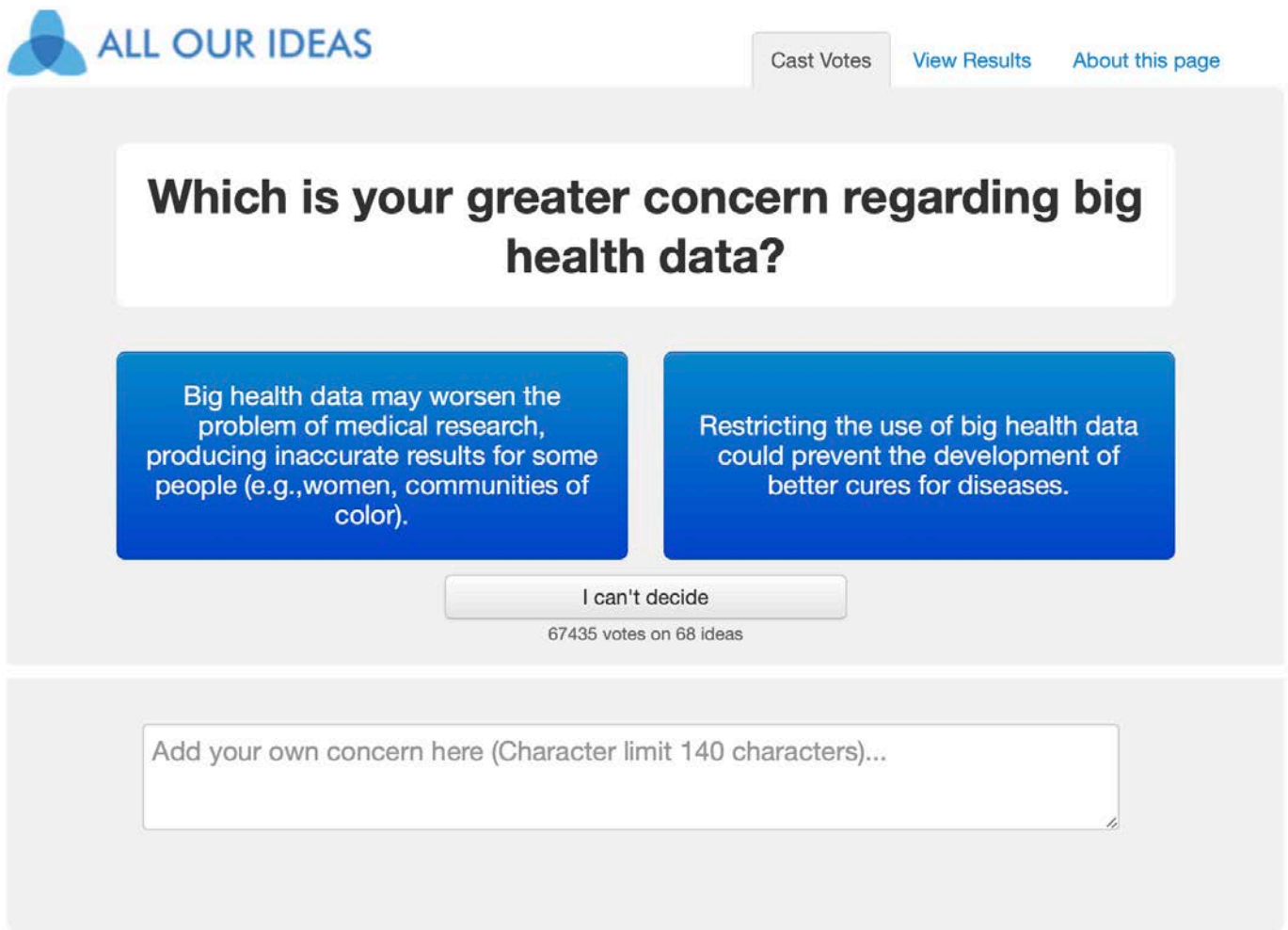
Fig 2: Screenshot of the All Our Ideas Tool used by the GovLab and AARP. Users simply had to select which one of the two options presented to them was a bigger concern.

Who participated?

This process, known as "pairwise voting," is faster and easier than responding to a long survey. Voting remained open for three weeks in December 2019 and over 5,000 participants cast 67,000 votes. (In Brazilian case, described under Solution Identification, over 100,000 people participated.) However, no demographic information was collected about respondents.

Results

At the end of the consultation, AARP received a rank ordered list of problems automatically presented by the software, which offers multiple visualizations of the results, including the ordered

list of responses, data on when people participated and how many. If participants are required to login, then the software can also provide data and visualizations about member locations. In this consultation, participants articulated that ensuring corporate accountability and preventing discrimination by insurers were their most pressing concerns regarding the use of their health data. AARP used the findings from the wiki survey to run a second consultation, asking people to identify novel solutions to the problems identified via All Our Ideas.
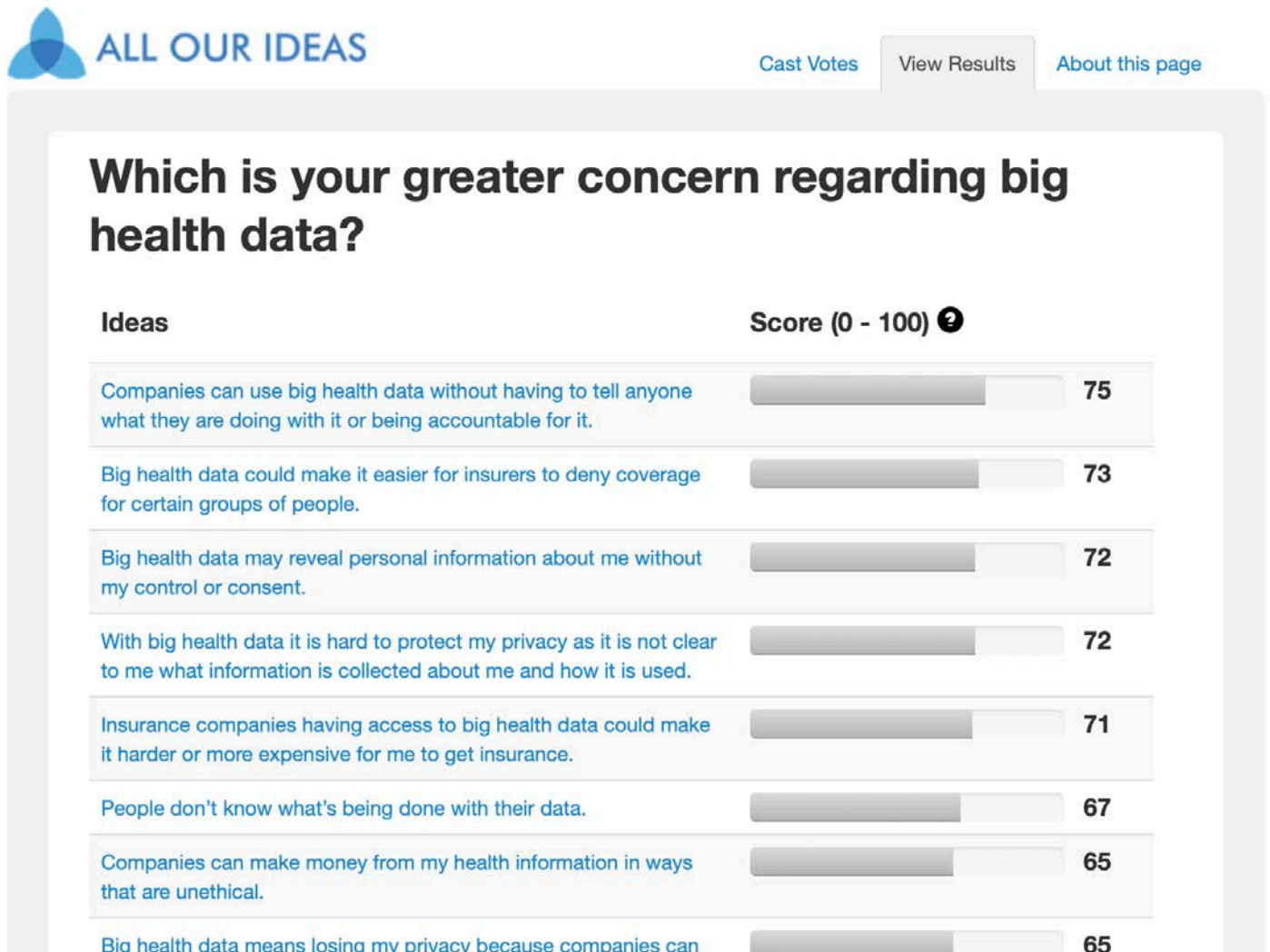
Fig 3: Screenshot of the All Our Ideas results page. Each statement has a score associated with it based on participants selecting it or not.

What does it cost?

All Our Ideas is a free, open source tool available at allourideas.org. Anyone can set up a wiki survey on the All Our Ideas website. In addition, the software can also be downloaded and used on

one's own website. The public version of the tool can be embedded in any website at no cost and with basic knowledge of HTML/CSS. The All Our Ideas code and API are available on Github at https://github.com/allourideas) and can be used, for free, to customize the tool's look,feel, and features. These customizations require more advanced software programming knowledge.

What are the benefits?

To date, organizations around the world have created 16,922 wiki surveys and have amassed 29.7 million responses.

Large scale participation: The All Our Ideas tool is easy to use and requires little instruction. As a result, thousands of participants in the Big Health Data consultation each cast several votes in a short period with little difficulty. Additionally, since participants are not required to log in or provide any other information before voting, the barrier to participation is very low.

Ease of administration: A wiki survey can be set up by anyone with no technical knowledge via All Our Ideas. Since the software automatically tabulates results and visualizes them, there is no additional effort required to extract meaning from participant responses.

What are the risks?

In order to get the most useful, actionable insights from a wiki survey, framing unambiguous problem statements is critical. Statements with technical jargon or generic sentences are likely to confuse participants and will fail to capture their real concerns. The AARP and the GovLab prepared many more negative concerns (ie. fear of use of big health data) rather than "positive" concerns (ie. fear of failure to use big health data) among the 63 statements. Thus, outputs were also heavily skewed toward the negative.

For more information, please contact: *crowdlaw@thegovlab.org*

vTAIWAN

USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

https://vtaiwan.tw/

CASE STUDY

vTAIWAN | USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

Introduction

For three weeks in April 2014, students, academics, and everyday citizens piled into the Taiwanese Parliament in Taipei to protest the passage of the Cross-Strait Service Trade Agreement aimed at liberalizing trade with China. The government negotiated the Agreement behind closed doors giving rise to protests now known as the Sunflower Movement. g0v.tw -the largest civic tech community in Taiwan- which was founded to promote government transparency and the use of tools to enable citizen participation, led the protests.

The Taiwanese government responded to the demonstration by acknowledging the public's peaceful demands. Former Taiwanese Minister without Portfolio Jaclyn Tsai attended a g0v.tw hackathon in December 2014 and asked the volunteers if they could "create a platform for rational discussion and deliberation of policy issues that the entire nation could participate in."[1] If they were up to the challenge, Tsai committed that the government would participate and respond.

> Shortly thereafter, the volunteers built vTaiwan, the open consultation process to bring together experts, government officials, and relevant citizens on a national scale to deliberate, reach consensus, and craft legislation.

Shortly thereafter, the volunteers built vTaiwan, the open consultation process to bring together experts, government officials, and relevant citizens on a national scale to deliberate, reach consensus, and craft legislation.[2] It has since transformed into a systematic online and offline process to reach consensus on large-scale issues and craft national legislation, helping lawmakers implement decisions with a greater degree of legitimacy. While this case focuses on vTaiwan's influence on the problem identification stage, it is important to note that vTaiwan enables public participation in each step of the lawmaking process in some form.

Mechanics/Workflow

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1 Barry, Liz. "Vtaiwan: Public Participation Methods On The Cyberpunk Frontier Of Democracy." Civic Hall, 2016.

2 Lin, Shu-Yang. "vTaiwan", 2018.

At the time of vTaiwan's inception, instead of g0v ceding control of the program to the government, its inventors and stakeholders decided that vTaiwan should exist as a platform independent of government that runs collaboratively between civil society and the public sector. It was founded with the agreement that the government will use the opinions gathered throughout the process to shape legislation on any given issue related to the digital economy. Now, three parties are in charge of its operation:[3]

1. **Issue sponsors:** the government agencies which submit drafts of laws and regulations that they are proposing.
2. **Editors:** individuals affiliated with the Science & Technology Law Institute, a government-sponsored NGO, who collect and organize the drafts into a format more conducive to discussion.
3. **Administrators:** g0v's vTaiwan task force, which works together to maintain the online system and update the content.

Though vTaiwan is government-funded, because volunteers run the process, it enjoys a relatively high degree of legitimacy.

The process comprises four distinct phases: proposal, opinion, reflection and legislation. The platform's administrators, however, stress that the system is flexible and the path of an idea often deviates from the ideal type depicted in this roadmap.[4] Some issues have taken as few as three months to settle while others have taken over a year.

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[3] "Opportunities and Challenges in Digital Democracy: Taiwan 2014-2016 Open Government Report." Open Culture Foundation, 2017.

[4] Private presentation from and interview with Shu-Yang Lin, co-founder, PDIS Taiwan, March 1, 2018.
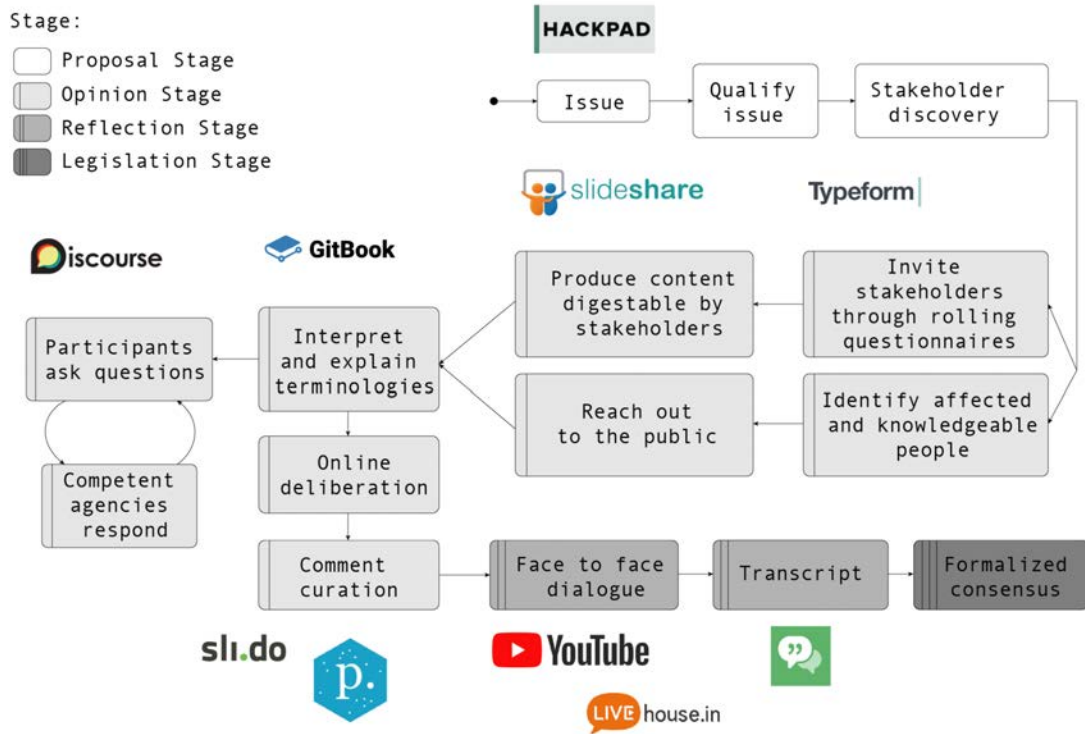
Figure 1: The vTaiwan process. Image from https://info.vtaiwan.tw/

The vTaiwan Process

I.   Proposal Stage

A. Diverse people including programmers, developers, public servants, journalists, scholars, legal specialists and students convene both online or offline for a weekly mini-hackathon hosted by vTaiwan every Wednesday.[5]

1. At these mini hackathons, contributors propose an issue of their choosing to a "competent government authority"[6] who may choose to either accept (thereby becoming accountable for the issue) or refuse to take on the topic of the proposal. Notably, a proposed

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[5] Yu-Tang Hsiao, Shu-Yang Lin, Audrey Tang, Darshana Narayanan, Claudina Sarahe. "vTaiwan: An Empirical Study of Open Consultation Process in Taiwan." Center for Open Science, 2018.

[6] "Competent authority" is a term used frequently in vTaiwan's process materials. It simply refers to the relevant government agency that is legally responsible for handling a given issue (such as the Ministry of Health and Welfare). In this study, the phrase will be used interchangeably with phrases like "relevant government agency."

issue will not initiate the vTaiwan process without a government authority[7] agreeing to become accountable for it and a facilitator taking charge of the issue.

2. This facilitator must be present to guide the issue through each stage of the process. He/she uses the "Focused Conversation Method" to lead discussion throughout each stage. This method is summarized below:

  a) Objective - participants share facts and data (e.g., vTaiwan is a project)

  b) Reflective - participants express their emotions and feelings about the objective facts (e.g., I think vTaiwan is a great project and here's why)

  c) Interpretive - participants exchange opinions and values (e.g., vTaiwan is a project that should expand)

  d) Decisional - participants make decisions and reach consensus (e.g., we concluded that vTaiwan expands within a month)

B. *Tools -* during the proposal stage, notes taken during mini hackathons are shared using a collaborative notetaking tool (Hackpad), while documents and presentations are shared using SlideShare.

C. *Stakeholder Identification* - The community[8] researches and identifies relevant stakeholders. In this case study, stakeholders are defined as any person or group affected by and/or with knowledge about the given issue.

II. Opinion Stage

Public opinion regarding the issue is gathered through several methods as the issue gets further refined.

A. The vTaiwan community launches the opinion collection process and produces the description of the case in a form digestible by stakeholders and the general public. This includes publishing any documents, research and/or presentations, relevant to the proposal. If

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[7] idib.

[8] "Community" in this context is referring to the whole of the vTaiwan community.

there is terminology that is difficult to understand, it is compiled into an open dictionary, where everyone can contribute to make things clearer.

B. "Rolling Questionnaires" - first, in an effort to keep the ball rolling and collect as many valuable opinions as possible, stakeholders within the community's network are sent questionnaires which ask what they know about the issue and their experiences with it. Notably, stakeholders are also asked if they can recommend others with knowledge and/or experience relevant to the issue. Subsequently, other individuals are sent the same survey, often via online advertisements and Facebook. Several steps are taken to maintain privacy but also to enhance the opinion collection process and to augment the crowd that is surveyed.

1. The respondent has the option to either keep their responses confidential within the vTaiwan community[9] or to publish their opinions publicly.

2. Either way, the respondent has the option to remain anonymous.

3. The respondent is also asked whether they would like to undergo a more in-depth interview.

4. The respondent is given the option to subscribe to email updates regarding the issue.

C. The vTaiwan community creates an online forum on which anyone, not restricted to Taiwan residents, can ask questions, comment on ideas or choose to. "agree", "disagree" or "pass" on others' ideas, and that forum is open for a designated period of time. Each round of opinion collection lasts for at least one month, but there is no limit to the number of rounds.

D. In order to foster consensus building, however, the process then calls for using Discourse (discussion tool) and Pol.is (opinion mapping).

E. Discourse is a discussion platform which allows users to tag competent authorities who, in turn, are obliged to respond to comments within seven days.

F. Pol.is is an opinion mapping tool to help a large group build consensus by helping the group to visualize its own opinions.

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[9] idib.

1. The Pol.is problem definition process with the public unfolds in multiple phases. In the first round, organizers, followed by participants, write statements about the problem. In other words, the organizers create sample problem statements to prompt discussion.

2. In the second round, participants are asked to 'Agree,' 'Disagree' or 'Pass' on those statements or answer "Is This Statement Important to You."

3. Statements are shown to all participants based on a comment routing system that gives each statement a priority score based on the responses it has received so far. Every person who enters the conversation sees a different ordering of the statements to avoid bias. As voting progresses, the algorithm then finds the underlying structure of the conversation using unsupervised machine learning. The software analyzes the votes and visualizes them in a real-time report known as an opinion landscape.

4. Through multiple rounds of the process, it becomes easier to see where there is consensus or disagreement and by whom.

5. Once the opinion process is closed, all interactions are reviewed, analyzed, and curated by the vTaiwan community. They are used to publish two reports ("raw and second-hand")[10] on the results of the opinion collection stage that are viewable by the public and also submitted to the relevant government authority. The reports are used as materials to set the agenda and as a topic of discussion for the upcoming mini-hackathon and consultation meeting.

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[10] The "raw" report includes the meta-data, numbers, statistics, etc.,produced, whereas the "second-hand" report is an interpretation of that data.

Opinion Group: 1 2   Majority Opinion
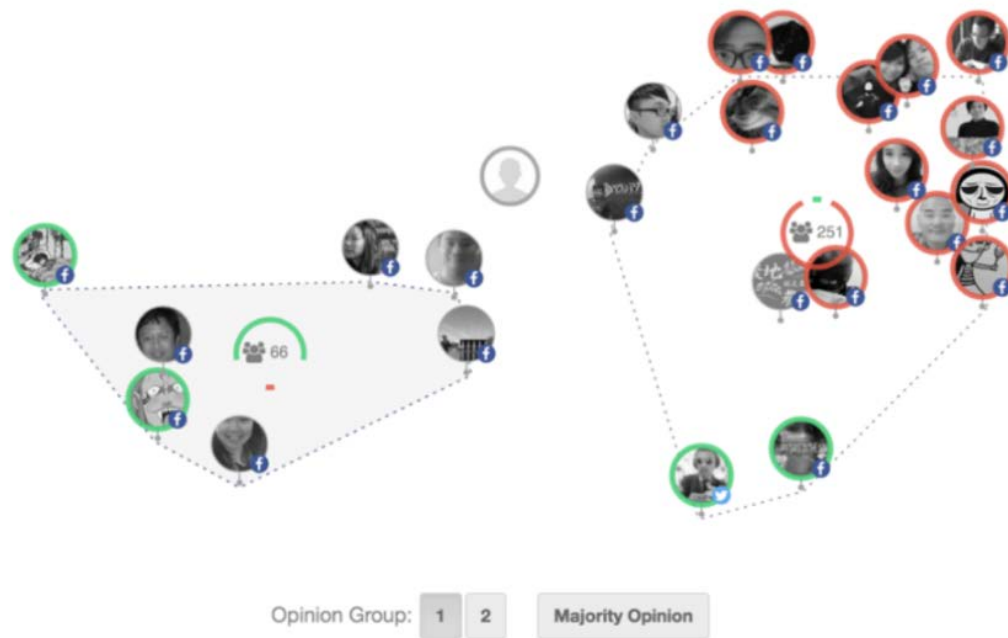
Figure 2: Example of Pol.is opinion groups being formed[11]

III. Reflection

A shorter stage comprised of two face-to-face events to reflect on findings thus far and determine if it is time to proceed or undergo another round of opinion collection.

A. If the competent authority and the g0v participants conclude that it is time to proceed, then they design an in-person consultation and:

1. Identify the proper facilitator for the meeting.

2. Define the size and scope of the issue with the competent government agency.

3. Host a pre-meeting with the facilitator and competent authority at least one week prior to the consultation meeting.

4. Create a plan for the meeting, which includes a rundown, agenda, and a list of invited guests and participants, among other logistical details.

B. Then, the in-person consultation meeting is held, which invites key stakeholders, including scholars, public servants, private sector representatives and participants who were deemed

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11 Berman, Paula. "Hacking Ideology: pol.is and vTaiwan." Democracy Earth, 2017.

highly active during the earlier stages, are invited. Although an invitation is required to participate in-person, this meeting is livestreamed online via YouTube with a chatroom where anyone can contribute ideas, so that everyone can be involved even if they cannot physically attend. The facilitator decides which contributions from the chat to incorporate into the meeting, choosing "insightful and valuable opinions" to include. The meeting is also recorded and transcribed to be used as materials for the next action.

1. The meeting begins with the facilitator describing a summary of the issue's process thus far.

2. Then, stakeholder groups are allowed to give presentations.

3. During this process, the facilitator takes notes digitally to document a summary in real-time, which is all displayed on the projector.

4. Following the meeting, the videos are released on the vTaiwan Facebook page so that citizens can continue to share ideas in the following weeks.

IV. Ratification

A final discussion on the results of the process which decides the action that the government will take.

A. After the consultation meeting, there is another discussion between the community and competent government agency on:

1. The raw report(s) from the opinion collection stage.

2. The secondary study on the discussion throughout the vTaiwan process.

3. The transcript of the consultation meeting.

4. The "rough consensus"[12] – the relevant government agency is responsible for using this to take action.

B. The final outcomes can take one of two forms.[13]

1. In some cases, the issue is resolved with a guideline, policy, or statement from the competent government agency. This often includes a point-by-point explanation of why legislation is not being enacted.

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12 Berman, Paula. "Hacking Ideology: pol.is and vTaiwan." Democracy Earth, 2017.

13 Avross Hsiao. "vTaiwan Slide Deck." 2018.

2. In others, it is formulated into a draft bill to be sent to the Yuan (Taiwanese Legislature).

Permanent beta

Minister Audrey Tang emphasizes the importance of seeing the process as an experiment that can and will always be improved upon and modified. She explained that:

> "vTaiwan's scope is not limited to Taiwan or any particular government; it's an experiment to prototype a model for consensus generation among large groups in general."

> - Audrey Tang, *Digital Minister, Taiwan*

Moreover, she described it as "an experiment for a new way of working together, to unconditionally trust when collaborating, to be more open and transparent, and to gain the potential to be trusted."

The process is inherently adaptive, meaning each issue discussed through vTaiwan may follow a different path. No two issues are assumed to be identical in nature and there is scope for each issue to be subject to a unique process, with progress determined by the community involved. In some cases, all four stages are not required. For example, in the case of developing a Fintech Sandbox, an effort to liberalize regulation and allow innovative financial technology companies to thrive, the reflection stage was skipped because there was pressure for immediate legislation. Similar regulatory sandboxes for electric scooter usage, autonomous vehicles, and the 5G spectrum network are currently in development on vTaiwan.

There is no set policy in place to decide when an issue advances from one stage to the next. Rather, the vTaiwan community decides this when they reach a "rough consensus" at any given point based on the situation at the time. According to PDIS Co-founder Shu-Yang Lin, "every case is different, and should be treated differently."[14]

Rather than aspiring to become a "best practice" for citizen engagement, vTaiwan's stated goal is to advance knowledge and research in the field of digital and participatory democracy, so that other governments and institutions--including its own--may learn from it.

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[14] Lin, Shu-Yang. "Reinventing democracy." issuu.com, November 14, 2017.

Participation

Since the platform's launch in 2015, over 80 percent of vTaiwan deliberations have led to decisive government action.[15] One of the most notable processes, and the first to utilize the Polis software, was a 2015 debate over the country's policies regarding taxis and the ride-hailing app Uber. Participation statistics from this process were as follows:

- ▸ 31,115 total votes (highest of any process to date)

- ▸ 145 statements submitted on Polis survey (during opinion gathering stage)

- ▸ 925 participants voted on Polis survey (opinion stage)

- ▸ 1,875 participants joined online during the two-hour live-streamed consultation meeting[16]

- ▸ 4,000+ participants crowdsourced the meeting agenda for the consultation

Impact

The Taiwanese government shifted from making decisions that angered the neglected public[17] to requiring each Ministry to create a vTaiwan forum account and holding them responsible for responding to citizens' comments within seven days, resulting in a diverse range of topics being discussed on the platform, none of which are trivial. Although it tends to attract participants who often spur discussion on topics related to economics, data, and technology, vTaiwan has also exhibited its capacity to catalyze deliberation on issues of social justice such as the Nonconsensual Pornography case.

This award-winning platform has been praised for its innovation, impressive technology, and its ability to bridge the gap between online and offline participation as well as gaps between various sectors and citizens. From topics like the sharing economy to security management, vTaiwan continues to showcase its capacity to invite stakeholders of all backgrounds to identify problems and generate rational, collaborative, and productive dialogue about key issues, to the point where possible solutions are often put forth and agreed upon.

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[15] Avross Hsiao. "vTaiwan Slide Deck." 2018.

[16] Tang, Audrey. "Uber responds to vTaiwan's coherent blended volition." Pol.is blog, May 23, 2016.

[17] O'Flaherty, Kate. "Taiwan's revolutionary hackers are forking the government." Wired, May 4, 2018.

Overall, it has proven to be a multipurpose platform that can help all parties that wish to be involved. It enables Taiwanese citizens to bring their concerns to light where they can actually be heard, while also diminishing the burden placed on lawmakers and public servants by fostering open, productive collaboration and mitigating citizen opposition.

The UberX case is touted as one of the most constructive processes facilitated through vTaiwan to date. Before the vTaiwan consultation, the regulation of ride sharing was a contentious topic. Citizens were concerned for their safety as UberX did not require its drivers to obtain a professional driver's license and was not subject to the same requirements as taxis. Taiwan's taxi drivers complained they were losing a significant portion of their business, hurting their income by 30 percent according to Chen Deng, Chairman of the Taipei City Taxi Passenger Transport Trade Association.

But, as a result of the vTaiwan process, Taiwan's Ministry of Transportation and Communications pledged to ratify the consensus reached on Polis and amend the existing regulation consistent with the plans worked out online and agreed upon by Uber Inc., the Association of Taxi Drivers in Taipei, Taiwan Taxi, and the Ministries of Transport and Communications, Economic Affairs, and Finance. These included such changes as:[18]

1. Taxis no longer need to be painted yellow.

2. High-end, app-based Taxis are free to operate as long as they do not undercut the existing taxi fare.

3. App-based dispatch systems must display car and driver identification, estimated fare, and customer rating.

4. Per-ride taxation would be imposed.[19]

The Uber case is evidence for the claim that the vTaiwan process does more than merely collect opinions; it provides a method for genuinely improving legislation.

Learnings

vTaiwan offers a replicable, open-source model for supporting constructive collaboration between committed members of the public and public servants and suggests several lessons.

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[18] Rashbrooke, Max. How Taiwan is inoculating itself against the Uber "virus.", CityMetric, February. 8, 2017.

[19] Sui, Cindy. "Taiwan: The place Uber couldn't crack." BBC News, February. 10, 2017.

1. Keeping it user-friendly

Although vTaiwan includes multiple stages and different tools, each component is simple and easy to understand.[20] During a presentation she gave in Paris, Audrey Tang jokingly remarked that g0v is, "a movement that tries everything [sic] to create a way for lazy people to engage in real action." From using titles that are very slight offshoots of common existing references (gov-g0v, Taiwan-vTaiwan) to creating timelines to help participants understand the context of certain issues, vTaiwan makes every attempt to make their process simple and inclusive for everyone.

> What is unique is fostering a process to bring together different groups of people who do not usually work together, including tech experts, social activists, and public servants.

2. Engaging diverse audiences

With 85 percent of its population online and 90 percent on Facebook,[21] creating an online participation program was not a big stretch.

Another example is the crowdsourcing platform created by the vTaiwan community to fact-check the statements made by presidential candidates during public speeches in the lead-up to Taiwan's 2020 election. g0v even helped launch Talk to Taiwan, a sibling project of vTaiwan consisting of a broadcast talk show where government ministers, mayors and scholars show up to respond to citizen ideas and concerns expressed via Polis.

As Minister Tang said, "…I think [vTaiwan] is closer to the civic tech community than it is actually to my office or any minister…what we're doing is institutionalizing the parts that worked." Nonetheless, the vTaiwan community has made some efforts to institutionalize the process in law. One piece of legislation, a clause in the Digital Communications Acts, would have created a legal framework for the executive branch to respond to cross-ministerial issues that originated on forums like vTaiwan. However, this legislation, itself a product of vTaiwan, did not complete its parliamentary process in 2019. Regardless, there appears to be bipartisan support to create a dedicated authority to institutionalize digital policymaking processes like vTaiwan.

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[20] "2016-03-02 Conference at SuperPublic." PDIS, March 3, 2016.

[21] "2016-03-02 Conference at SuperPublic." PDIS, March 3, 2016.

3. Mandating engagement

vTaiwan's organizers have emphasized the importance of trust among citizens, civil society, and the public sector.[22] The government trusts activists to maintain this largely volunteer-run process, while the community activists trust the government to listen and use their insights and opinions to shape legislation. Building upon its initial commitment to use the platform, the additional requirement that began in 2017--every ministry within the Taiwanese government assign at least one "participation officer" (PO) to "be involved in engagements with the civil society and to acquaint themselves with multi-stakeholder collaborative settings, as to shape regulations appropriate to their ministry"-- is a crucial development.[23] Although many public officials are still reluctant participants, mandatory public engagement is beginning to create a culture of mutual trust.

Special thanks for editorial assistance to:
- Fang-Jui Chang, *Service Designer, PDIS Taiwan*
- Audrey Tang, *Digital Minister, Taiwan*

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[22] Atlee, Tom. "vTaiwan (Part 2) — Notes on Aspects of the vTaiwan Phenomenon." April 23, 2018.

[23] Atlee, Tom. "vTaiwan (Part 2) — Notes on Aspects of the vTaiwan Phenomenon." April 23, 2018.

SOLUTION IDENTIFICATION

Lawmakers must devise effective and workable solutions to problems. Parlement & Citoyens in France enables citizens to submit solutions to a problem posed by a representative. Public participation in developing solutions enhances innovation in lawmaking.

MYGOV INDIA

POLL, DISCUSS, DO

https://mygov.in

BRIEFING NOTE

Owner: National Informatics Center, Government of India
Location: India
Years in Operation: 2014-present
Implementation Level: National
Platforms: Web, Mobile
Method: Online brainstorming, Prize-Backed Challenges
Participatory Task: Ideas, Opinions, Actions

MYGOV INDIA I POLL, DISCUSS, DO

How Does It Work?

MyGov India is the Government of India's official citizen engagement platform and is used by its ministries and agencies to solicit ideas from the Indian public to solve public problems. Each ministry or agency can create participation opportunities that range from identifying solutions to serious problems -such as identifying opportunities to increase non-fare revenue for Indian Railways - to tapping into the creativity of members of the public to design a new app for the Prime Minister.

MyGov India divides participation opportunities into three categories: Poll, Discuss, and Do.

1. Poll - Ministries can post opinion polls and surveys about topics ranging from the naming of government programs, to the design of government apps, websites, and logos. Many polls are also used for priority-setting tasks around "Smart Cities" initiatives and area-based development. For instance, one poll allowed residents to vote for which area of the city of Ghaziabad should be selected for area-based development as a Smart City. For the duration of the polling period (determined by the creator of the poll), registered users can vote in the poll or survey; the platform shows users the results of the poll after they have cast their vote.

2. Discuss - Users respond to prompts or questions posed by Ministries, or by the central Government of India, on topics such as reducing corruption through technology, celebrating the 150th birthday of Mahatma Gandhi, or building parks in Varanasi City. Additionally, in the lead up to Prime Minister Modi's monthly national radio address (called Mann Ki Baat), users are asked to submit topics and key themes about important issues.

3. Do - The Do section presents opportunities for engagement that go beyond simply suggesting ideas or providing opinions and presents a chance for users to undertake tasks. While a large majority of the tasks are contests for designing slogans, posters or logos, there are also innovation contests involving substantive policy goals. One example was the 2018 Rurban (rural-urban) innovation challenge which invited startups or individuals to propose projects for implementation around eight focus areas including: sanitation, road safety, healthcare services and digital literacy in villages, among others. By successfully completing

tasks, users earn "activity points" and accumulate "hours" of participation, which are displayed on their profile to track their engagement on the site.

MyGov works with ministries to identify an idea for the engagement initiative and publish it on the platform, and also helps with both designing the outreach initiative and analyzing responses before passing them to the participating ministry. How submissions are processed after MyGov turns them over to the participating ministry differs from division to division. If the ministry implements a user's idea, they must inform MyGov, who in turn informs the user.

What Are The Outcomes?

With over 7.8 million registered users, MyGov is one of the largest CrowdLaw projects in the world. As of March 2019, the platform boasted 223,000 submissions across 808 tasks, and 3.9 million comments across 799 discussions since the platform's creation in 2014. Among the most notable features are the automatic translation tools used to transcribe and translate from the country's many diverse languages and an algorithm used to analyze and prioritize comments. Going forward, MyGov plans to include support for regional languages and further explore the use of voice-to-text conversion to enable people to participate by phone.

Additionally, important policy decisions have been shaped by submissions to the MyGov platform. For example, the Indian Railways budget of 2016 included 15 citizen ideas from MyGov. Yet, MyGov has been most popular for creative design contests such as the logo design for the "Clean India" mission (Swacch Bharat), and for soliciting topics which the Prime Minister should address in his monthly radio address to the nation.

What Does It Cost?

For the 2016-2017 financial year, the MyGov division of the Digital India Corporation reported a total expenditure of Rs. 1,066,194,458 ($14,480,499 USD). MyGov is funded in full by a yearly grant-in-aid from India's Ministry of Electronics and Information Technology. Nearly 90 percent of this budget -- Rs. 938,544,82 -- was spent on administrative expenses. The vast majority (over 96 percent) of the administrative expenditures went towards promoting the MyGov platform through advertising and conferences; only Rs. 6,033,936 -- or 0.6 percent of MyGov's total budget -- was spent on direct maintenance and data storage related to website operations (Digital India Corporation, 2017).

What Are The Benefits?

▸ Extensive marketing and publicity using multiple modes of communication, especially social media, has led to high levels of engagement.

▸ Mixing "fun" and "serious" tasks, such as logo design with policy proposals, keeps more diverse audiences engaged.

▸ "Gamification" and contests boost participation.

▸ The MyGov India staff supports ministries in creating engagement opportunities and requires agencies to respond, explicitly communicating how they used public feedback.

What Are The Risks?

▸ While the site enables engagement, it does not commit the government to respond nor guarantee any legislative outcomes. The lack of definite outcome risks reducing the impact of the project.

▸ Even though policy discussions are held on MyGov, Ministries are not compelled to respond, depressing participation.

▸ Posting vague problem statements reduces the quality of submissions and increases the workload for the team responsible for filtering the submissions and selecting the best ones.

For more information, please contact: ***crowdlaw@thegovlab.org***

Sources:

- MyGov India Blog, "15 Citizen Ideas That Shaped the Rail Budget 2016-17".
- Available online at https://blog.mygov.in/15-citizen-ideas-that-shaped-the-rail-budget-2016-17/

DECIDE MADRID

MADRID'S DIRECT DEMOCRACY EXPERIMENT

https://decide.madrid.es

BRIEFING NOTE

Owner: Madrid City Council
Location: Madrid, Spain
Years in Operation: 2015-present
Implementation Level: Local
Platforms: Web, Offline
Method: Online brainstorming
Participatory Task: Ideas

DECIDE MADRID | MADRID'S DIRECT DEMOCRACY EXPERIMENT

How Does It Work?

Decide Madrid is a citizen participation platform launched in 2015 that, amongst other features, allows members of the public to submit proposals to the City Council.

People wishing to make a proposal through the Decide Madrid website must first register by providing, as a minimum, their email address. Registered users can then create a "citizen proposal" of any length in text and/or video. Citizen proposals can be submitted via the website, by mail, or in person. To assist people in developing sound proposals, a resource kit and blog post with guidelines and tips are provided.

Once a proposal is submitted, any registered and verified resident of Madrid can click a button expressing support for a proposal. Once posted, each proposal is given twelve months to gather the public support needed for it to progress to the next phase of consideration. In order to advance to the next stage, a given proposal must receive the support of at least 1 percent of registered citizens in Madrid over 16 years of age (currently ~27,000 people) - this is a legal requirement that stems from Spanish law. If, after 12 months, a proposal does not reach this threshold, it is moved to the "archived" section of the website.

Proposals can be sorted by "most active," "highest rated," "newest," and "archived," or by category tags such as "culture," "mobility," and "social rights."

To maximize citizen participation and accommodate those without internet access, most actions that take place on the website (including registration) can also be completed in one of Madrid's 26 Citizen Assistance Offices with the help of trained staff.

If a proposal reaches the 1 percent threshold, a 45-day period of online public discussion is triggered. This period is followed by an additional seven-day period when verified users can vote to accept or reject the proposal. A majority vote in this process allows the proposal to move to the next stage - consideration by the City Council.

Any proposal that wins majority favor in the second round of public voting must be reviewed by the City Council within 30 days. During this 30 days, the Council evaluates the proposal based on its

legality, feasibility, competence, and economic cost, all of which are set out in a subsequent report that is openly published. If the report is positive, a plan of action to carry out the proposal is subsequently written by City Council staff and published. If the report is negative, the City Council may either propose an alternative action, or publish the reasons that prevent the proposal's execution.

What Are The Outcomes?

Decide is a mixed success. On the one hand, it offers an efficient mechanism for any member of the public to engage in democratic life and the free software that it utilizes is in use in 70+ cities. In Madrid, nearly 400,000 people are signed up and have submitted over 21,000 proposals. On the other hand, the legal requirement to obtain one percent of the population's signatures (only two proposals have ever garnered the required support) before a proposal can move forward, combined with a number of design flaws, has resulted in thousands of proposals being submitted but none being enacted since the platform's inception. Also many proposals put forth by citizens are poorly informed and designed in such a way that prevents their implementation, often because they are not under the jurisdiction of the City or they duplicate another law that already exists. The City of Madrid is seeking to test new ways to increase the number of signatures on citizen-submitted proposals while simultaneously improving their quality.

What Does It Cost?

The software is free and open source and developed by a community of volunteers. The City Council, however, pays for a staff member whose job is to focus on public engagement as his/her job.

What Are The Benefits?

- The clear and straightforward process make it easy to sign up and submit a proposal or vote on someone else's.
- In-person citizen assistance venues ensure that everyone - regardless of their ability to access the internet - is included.
- Registration and verification ensure that only Madrilenians participate in certain processes.
- Even if the City Council cannot officially engage citizens on the platform, it can still see what people are talking about and care about.

What Are The risks?

- The absence of a sample proposal or guiding questions means there is a lack of guidance as to what constitutes an actionable proposal, leading to lower quality submissions.
- The inability of elected officials or staff to engage with citizen proposals means proposals that could otherwise have been developed into something implementable receive no feedback.
- The volume of proposals is very high, which limits participants' ability to see many of them - as a result, many high quality proposals may go unnoticed.

For more information, please contact: ***crowdlaw@thegovlab.org***

BETTER REYKJAVIK

MUNICIPAL OPEN INNOVATION

https://betrireykjavik.is

BRIEFING NOTE

Owner: Citizens Foundation - A non-profit organization in Iceland

Location: Iceland

Years in Operation: 2011-present

Implementation Level: Local

Platforms: Web

Method: Online brainstorming

Participatory Task: Ideas, Opinions

BETTER REYKJAVIK | MUNICIPAL OPEN INNOVATION

How Does It Work?

Created by the Icelandic Citizens Foundation in October 2011, Better Reykjavik is the City of Reykjavik's initiative for crowdsourcing solutions to urban challenges. Better Reykjavik uses Your Priorities, open source software to organize and crowdsource ideas. Better Reykjavik is an umbrella for several programs, including the city's participatory budgeting platform called "My Neighborhood" and the City Council's participatory lawmaking project is called "Your Voice." Over 20% of the population of the City regularly uses the platform, which has over 27,000 registered users, primarily for participatory budgeting. The same platform has been used by 20 countries to conduct online engagement.

Through Your Voice, residents of Reykjavik submit original ideas and solutions to municipal-level issues within the city, and vote on proposals submitted by other users. To encourage thoughtful deliberation instead of rancorous debates or "trolling," the platform uses a "pros" and "cons" feature. Rather than responding to individual comments, residents can make comments either in favor of, or against, a particular proposal, and either upvote or downvote each proposal. The rating scheme can be customized. Your Voices uses a thumbs up/thumbs down rating scale but this can be changed to numbers or stars and include multiple rating systems. For example, when the State of New Jersey used Your Priorities to gather ideas from State employees on how to make the government more effective and efficient, it asked participants to rate ideas based on importance and feasibility using five stars, instead.
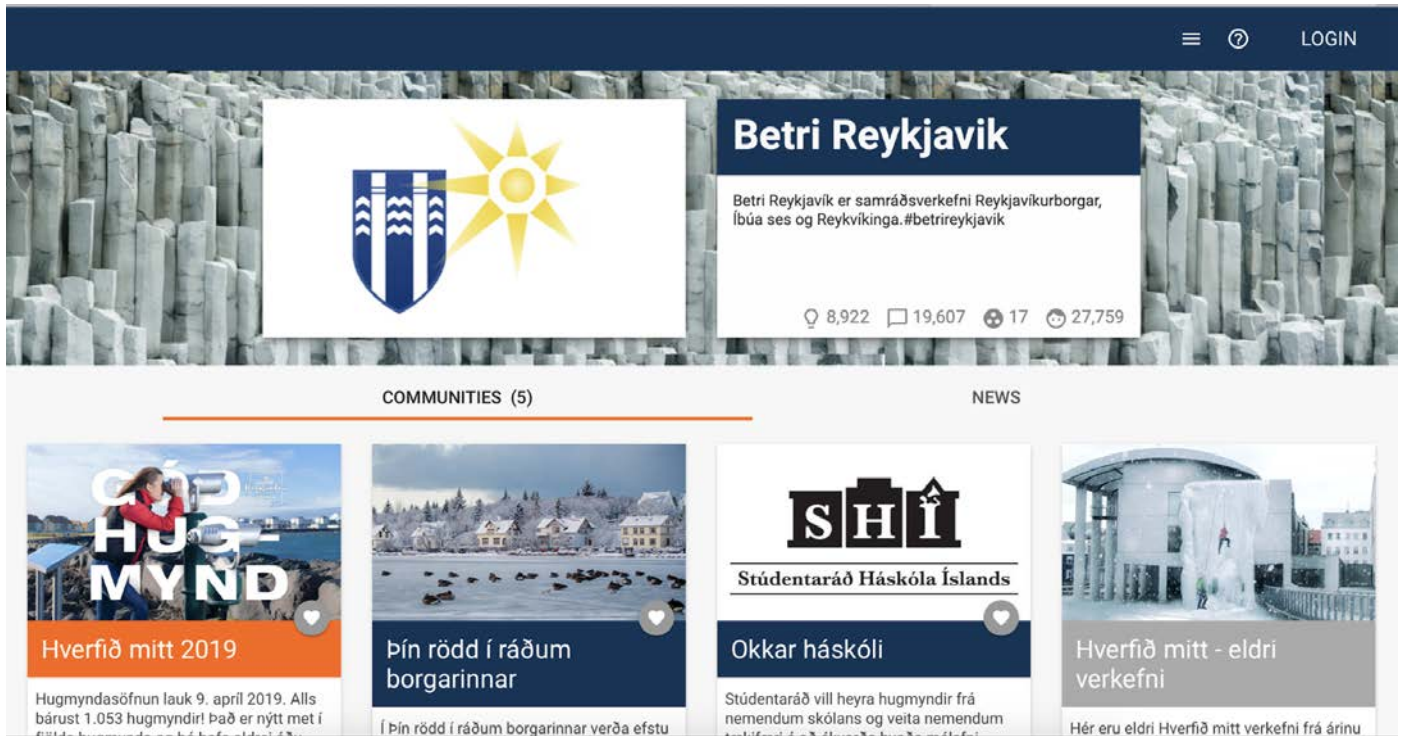
In the early days of the project in Reykjavik, on the last working day of every month, a project manager from the Mayor's Office collected the five top rated ideas with at least 25 upvotes and that were less than one year old. The project manager then evaluated the proposals to determine whether the city had jurisdiction to implement them. If they qualified, the ideas were then transferred to the appropriate standing committee within the city council. The committee then conducted a feasibility analysis. If necessary, professional teams contacted the creators of the idea for further details and customization of the idea. Each idea was then either accepted or rejected.

To make the entire process transparent, every stage of the Mayor's Office assessment was posted on the Better Reykjavik website. The evolution from an idea to a decision took 3-6 months - at the end of that timeline, all the participants, including the proposer and those who voted for the proposal, were notified about the outcome. If an idea was rejected, the author received an explanation by email, and an invitation to come to City Hall for further discussion, if requested.

Research has shown that crowds of problem-solvers can outperform a company's internal R&D unit, if one knows when—and how—to use them. But the involvement of a larger number of people is only one reason to prefer a collaborative approach to urban policymaking. A greater diversity of people, with various skills and perspectives, can be just as important, especially when care is taken to go beyond the usual suspects for input. A diversity of participants also enhances the likelihood of

obtaining expertise that is more innovative, creative, and varied than the traditional means of public input, such as occasional hearings. Advances in online technology make such deliberative consultation both possible and efficient.

However, despite the initial promise, over time political support and institutional backing in Iceland have waned. Though the Better Reykjavik platform (operated by the Citizens Foundation) is still live, the City Council is not currently processing submissions. City officials believe that having too many initiatives -- participatory budgeting and open policymaking -- means the public does not know which proposals belong where. However, other countries have adopted the platform. For example, the Scottish Parliament is also using Your Priorities to enable public engagement in lawmaking. For example, in 2019 the Committee on Community Well-being solicited citizen engagement in connection with draft policymaking. However, in a current deliberation on whether to legalize civil partnerships for heterosexual couples (currently only gay couples can enter into civil unions) or abolish civil unions altogether, the deliberation feature is turned off, presumably to reduce the amount of discussion. In other words, the deliberation feature can be turned on or off, allowing for greater flexibility and testing of the value and impact of deliberative commenting where people respond to one another's comments.

What are the outcomes?

As the Reykjavik City Council retrenches its support, participation has declined. From 6.9% of the city's voting-age population in 2012, it already dropped to 5.7% in 2014. According to surveys conducted by the University of Iceland, there were many reasons behind the decline of participation: lack of knowledge of the platform, lack of time, lack of interest, and issues with the accessibility of the platform. However, in 2015, participation rates recovered and rose to a record-setting 12.5% participation in 2018. To date, 27,000 registered users have submitted over 8,900 proposals and 19,000 arguments for and against them.[1]

In a 2015 audit conducted by the University of Iceland, just over 40% of Reykjavik residents reported that they were pleased with Better Reykjavik. Interestingly, although the youngest people demonstrated the lowest levels of participation, those who did were the most satisfied with the experience. This dynamic perhaps reflects the demand among young people for more direct forms of democratic engagement.

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[1] Betri Reykjavik", City of Reykjavĩk of the Institute of Political Science and Politics at the University of Iceland, 18 Jan. 2016. Accessed 21 June 2018. , https://fundur.reykjavik.is/sites/default/files/agenda-items/Drö̈g%20að %20útttekt%20um%20verkefnin%20Betri%20Reykjav%C3%ADk%2C%20Betri%20hverfi.pdf

What does it cost?

The cost of Better Reykjavik from 2011 to 2015 was approximately 1.3 billion ISK ($12 million USD, €10 million) - this includes the participatory budgeting outlay, costs such as the salaries of project managers, advertising and promotional costs, and the €2,500 service agreement with the Citizens Foundation, who operates the Better Reykjavik website. However, this figure does not account for the savings from the innovative proposals or the time of the citizens invested in making them.

What are the benefits?

Giving citizens a voice within the policymaking process and the power to influence the outcome of impactful issues was itself a benefit
For a time, the City Council's commitment to reviewing the best ideas has helped ensure a high degree of quality.

What are the risks?

The use of the term "Better Reykjavik" to refer to multiple projects has caused confusion among participants. Some have submitted ideas on Your Voice that belong as participatory budgeting projects on My Neighborhood, as citizens often do not understand the rules for participation, much less how the City Council functions.
Some have raised concerns about the limitations of the platform with regard to its original goal. While Better Reykjavik was conceived as a platform to give citizens a voice in governmental and economic matters, participants' ideas have focused on projects that simply improve the quality of everyday life. This raises questions of whether it is necessary for the Better Reykjavik platform to be further improved to facilitate this larger conversation between citizens and the city's government. Google Translate is incorporated to make the website accessible to non-Icelandic speakers, but it is questionable whether this is adequate to ensure participation by non-Icelandic speaking immigrants.

For more information, please contact: *crowdlaw@thegovlab.org*

RAHVAKOGU

TURNING THE E-REPUBLIC INTO AN E-DEMOCRACY

https://rahvakogu.ee

BRIEFING NOTE

Owner: Office of the President, Estonia
Location: Estonia
Years in Operation: 2013
Implementation Level: National
Platforms: Web, Offline
Method: Online brainstorming
Participatory Task: Ideas, Opinions

RAHVAKOGU | TURNING THE E-REPUBLIC INTO AN E-DEMOCRACY

How Does It Work?

Rahvakogu (The People's Assembly) was a digital initiative to crowdsource policy proposals for improving the state of democracy and mitigating political corruption in Estonia. Five specific issues (the electoral system, the functioning of political parties, the financing of political parties, public participation in political decision-making, and the politicization of public offices) were selected beforehand as the topics for engagement.

Rahvakogu was conducted in four phases: Proposals, Grouping, Synthesis, and Deliberation:

1. **Proposals -** Proposals enabled the public to make policy proposals pertaining to the themes of political reform via the project website, which used the Your Priorities platform developed in 2008 by the Icelandic nonprofit Citizens Foundation. During the three weeks that the portal was live, from January 7 through January 31, the Rahvakogu webpage garnered over 60,000 views, with over 2,000 users posting 2,000 proposals and 4,000 comments.

2. **Grouping -** In February, during the Grouping phase, policy professionals read, summarized, and then grouped the proposals into 59 "bundles." Then, 30 experts in the fields of political science, law, and economics analyzed these bundles and provided an impact assessment of what effect the proposals would have if enacted.

3. **Synthesis -** A series of five seminars was held during the Synthesis phase in March, at which time political representatives, experts, and citizens who had submitted proposals in the crowdsourcing process were eligible to participate. Participants then drafted proposals and discussed them in small-group meetings to synthesize their proposals into 18 discrete bills in preparation for the face-to-face Deliberation Day.

4. **Deliberation -** The live Rahvakogu event -- the Deliberation Day -- was held on April 6, 2013. The total group of 314 randomly selected and representative citizens was divided into smaller groups of ten to facilitate discussion. Armed with briefing materials prepared by the expert group, and overseen by a moderator, each group deliberated and cast a formal vote to either accept or reject the proposals.

Why Is It Interesting?

Given its short life span of only a few months, Rahvakogu was one of the most immediately impactful CrowdLaw projects, resulting in legislation that created Rahvaalgatus, a permanent CrowdLaw mechanism for sourcing new policy ideas that is still active today.

What Worked?

A hybrid approach to use of technology - while policy ideas were submitted through an online platform, the other tasks involved in Rahvakogu, including a Deliberation Day, were done in-person. This allowed the organizers to fill some demographic gaps in participation, and allowed for policy experts and analysts to weigh in on the submitted policies.

What Are The Outcomes?

In total, 15 of the 18 proposals were accepted by the People's Assembly, which were then passed along to the Riigikogu (Estonia's unicameral parliament). Since there was no formal legal mechanism for the Riigikogu to vote on laws drafted by an outside source, the President had to use his power to introduce the 15 bills to parliament. The Riigikogu eventually passed three of the proposals as law while "four proposals have been partly implemented or redefined as commitments in the government coalition programme."

What Does It Cost?

The hosting service for the tool used for Rahvakogu (called YourPriorities) costs $390 per month for medium-sized projects (up to 5,000 users) and $2800 per month for large cities/governments (up to 250,000 users).

What Are The Benefits?

- The focused and well-defined set of themes (and a process that limited debate only to those topics) ensured that participation remained topical.
- The combination of online, self-selected participation with the selection of an offline representative sample of the population helped achieve the best of both diversity and legitimacy.
- The five-stage process that combined public and expert input resulted in actionable and implementable laws and policies.

What Are The Risks?

- The one-off nature of the experiment and Estonia's small size (population 1.3 million) means that results may vary.

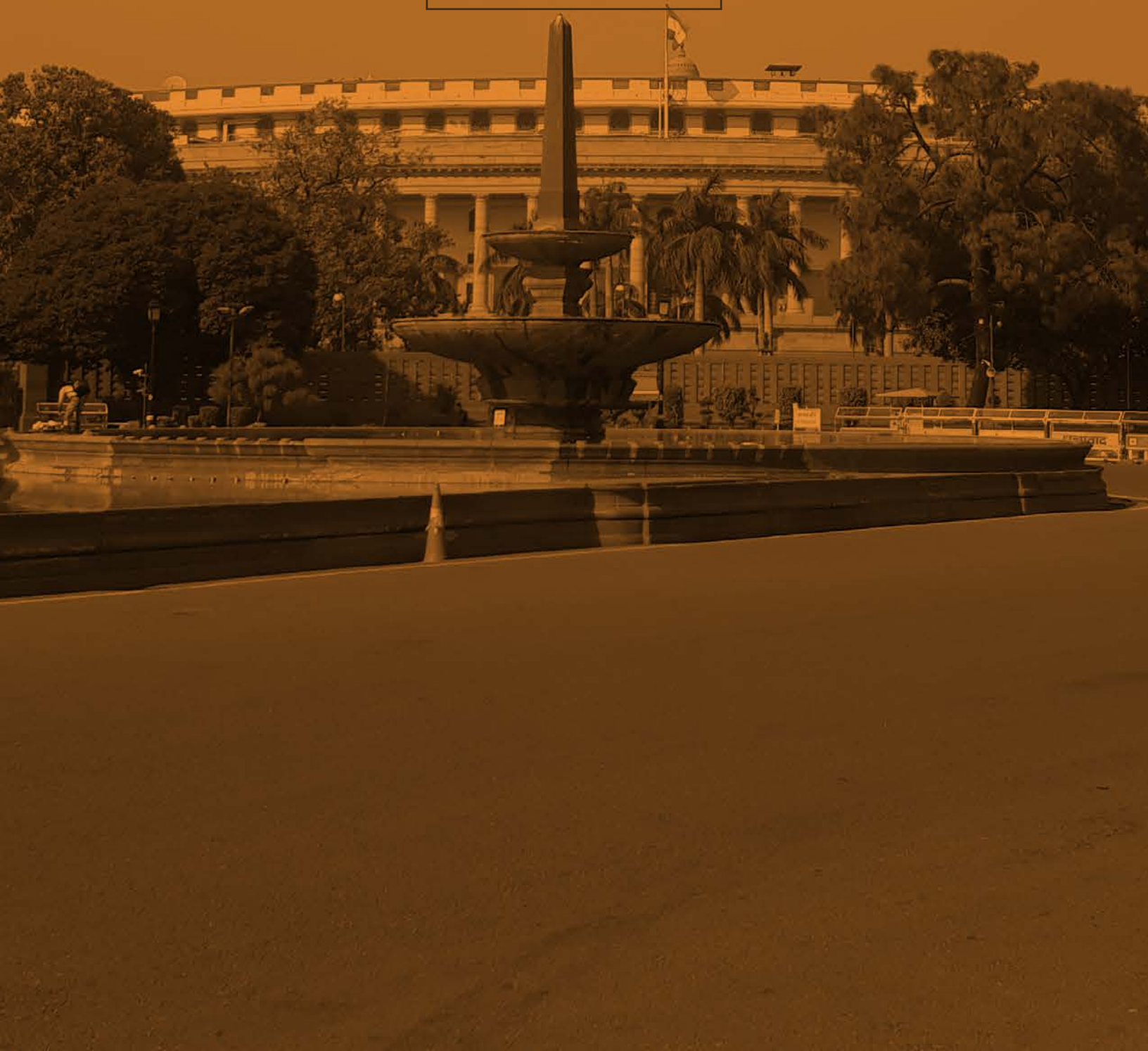For more information, please contact: ***crowdlaw@thegovlab.org***

MYGOV INDIA

POLL, DISCUSS, DO

https://mygov.in

CASE STUDY

MYGOV INDIA I POLL, DISCUSS, DO

Introduction

MyGov India (mygov.in) is an online crowdsourcing and "crowdscoring" platform that allows citizens multiple opportunities to engage with India's Government, including commenting on discussion topics, leaving feedback on polls and surveys, and participating in contests. These contests may involve a range of tasks, from drafting policy suggestions, to competing in knowledge-based quizzes, to participating in content creation competitions (MyGov, NIC, & MeitY, 2017). MyGov India is an example of a 360° CrowdLaw project, where participation happens through a combination of online discussions and offline tasks (GovLab, 2018). MyGov India indicates that in the Solution Identification phase of lawmaking, governments can draw participants in by providing multiple channels for participation that offer real-world incentives. Online polling can be used for public consultation on future programs and for feedback on existing initiatives. However, none of this will necessarily result in meaningful or impactful engagement if the proper institutional mechanisms for the Government to respond to feedback are not in place.

Background

Prime Minister Narendra Modi launched MyGov on July 26, 2014, 60 days into his tenure as prime minister. The stated intent of the program is to "contribute to the social and economic transformation of India" by creating "an interface for healthy exchange of ideas and views involving the common citizen and experts" which would "bring...the government closer to the common man." In Modi's words, the intent of the program was to transform "'Swaraj' (self-rule) into 'Surajya' (good rule)" (MyGov India, n.d.-a).

Modi's government created MyGov to combat perceived systemic corruption in India's government. Under the rule of the United Progressive Alliance from 2004 to 2014, the increase of access to 24-hour news and talk shows, which fixated on a series of corruption scandals involving the members of the ruling party, "made exposure of high level corruption a daily national sport" (Nayar, 2015). Coalgate[1] and the 2G Telecommunications Scam[2], two of the most prominent scandals, coincided with a culture of normalized corruption, everyday bribery, and political patronage. These corruption

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[1] In this 2012 scandal, the Comptroller and Auditor General of India (CAG) exposed a practice in which the Indian Government allocated coal mining contracts at its own discretion rather than through a bidding process, which CAG estimates resulted in a Rs. 1.86 trillion gain by the private parties involved. (Gupta, Sultan et al. 2017).

[2] In this 2007 scandal, Telecom Minister A. Raja illegally manipulated the selection process for the allocation of 2G spectrum licenses to companies in his favor, again resulting in a Rs.1.8 trillion loss by the Indian Government.

problems, along with stagnating economic growth and a decline in the perceived legitimacy in the United Progressive Alliance government, set the stage for the "high-tech populism" (Jaffrelot, 2015) of Narendra Modi and the Bharatiya Janata Party (BJP).

Modi capitalized on the proliferation of access to visual media technologies during his 2014 campaign to cultivate his image as a powerful, technologically-advanced, and universally-beloved nationalist leader (Jaffrelot, 2015). The BJP furthered this effort with the publication of its 2014 Election Manifesto, which promised to reduce corruption, in part by creating an e-Governance platform to complement its transparent, policy-driven government. BJP intended the "Easy, Efficient, and Effective" e-Governance platform not only as an antidote to corruption, but as part of a broader Open Government goal which would include the digitization of public records, the further development of India's information technology infrastructure and economy, and public participation in policymaking (BJP, 2014).

Numerous disparate e-Governance initiatives existed in India at various levels prior to MyGov. In response to these "islands of e-Governance initiatives in the country at the National, State, district and even block level" (Second Administrative Reforms Commission, 2008, p.106), the Department of Information Technology and the Department of Administrative Reforms & Public Grievances created the National e-Governance Plan (NeGP), which the Government of India approved in May of 2006. To execute the plan, the Ministry of Electronics and Information Technology (MeitY) created the National e-Governance Division as an independent division of Media Lab Asia[3] to manage the project. NeGD organized e-Governance initiatives into 27 Mission Mode Projects (MMP) --which had expanded to 44 by 2018. Under the plan, NeGD also created numerous brick-and-mortar facilities, called "Common Service Centers," across India where citizens without internet access could go to access e-Services (Second Administrative Reforms Commission, 2008).

In July 2015, PM Modi announced the creation of the Digital India campaign (Ray, 2018). Digital India is an umbrella program which combines initiatives created by Modi's Government (such as MyGov India) with updated versions of existing programs. For instance, NeGP was overhauled as "e-Kranti," receiving an additional 13 MMPs with a new focus on mobile, Cloud, and geographic information

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[3] MeitY later restructured this division in the Digital India Corporation in 2017 (MeitY, 2017).

systems technologies (Kumar, 2018). Digital India takes a nine-pillared approach,[4] of which e-Governance is one. Under this framework, MyGov was created as the crowdsourcing, communications, and social media engagement platform, while e-Kranti assumed responsibility for e-Service delivery.

The MyGov platform launched on July 26, 2014, and is on-going. The Government of India created the platform via the National Informatics Center (NIC), the public organization in charge of India's information and communication technologies services, overseen by MeitY. In March of 2015, the NIC released an updated version of the site, dubbed "MyGov 2.0," which includes polling and survey features, better navigation and layout, and improved data analytics tools (Alawadhi, 2015). The platform is built on open-source software (Alawadhi, 2015), as per the Government of India's 2015 Policy on Adoption of Open Source Software for Government of India. MyGov launched a mobile app in 2017.

Project Description

MyGov India offers a range of curated participation opportunities, which fall into three categories: Do, Discuss, and Poll. The "Do" section consists of a mix of CrowdLaw tasks, some of which are used to create content for the Government of India and some of which serve to identify solutions to problems identified by the Government. Users can join communities called Groups (e.g. Clean Ganga, Sporty India, Tribal Development), which are led by public agencies (e.g. Department of Biotechnology, Department of Telecom, Department of Finance) to engage users on policy proposals, social issues, and other initiatives related to the Ministry's work. Most activities on the site are categorized by Group, while some are published to the whole site. Users can belong to a maximum of four groups at a time (MyGov, NIC, & MeitY, 2017).

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[4] The nine pillars are:
    1. Broadband Highways through national optical fibre network
    2. Universal access to mobile: connectivity in all 44,000 villages in the country
    3. IT teaching skills for youth job skills training.
    4. Electronics Manufacturing of items such as smart cards, smart energy meters, micro ATMs, mobile, set-top boxes, consumer and medical electronics.
    5. Public access to Internet by renovating post offices to be e-Service delivery centers
    6. E- Governance: delivery of services, publicly-visible government workflow automation, and public grievance redress through online platforms.
    7. E - Kranti: delivery of electronic services to people which deals with health, education, farming, justice, rights, security, financial inclusion and many more services
    8. Global Information: Hosting data online, engaging social media platforms and facilitating two-way communication through the creation of the MyGov website
    9. Early Harvest Programmes: increasing usage of internet and e-books in universities and promoting email as a method of communication
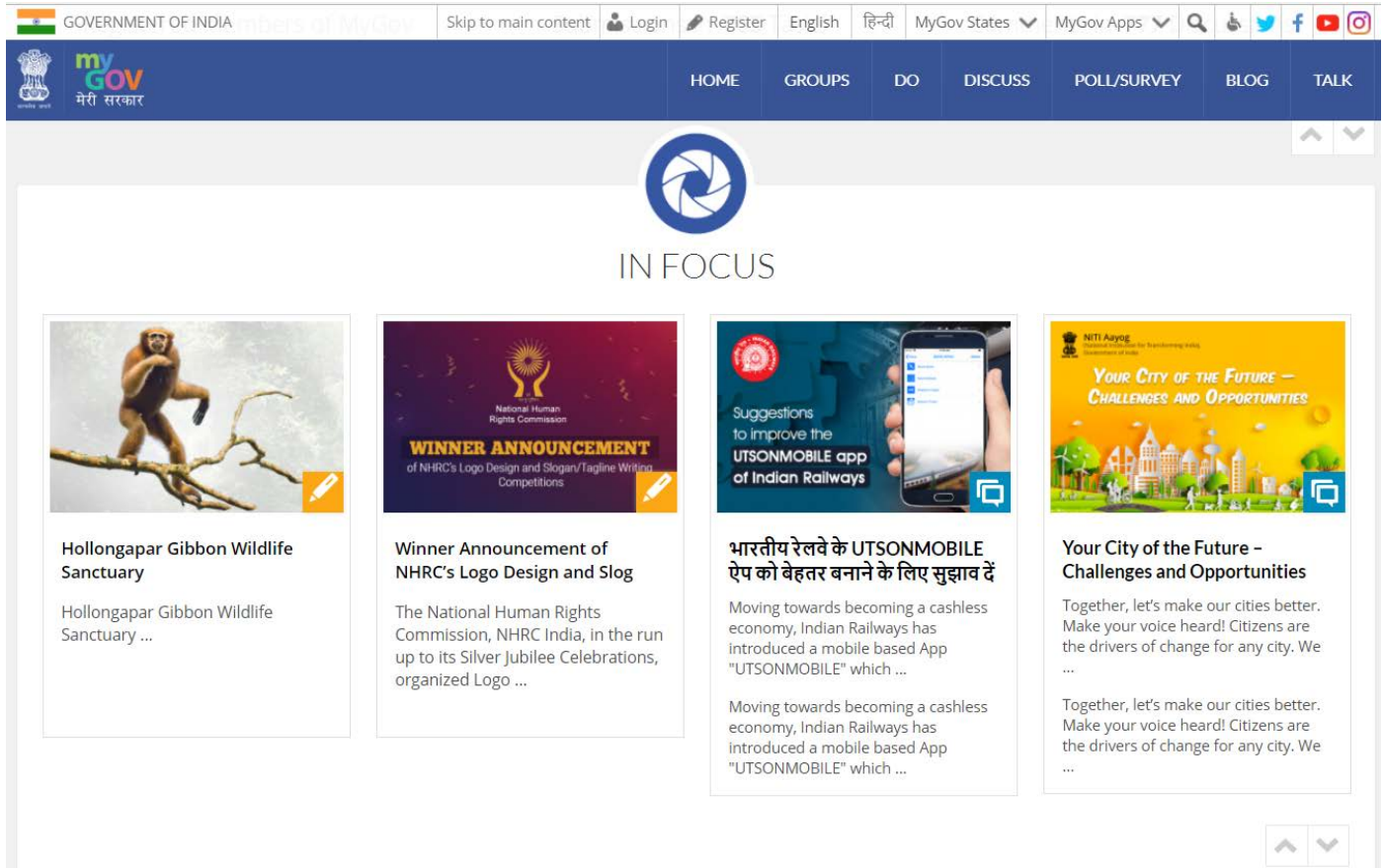(Kumar, 2018)

The Discuss section functions as a curated forum, where users respond to prompts or questions posed by ministries or by the central Government of India. Various Groups have asked users to provide suggestions about topics ranging from the Reduction of Corruption Through Technology, the Celebration of the 150th Birthday of Mahatma Gandhi, and the Development of Parks in Varanasi City. Additionally, in the lead up to each Mann Ki Baat (Prime Minister Modi's monthly national radio address), users are asked to submit topics and key themes about important issues. Users can post responses to discussion topics, along with file attachments, which other users can reply to by "crowdscoring" with up/down votes, or by leaving comments of their own (GovLab, 2018). The Discuss section is the primary CrowdLaw component of the MyGov platform, as it allows citizens to Identify Solutions to the problems identified by the Government of India, solutions which ministries take into account when formulating policies. This is in addition to the section's role as a general feedback/suggestions forum for various government programs.

In the Poll/Survey Section, Groups can post opinion polls and surveys about topics ranging from the naming of government programs, to the design of government apps, websites, and logos. Many polls are also used for priority-setting tasks around "Smart Cities" initiatives and area-based

development. For instance, one poll allowed residents to vote for which area of the city of Ghaziabad should be selected for area-based development as a Smart City. For the duration of the polling period (determined by the creator of the poll), registered users can vote in the poll or survey; the platform shows users the results of the poll after they have cast their vote. This is an additional CrowdLaw component, though one where users have markedly less freedom. While polling only allows users to select from a predefined list of options, and is not the focus of MyGov, it does allow citizens to express their opinions on policy initiatives. In the Blog section, MyGov staff, Senior Government Officials, Union Ministers, and invited guests post editorials relating to MyGov initiatives, relay general updates about the platform, and announce contest winners (MyGov, NIC, & MeitY, 2017). Groups also use the Blog to disseminate e-Books, which are largely long-form reports of "success stories" from past initiatives. Likewise, the Talks section hosts and archives a variety of live streamed events, panel discussions, webinars, and lectures organized by members of India's government. Together, these two sections function as a media outlet for the Government rather than as a CrowdLaw platform.

The Do section includes online and offline tasks that further the objectives of the Group or the Indian Government. Users can view the task, its description, and its duration as determined by the creator, and then accept the task by selecting "Do this task now." Users then can complete their task by uploading a document containing their submission. The organizer of the task announces the winner(s) on the Blog section. By successfully completing tasks, users can earn "activity points" and accumulate "hours" of participation, which are displayed on their profile to track their engagement on the site (MyGov, NIC, & MeitY, 2017).

FIGURE 2: PUBLIC COMMENTING PROCESS FOR DATA PROTECTION WHITEPAPER. SOURCE: MYGOV.IN

The Do section offers a mix of CrowdLaw tasks. In one example of a public consultation task, the Ministry of Telecommunications invited the public to leave comments on specific chapters of the 2018 Draft National Digital Communications Policy through a portal on the MyGov site. The same process was used by MeitY to garner input on a White Paper of the Committee of Experts on Data Protection Framework for India, a precursor to a draft bill on data protection in India. These tasks solicit feedback on sections of draft legislation, in an effort to resolve specific issues, rather than to identify general solutions to problems, as is done in the Discuss section. Other tasks are framed as contests (or "Innovation Challenges"), where ministries ask users to submit proposals for how to raise money for India's railways or how to bring urban services to rural villages; the submission requirements, prizes, timelines, etc., vary from contest to contest. While some of these contests and other tasks are related to policymaking (grouped under the innovate.mygov.in module), many

others are creative tasks (grouped under the "Creative Corner" section) such as photography, letter-writing, logo design, sloganeering, and film contests. These contests are used to produce content for the Indian Government and its many schemes.

Participation

There is some opportunity for citizen participation in each section of the MyGov platform. For the most part, participation is self-selected; anyone with an email or phone number is able to participate in discussions and polls, while some contests with prizes are only open to Indian citizens. To participate, users must register for an account using either an email address or phone number and birthday, along with their full name, which is visible to other users. Users with "@nic.in" or "@gov.in" email addresses can directly log-in to the system using their government credentials without registering. Anonymous users may view the various tasks and discussions but may not participate (MyGov, NIC, & MeitY, 2017). Only members of government, MyGov employees, and select invited guests are allowed to post "Blog" or "Talk" content.

> As of July 2018, the dashboard boasted 6.3 million registered users on the platform, with 222,000 submissions across 773 tasks, and 3.8 million comments across 780 discussions since the platform's creation.

The MyGov portal tracks the participation of individual users (MyGov, NIC, & MeitY, 2017), and publishes real-time metadata on a dashboard called "Highlights." As of July 2018, the dashboard boasted 6.3 million registered users on the platform, with 222,000 submissions across 773 tasks, and 3.8 million comments across 780 discussions since the platform's creation.

According to MyGov, actual engagement stretches to over 200 million citizens, including the less digitally or lingually literate who participate by voice. The platform has also hosted 64 Groups, 180 Talks, and 244 Polls. MyGov also hosts "#TransformingIndia" (See Figure 3), a performance dashboard for progress updates of the Modi Government's various schemes. A related dashboard, "48 Months Transforming India," celebrates the accomplishments of Modi's first four years in office.

MyGov provides multiple channels for participation, as part of Digital India's 360° Approach. Users can partake in some MyGov tasks and discussions even if they are not able to access the desktop

site. For instance, through the #FridaysAtMyGov program, Ministries hold meetups between experts and ministers in a particular field, which MyGov users can register to attend in person, or can call in through a WhatsApp phone line. Similarly, users can submit ideas for the Prime Minister's Mann Ki Baat address, and can record responses for some polls, by calling a toll-free phone number. Users can also participate in polls, discussions, and tasks, and consume talks and blog posts, through the MyGov Mobile app. Users can also make submissions using the site's text-to-speech function (Basu & Lin, 2018). These channels provide the opportunity for millions of Indians to participate in MyGov: while India has 462 million internet users, it has nearly three times as many (1.21 billion) mobile phone connections, 40 percent of which are smartphones (GovLab, 2018).

However, those who participate tend to be Modi supporters. There is no technical barrier to diverse engagement yet there is little, if any, interaction across the aisle or from vocal critics of the Government (Pugalia, Interview with the author, 2018). Also, while the platform has attracted 6.3 million registered users, this is a drop in the bucket (less than 0.5 percent) of India's total 1.3 billion population.
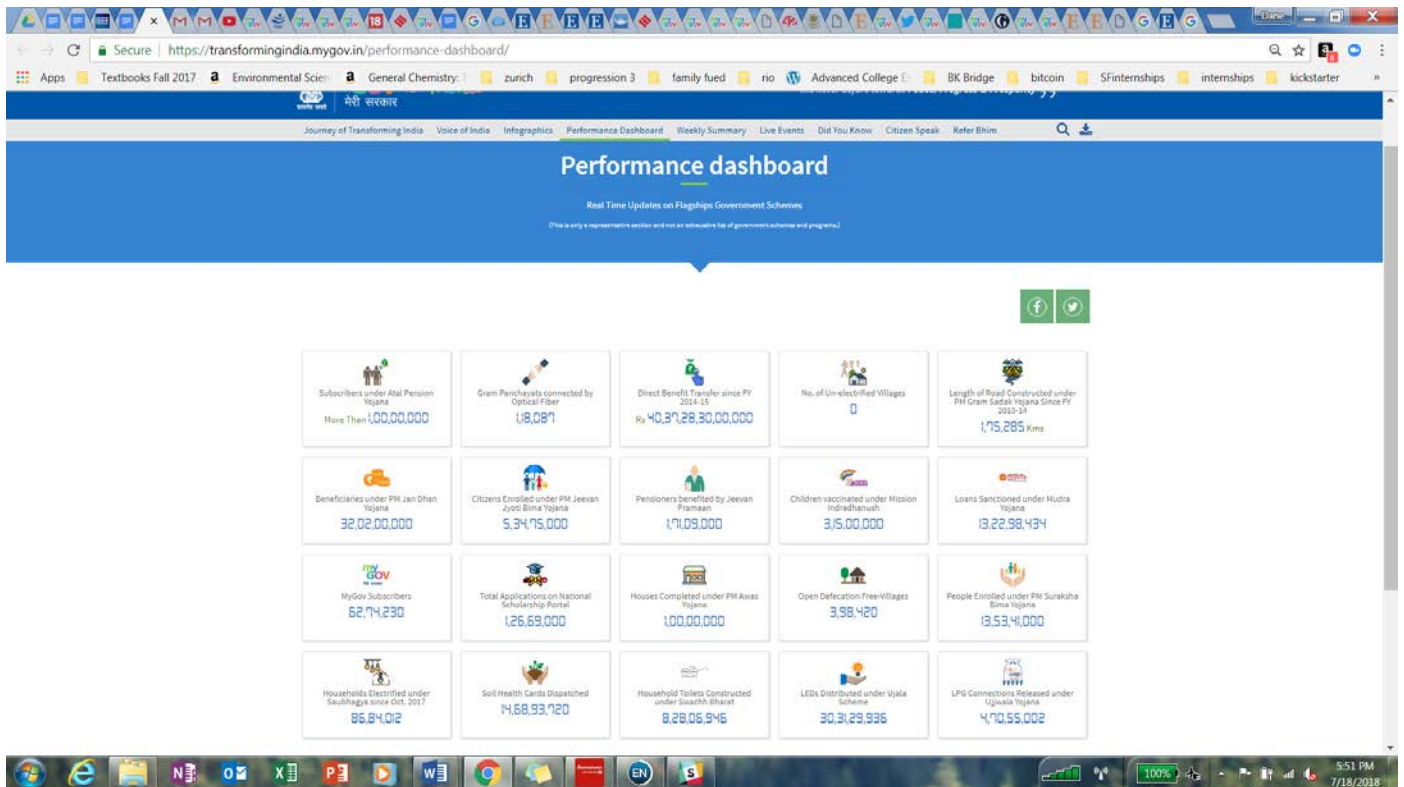
FIGURE 3: TRANSFORMING INDIA PERFORMANCE DASHBOARD. SOURCE: MYGOV.IN

These relatively low numbers may be attributed, in part, to the fact that the only real incentive offered to discussion participants is the ability "to take part in various initiatives towards public

good" and "to voice your opinion on the policy initiatives of the Government" (MyGov India, n.d.-b).
In other words, the value of the user participating is the participation itself. While users accumulate
credit points by participating, the only mention of how these points can be used is on the site's FAQ
page, which simply states that "Incentives based on credit points will be announced in the
future" (MyGov India, n.d.-b). Some incentives, such as cash prizes, electronic devices, and
certificates of achievement, are offered to the winners of contests.

FIGURE 4: MYGOV INDIA'S INTERACTION PROCEDURE. SOURCE: MYGOV. INDIA

At the institutional level, a team of MyGov staff members collects and processes submissions
through a five-step mechanism (See Figure 4). First, MyGov works with a relevant Ministry to identify
an idea for the engagement initiative. Next, MyGov, the Ministry, and any other involved groups
create the task (a discussion topic, contest, poll, etc.) with input from both ends. Once MyGov and
the relevant division have approved the activity, it is published on the platform. MyGov users are
then able to discuss, vote, or create content for the contest for the duration of the task.

At the end of the task, MyGov staff receive the submissions and process them using listening tools,
open-source software to translate and transcribe the country's diverse languages (GovLab, 2018),
and algorithms used to analyze and prioritize comments (Basu & Lin, 2018). Going forward, MyGov
plans to further explore the use of voice-to-text conversion, as voice is a primary mode of access

and communication for people in India. This will also include support for regional languages (MyGov, personal communication, 2018). Subject experts also analyze the submissions before referring them to a relevant ministry. The opinions and feedback of all individuals are then presented to the relevant divisions so that the ministries can make educated policy and governance decisions. How the submissions are processed after MyGov has turned them over differs from division to division. Each ministry has a team that is responsible for ensuring participative governance. If the ministry implements a user's idea, they must inform MyGov, who in turn informs the user. MyGov employs a team of approximately 50 staff members, overseen by CEO Arvind Gupta. These team members are spread across several verticals including Research, Content, and Technology, according to the strengths of each employee. Employees receive training in both "soft" and technical skills, making use of subscriptions to technical tools to upgrade work-related skills (MyGov, personal communication, 2018).

For the 2016-2017 financial year, the MyGov division of the Digital India Corporation reported a total expenditure of Rs. 1,066,194,458 ($14,480,499 USD). MyGov is funded in full by a yearly grant-in-aid from India's Ministry of Electronics and Information Technology. Nearly 90 percent of this budget -- Rs. 938,544,82-- was spent on administrative expenses. The vast majority (over 96 percent) of the administrative expenditures went towards promoting the MyGov platform through advertising and conferences; only Rs. 6,033,936 --or 0.6 percent of MyGov's total budget-- was spent on direct maintenance and data storage related to the website (Digital India Corporation, 2017).

The Government of India has communicated the existence of the MyGov platform to citizens through a targeted campaign involving social media, online articles, radio broadcasts, and live events. The platform operates a Facebook account, Instagram page, YouTube channel, and most notably a Twitter feed (@mygovindia) with over 1.4 million followers and 11,000 tweets. The platform and its initiatives have been covered in online and print media outlets including The Economic Times, The Indian Express, The Hindu, and Hindustan Times. The Prime Minister's monthly Mann Ki Baat radio address is broadcast on the public radio station All India Radio. Each of these outlets is in addition to the MyGov platform, whose "Talk" and "Blog" sections function as a media outlet for the Modi Government. The MyGov website, as with most of its publications and related media, is available in English and Hindi.

Unlike other CrowdLaw processes, MyGov India is not supported by a formal legislative framework or defined legal process. Though there are opportunities for citizens to provide input on government initiatives, there is no guaranteed way for user-submitted policy ideas to become

codified in law through MyGov India. While various government organizations may solicit suggestions or feedback regarding policy proposals or draft legislation, it is at the discretion of the ministry involved to determine what to post for public input and to what degree the suggestions will be implemented, if at all. There is no mandatory feedback requirement.

Impacts

By holding discussions on MyGov, the Government of India and the ministries that are active on the platform benefit from a curated list of suggestions that is "crowdscored," or rated by other users on the forum, and ranked by relevance using MyGov's algorithms, which can give the ministers an idea of which proposals are most worth considering and make the data consumption process easier (Basu & Lin, 2018). As ministries must post a discussion topic before users can respond, the ministers can control the flow of proposals by determining how often they post a forum. This allows the institutions to avoid being overloaded by information. Ministries benefit from a diversity of ideas, experiences, and opinions. Holding discussions on MyGov also allows ministers to create policies that are more in line with the beliefs and values of the people of India, as seen with the debate around India's Net Neutrality[5] policy in 2015 (GovLab, 2018).

> Holding discussions on MyGov also allows ministers to create policies that are more in line with what the beliefs and values of the people of India, as seen with the debate around India's Net Neutrality policy in 2015.

Prior to 2015, India had no official policy regarding net neutrality. In response to the rapid growth in traffic on web platforms like Google, Yahoo, and Facebook, the Department of Telecommunications'(DoT) tasked the country's Telecom Regulatory Authority (TRAI) with drafting a series of recommendations for the regulation of India's internet service providers. In March 2015, these recommendations were made public in the form of a rambling, hundred-plus page Consultation Paper[6] on TRAI's website. Many saw the TRAI report as favoring differential pricing,

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[5] "Net Neutrality" is the principle that Internet service providers (ISPs) cannot discriminate based on the source or type of Internet data with regard to their service. For instance, an ISP cannot "throttle" access to a rival ISP's website by slowing down data speeds to that site.

[6] Differential pricing is a practice where a provider charges different prices to access multiple websites, even if the same amount of data is transmitted to each site.

zero-rating,[7] and other controversial practices, much to the chagrin of net neutrality supporters. The backlash from supporters of net neutrality was immediate, with the TRAI receiving over 1 million emails about the report in the four months that followed (Soni, 2016). In July, DoT moved the discussion to MyGov, where it garnered over 70,000 responses --the vast majority of which opposed TRAI's recommendations-- before the topic closed on August 20, 2015. This feedback was reflected in TRAI's revised set of recommendations published in November of 2017, a complete reversal of the agency's prior position. The revised recommendations sought to "prohibit Internet service providers (ISPs) from engaging in 'any form of discrimination or interference' in the treatment of online content" (The Wire Staff, 2018). In July of 2018, the DoT's Telecom Commission adopted these recommendations, with a few exceptions for providers of "special services" (The Wire Staff, 2018). For the institution, the MyGov platform provided a centralized repository for ministers to receive and process comments in a crowdscored thread, in contrast to the millions of individual emails that comprised the only channel for feedback prior to MyGov.

FIGURE 5: THE IDEA FOR SWAYAM, INCORPORATED INTO THE 2017 UNION BUDGET. SOURCE: MYGOV. INDIA

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[7] Zero-rating is a practice where a provider allows users free access to a website or network of websites, usually one(s) with which the provider is affiliated. Backlash against Facebook's plan to bring "Free Basics," scheme to provide zero-rated access to Facebook and affiliated sites to India, sparked the country's larger discussion about net neutrality policy.

By hosting contests on MyGov, these institutions benefit from a content creation system, crowdsourced by users through a gamified approach, that can be more convenient and less expensive than the mechanisms that are traditionally used to design content for the government. For instance, MyGov India CEO Arvind Gupta recounts a 2014 project where MyGov was used to crowdsource the logo for Swachh Bharat ("Clean India"), a campaign to build community-owned sewerage infrastructure. Rather than outsourcing the creation of the logo through a conventional request for proposals (RFP) process, the Ministry of Drinking Water and Sanitation held a logo design contest on MyGov, where users could submit their designs for the chance to win a Rs.50,000 prize. The task amassed over 1,600 submissions, which users could then "like", and share on social media. This crowdscoring process was taken into consideration by the Selection Committee in determining the winner. The entire crowdsourcing process accrued a total cost of only $1,500 USD, approximately 1 percent of what the cost would have been using the RFP process (GovLab, 2018).

Similarly, in 2015, the Prime Minister's Office and Google co-hosted a contest on MyGov for the design of Prime Minister Modi's mobile application. The contest was held in three phases: Idea Submission, Wireframe Development, and App Development. Users were first asked to submit ideas for the app's content and function, with the best ideas (as decided by a MyGov Screening Committee) included in a "blueprint." In the second phase, teams of users consulted the idea blueprints to design wireframes of the app's functional layout. The Screening Committee shortlisted the top ten wireframe designs and invited their team members to present their work for a MyGov jury consisting of eminent professionals and government representatives. This jury then selected five of the wireframe design teams to participate in the third phase, where each team received mentorship from Google to develop their app. The jury then evaluated each app and selected a winning team, who won a sponsored trip to meet for six weeks with a team of engineers and developers at Google's Headquarters in Silicon Valley (MyGov India, n.d.-c). Through this contest, the Government of India was able to crowdsource the development of the application at minimal financial and labor cost; none of the participants in the contest received any financial compensation, and Google assumed the heavy lifting duties involved in developing the app. The Government also retained ownership over the app and its source code (MyGov India, n.d.-c).

Numerous suggestions made by users of the platform have also had real-world impacts. The ideas for SWAYAM (a Massive Open Online Course platform run by the Government of India) and the India Post Payments Bank (a system in which certain third-parties can offer some financial services usually provided by banks) originated from users on MyGov India (Baru & Lin, 2018). Several other

ideas from MyGov users have made it into proposals for Union and Railroad budgets of 2015, 2016, and 2017 including the installation of digital display networks in train passenger cars; collaboration with startups to support innovation in the railway system; and making Rs. 2,000 the maximum cash donation a political party could receive from a single person.

Challenges and Risks

Several scholars have identified ongoing challenges faced by the Digital India project, many of which are also more narrowly applicable to MyGov India. Of the 1.326 billion people who live in India, approximately 67.6 percent live in rural areas, which tend to suffer from reduced access to the internet; it is estimated that 864 to 950 million Indians lack internet access (Kumar, 2018; Ray, 2018). One survey found that only one in five households in Indian cities owns a computer, while only 9.8 percent have a computer with internet access in their home (Praharaj, Han et al. 2017). Many rural villages that are connected to the internet suffer from slow internet speed. While the Digital India plan seeks to solve this problem by further building out India's broadband internet infrastructure and by providing citizens internet access via Common Service Centers, the country's vast size makes this an ongoing challenge.

Linguistic diversity is another challenge, as over 1,600 languages and dialects and 15 official languages are spoken across India (CIA, 2018). Although English is an official language that is used by government officials and often learned as a secondary language, less than 1 percent of India's population speaks it as a first language and less than 5 percent are considered fluent. Although 41 percent of Indians speak Hindi (CIA, 2018), this still leaves at least half of India's population unable to fluently navigate the MyGov site without the use of outside software. Likewise, processing these many languages on the backend of MyGov is an additional ongoing challenge, and one that will compound as the platform continues to expand (Basu & Lin, 2018).

In analyzing Digital India, Kumar (2018) notes that "with cybercrime on the rise, the idea of putting information of about a billion citizens online seems like a risky move." While cybersecurity is a growing problem worldwide, India is especially prone to this problem due to its rapidly growing population of internet users and lack of institutional capacity to deal with cyber threats. In particular, the country lacks human capital of cyber security professionals, technologically savvy law enforcement officers, and cyber security R&D personnel. This problem is compounded by underreporting of crimes and low conviction rates for cyber criminals (Kshetri, 2016).

Reactions

MyGov has faced several technical hurdles, including those associated with the website's design. Rather than having one central engagement opportunity that draws in users and then directs them to other features, the site's overload of features spreads engagement out across the various sections of the site, causing it to feel empty. While the site's modular design allows for new ministries or states to easily be added, the generally poor design can also cause the site to be sluggish and prone to OTP (One Time Password) and other login issues. (Pugalia, Interview with the author, 2018).

MyGov has also been subject to controversies caused by the rapidly changing digital landscape in India, in which technologies and citizens' needs advance at a pace that leaves government institutions struggling to keep up. Recent controversies such as the Cambridge Analytica scandal (involving the collection and misuse of Facebook users' personal data) and data security issues related to Aadhar --India's digital identification card system-- have brought data privacy concerns into the public consciousness. In particular, some have questioned MyGov's request for ministries to share users' data with them in order to improve engagement on the platform (Sharma, 2018). In response to these concerns, MyGov CEO Arvind Gupta defended the platform's data usage as following "best practices," and argued that the tracking of users' engagement is crucial so that users "are not bombarded with unnecessary information and get communication from government which is relevant to them" (qtd. in Sharma, 2018). Others have raised the issue of public access to data. While MyGov is a government platform with publicly available data, PM Modi's app, which draws upon many of the same resources and is often used interchangeably with MyGov, is privately owned by the Prime Minister and as such its data is not publicly available (Pugalia, Interview with the author, 2018). While some of these issues may be addressed with the forthcoming data protection bill, as of now, India's data best practices, and by extent MyGov's own data conventions, remain unclear.

The platform's role as a facilitator of public debates has also been subject to criticism. Although the platform was used in India's Net Neutrality debate, its role in this discussion was controversial, as some saw the move from email submission as an attempt to move the discussion behind a sign-in wall. MyGov CEO Arvind Gupta stated that this was not, "a one-way mechanism of seeking feedback," since "India announced the net neutrality policy shortly after the discussion was closed" for which "the bulk of the comments were sourced from [MyGov India]" (qtd. in GovLab, 2018). On the other hand, The Guardian reported that many net neutrality campaigners "...suspected the

move was designed to discourage people from participating in the debate because the site made it harder to leave comments" (Soni, 2016). While users posted 70,000 comments on MyGov's discussion forum, this pales in comparison to the over 1 million emails submitted before the debate was moved. The net neutrality example calls into question the role that MyGov has played in facilitating public debates and also raises the larger issue of whether this platform is the proper feedback mechanism for holding a meaningful conversation between people and the government.

A related issue that has arisen in the last few years is the desire for a channel by which to organize and express resistance to established policies of the Indian Government. This want is illustrated by the widespread citizen involvement in debates around net neutrality, data privacy, and other socioeconomic issues related to caste. The Government of India has thus far lacked the institutional capacity to deal with these changes through traditional feedback mechanisms like email and online forms (Pugalia, Interview with the author, 2018). While MyGov was largely created to address these challenges, the site's discussion tools serve simply as an update to their appearance that does not solve the underlying issues with the older feedback mechanisms. As such, the engagement opportunities available on the platform have come short of delivering the much-needed two-way conversation between the people and their government.

Another shortcoming has been the inability to attract and engage citizens and government members at the local level. Praharaj, Han et al. (2017) examined the intensity of participation on MyGov India discussion pages across 100 cities and found that participation on the platform varied substantially based on geography. Medium-sized cities, such as Bhopal and Indore (with populations under 2 million), and small cities like Udaipur and Jabalpur (under 1.3 million), drew higher rates of citizen engagement than did larger cities like Mumbai, Delhi, and Chennai. To explain these differences, the authors also studied the intensity of participation in relation to demographic characteristics, and found a statistically significant negative correlation between participation and internet access ($r=-.221$, $p<0.05$), mobile phone access ($r=-.253$, $p<.05$), and literacy rate ($r=-.243$, $p<0.05$). This indicates that while internet access, device ownership, and literacy may be prerequisites for participation on the platform, increasing these characteristics will not necessarily lead to greater engagement on MyGov. As MyGov "..is being managed by the central government" the platform's "lack [of] local level engagement...could be identified as a key reason for low level of participation in majority of cities and even the ones having [a] considerable share of population" (Praharaj, Han et al., 2017, p.1431). This, combined with the overall low participation rates on local-level pages, indicates that rather than focusing solely on improving the

country's wireless infrastructure, the Indian government should pursue strategies to increase engagement at the local level.[8]

MyGov CEO Arvind Gupta contends that one successful aspect of MyGov's 360° approach has been the blending of online and offline features. In particular, the combination of online submissions with offline prizes has attracted a high level of engagement on the platform, as seen in the example of the 2018 Padma Awards. In contrast to past years, where only ministers were able to nominate recipients for these annual civil service awards, nominations for the "#PeoplesPadma Awards" in 2018 were open to anyone. Users could make nominations through an open submission process on the padmaawards.gov.in website, beginning in Fall of 2017 (Express Web Desk, 2017). In the lead up to the awards ceremony in Spring of 2018, a quiz was held on the MyGov site where users were asked knowledge-based questions about the lives and accomplishments of Padma nominees. The top scorers were entered into a lottery for a chance to attend the Padma Awards in person at the President of India's residence (Express Web Desk, 2018). This example is typical of MyGov's gamified approach, wherein a user competes in online activities for the chance to win real-life experiences as prizes. These rewards bring users personal gratification, which is important for achieving high-quality engagement on the platform (GovLab, 2018).

Another strength has been the Government of India's role in sponsoring the site, as this has helped MyGov India to develop a strong brand (Pugalia, Interview with the author, 2018).

Key Learnings

The platform's most consistently successful features, where it has garnered the most engagement and had the most real-world impacts, have been in its content creation tasks and competitions rather than in its lawmaking function. Similar platforms can succeed in attracting users by blending online and offline engagement opportunities, and by providing real-world prizes to participants. Likewise, institutions can reduce their workloads involved in soliciting feedback on initiatives by creating a centralized repository where citizens' comments are collected, crowdscored, and priority-ranked using an online forum.

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[8] So far, local-level pages exist for the states of Haryana, Maharashtra, Assam, Madhya Pradesh, Arunachal Pradesh, Manipur, Tripura, and Chhattisgarh. Participation varies among these local pages, both in scale and in activity. While Maharashtra has attracted over 78,000 participants, its users have submitted only 1,700 comments. This is less than half the number of comments submitted on the Madhya Pradesh page, which has only 23,500 members. Haryana, a state with a population of over 25 million, has only 12,000 registered users who have left a little over 100 comments.

The key shortcoming for MyGov is its lack of a formal lawmaking mechanism or even a simple grievance redressal system by which citizens' submissions could have some direct bearing on government policy; even though discussions are held on MyGov, ministries are not compelled to respond. To this end, while MyGov may be a more convenient and more aesthetically-pleasing replacement of the prior modes of feedback done via email and ministry websites, it has not truly improved or updated their function as a "one-way" conversation between the Government and the common person. Participation on MyGov is lacking at the local level, among critics of the government, and among those lacking reliable internet access, leaving out large swaths of India's population. Future projects must address the underlying issues in their systems of engagement such that they can provide a "two-way" conversation between people and their government that is accessible to their whole population. While the provision of offline participation channels is a step in the right direction, this must be combined with meaningful engagement opportunities that draw users in and then allow them the opportunity to truly impact the way their country is governed.

DECIDE MADRID

MADRID'S DIRECT DEMOCRACY EXPERIMENT

https://decide.madrid.es

CASE STUDY

DECIDE MADRID | MADRID'S DIRECT DEMOCRACY EXPERIMENT

Introduction

The City Council created the Decide Madrid civic technology platform in 2015 in response to the growing political disenchantment in Spain. Protests had begun years earlier when the Indignados ("outraged") took to the streets of Madrid to demand better democracy and protest welfare cuts, corruption, and more. In the years following the massive protests, the champions behind the movement began to find their way into positions of power. Pablo Soto Bravo, a computer programmer turned City Council member, led the development of the Consul software to create a way for ordinary people to participate in politics.[1] In use in over 70 cities, the Madrid version known as Decide enables a variety of forms of engagement, including participatory budgeting for which the city appropriates €100 million. Its consultations feature has been used to foster public discussion on 38 issues. The platform also includes a Propuestas (proposals) feature which enables anyone to propose legislation. Decide enables a registered user to create a "citizen proposal" and a verified resident of Madrid to sign onto and support proposals for new regulations, policies or actions the submitter wishes the City Council to undertake. Proposals that receive enough signatures by residents must be considered by the City Council. There is, however, no obligation on the part of the Council to enact a proposal.

Decide is a mixed success. On the one hand, it offers an efficient mechanism for any member of the public to engage in democratic life. Nearly 400,000 people are signed up and have submitted over 21,000 proposals. On the other hand, the legal requirement to obtain one percent of the population's signatures before a proposal can move forward, combined with a number of design flaws, have resulted in thousands of proposals being submitted but none enacted since the platform's inception.[2] The City of Madrid is seeking to test ways to increase the number of signatures on citizen-submitted proposals while simultaneously improving their quality.

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[1] De Sousa, Ana Naomi. "Hacking Madrid." Al Jazeera, December 13 2015.

[2] One proposal was "Billete único para el transporte público," which called for citizens to be able to purchase one universal ticket to access every form of public transportation. The other proposal was "Madrid -- 100 percent Sostenible," a self-proclaimed manifesto which demanded the implementation of 14 points related to sustainability.

Propuestas Workflow

The goal of the proposals feature is to create a direct democratic process where citizens can submit, and subsequently support and vote on, one another's ideas for new regulations, policies, and actions, for the City Council of Madrid's consideration.

When creating a proposal, people can access "Kit.Decide" and a blog post via the Decide Madrid website, both of which offer guidelines and keys for creating a successful proposal.

Registered users[3] can propose an idea by simply clicking the "Create a Proposal" button. To register only requires providing an email address. There is no residency requirement to make a proposal, and they can also be submitted by mail or in person. A proposal is comprised of:

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[3] There are three levels of authentication for the site. Registered users provide a username, email address, and password but do not verify residence, so people can do this from anywhere in the world. Basic verified users verify residence online by entering their residence data, then receive a confirmation code via mobile phone. Users who wish to become completely verified will receive a letter containing a security code and instructions to carry out the verification, which they must send back to a Citizen Assistance Office

- Title

- Summary (max 200 characters)

- Proposal text (no limit)

- Link to external video

- Link to additional documentation

- Descriptive image

- Additional documents (max of three, must be PDFs)

- Scope of operation (select a neighborhood or entire city)

- Place marker on map to represent scope (if applicable)

- Tags

- Full name of person submitting proposal (not displayed publicly)
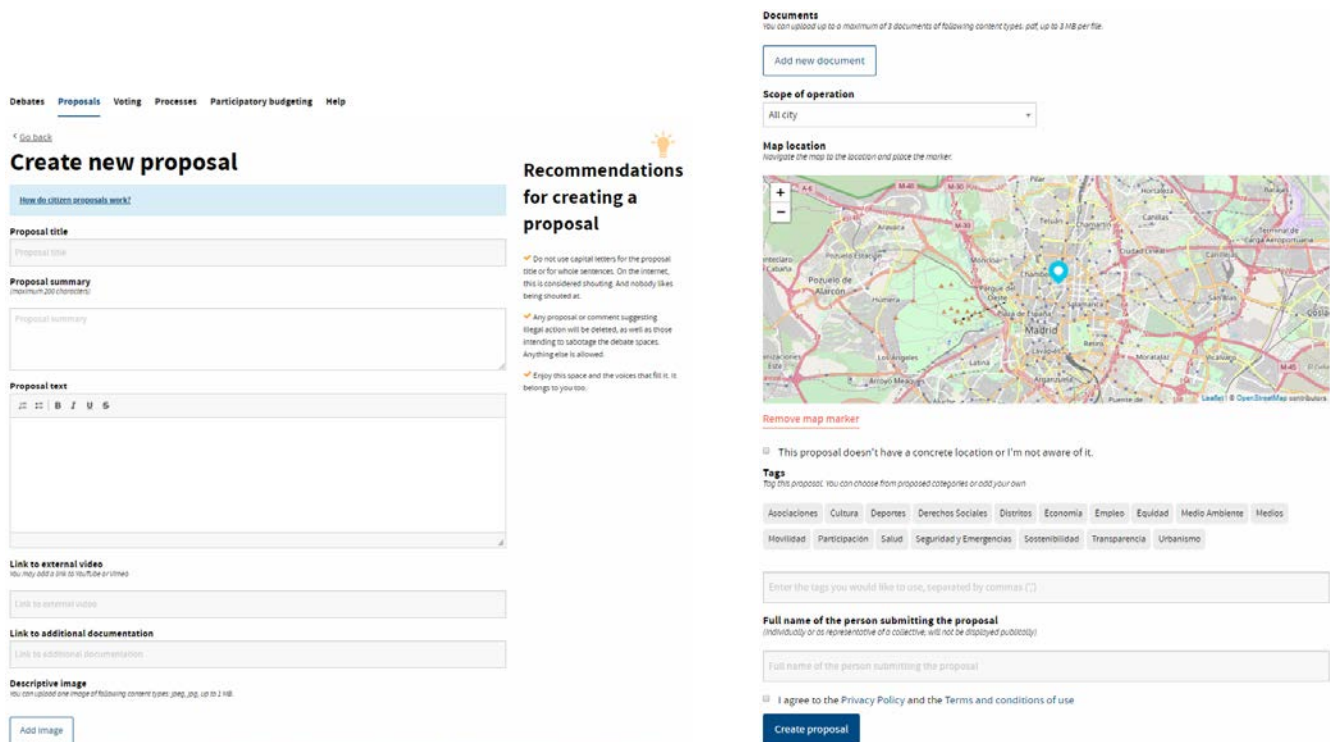
FIGURE 2: SCREENSHOT FROM THE "PROPUESTAS" PAGE. SOURCE: DECIDE.MADRID.ES

Over 21,000 proposals have been submitted and are available to view on the site, sorted by "most active," "highest rated," "newest," and "archived" (can no longer receive support), or by tags such as culture, mobility, and social rights. Once a proposal[4] is submitted, anyone with verified accounts can click a button expressing their support for said proposal. Each proposal is given 12 months to

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4 Note: in order to maximize citizen participation and accommodate those without internet access, most actions that take place on the website (including registration and verification) can also be done in one of Madrid's 26 Citizen Assistance Offices with the help of trained staff.

gather requisite support (signatures) to advance in the process. Some examples of active proposals with a high number of signatures include a protest against a trash incinerator and a moratorium on tourism in the Madrid town center, with 5,225 and 2,427 signatures, respectively. To move forward for consideration, a proposal must receive the requisite support, represented by signatures from "one percent of registered citizens in Madrid over 16 years of age" which is currently ~27,000 people (Decide Madrid). If a proposal does not reach this threshold, it is moved to the "archived" section after 12 months.

If a proposal receives the required number of signatures, this triggers a 45-day period of deliberation and discussion by the public on the website, where they can get informed about the topic of the proposal. Afterward begins a seven-day period (final voting phase) when verified users over 16 years of age can again vote to accept or reject the proposal. A majority vote in this process decides whether the proposal is brought to the City Council for consideration. There is no minimum requirement for consideration at this stage.

The City Council must review any proposal that wins majority favor in the final voting phase within 30 days. It should be noted that winning proposals are not automatically implemented, as the Spanish Constitution does not permit such binding referenda. During these 30 days, the Council evaluates the proposal based on its legality, feasibility, competence, and economic cost, all of which are highlighted in a subsequent report that is openly published. If the report is positive, then a plan of action will be written and published to carry out the proposal. If the report is negative, the City Council may either propose an alternative action or publish the reasons that prevent the proposal's execution.

Participation

The Decide Madrid website provides a general overview of user statistics, but the information provided is not available in one centralized and easily accessible location. Rather, it is scattered across the website on different pages. However, the site does provide a link to the Madrid City Council's "Open Data" portal, where one can find a substantial amount of data on Decide Madrid through a downloadable application programming interface.[5] Site traffic and user participation are

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[5] "Portal de datos abiertos del Ayuntamiento de Madrid." *Ayuntamiento de Madrid.*

the areas where the platform has found great success, demonstrated by the following statistics provided by Madrid's Collective Intelligence for Democracy Lab or "ParticipaLab."[6]

395,000+
Number of registered users on Decide Madrid

9,000,000
Number of site visits

21,000
Number of proposals submitted

38
Decisions made through direct voting

infogram
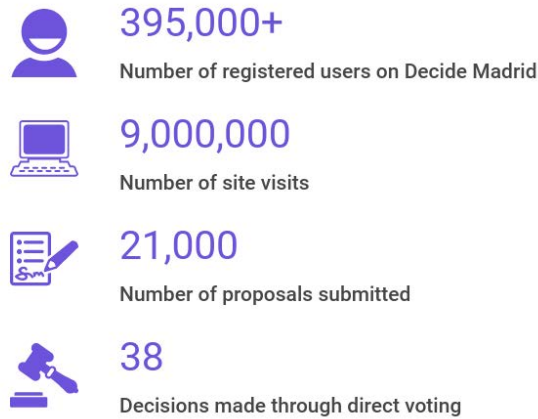
FIGURE 3: USER DATA AS OF MAY 04, 2018. SOURCE: YAGO ABATI, DIRECTOR - LABORATORIO INTELIGENCIA COLECTIVA PARA LA DEMOCRACIA (PARTICIPALAB).

Unfortunately, the site does not provide more specific data on user behavior and activity, such as the amount of time the average user spends on the site, the number of frequent users, the number of votes cast or proposals submitted by the average user, location, occupation, etc. While some of that information is likely protected by privacy laws, more data and a deeper understanding of the platform's users would help Decide Madrid administrators, and those who wish to replicate the process, identify challenges with using such a tool and potential solutions. However, some of this information could be found with some searching on ParticipaLab's now defunct "Data Analysis for Citizen Participation" site, though it required significant manual effort. In addition, the website does offer an extensive overview of data from one week in February 2017, when the City Council combined the opportunity to vote on two citizen proposals and several "processes." If such data were collected pertaining to the entire site, it would be highly valuable.

February 2017 Voting

Due to a coincidence in how the timing unfolded, the City Council combined the opportunity to vote on two citizen proposals and several "processes" into one week in February 2017 where citizens

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[6] Yago Bermejo Abati, Director - Laboratorio Inteligencia colectiva para la Democracia (ParticipaLab) personal communication, May 04, 2018.

could vote on all of these different items. This "first citizen vote" provides the richest set of user data available on the site, thus the following figures and statistics all pertain to that vote. Of particular note is the number of people participating via mail, rather than the web.

Number of users who voted: 217,076

Number of votes cast: 963,887

Participation by Gender:

- Men: 105,298 (49.23 percent)
- Women: 108,591 (50.77 percent)

Participation by Channel:

- Web: 76,481 (35.73 percent)
- Ballet box: 23,654 (11.05 percent)
- Mail: 117,388 (54.83 percent)

Below is a graphic representing votes by age group. For more detailed information about participation broken down by geography and subjects of the votes, please visit First Citizen Vote (February 2017):
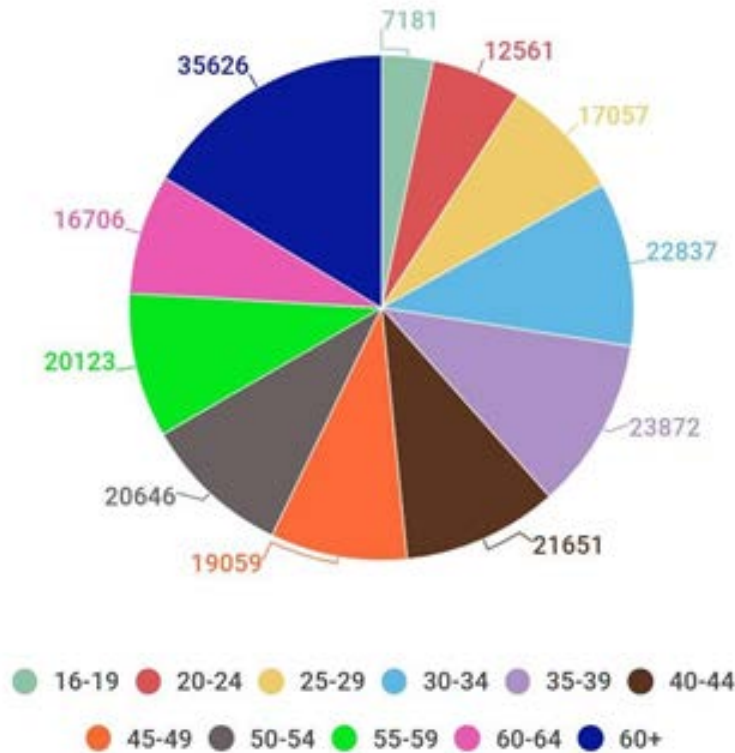
FIGURE 4: VOTES BY AGE GROUP. SOURCE: FIRST CITIZEN VOTE (FEBRUARY 2017).

CROWDLAW FOR CONGRESS

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Challenges

Undoubtedly, the most obstinate challenge faced by Decide Madrid is advancing citizen proposals through the process to be passed into legislation because of the signature threshold. Despite impressive participation numbers with nearly 400,000 registered users and over 21,000 submitted proposals since the platform's inception in 2015, only two of these proposals have reached the threshold of signatures required for them to be put to a vote for consideration by the Council. Notably, both of these proposals were submitted on the day the platform was launched, and in subsequent years not one single proposal has reached even half of the support threshold.[7]

Equally problematic, however, is the quality of proposals. Many submissions are poorly informed and designed in such a way that prevents their implementation because the City government is not permitted to respond to or give feedback on proposals. Thus, many are not relevant to the jurisdiction of the City or they duplicate another law that already exists. In other words, many proposals with credible ideas that offer practical solutions to real problems are drowned out by the volume of ineffectual proposals.

This poses a delicate issue. One of the goals of such participatory democracy tools is to enable wider participation. In doing so, however, Decide Madrid has attracted a surfeit of contributions that are proving ineffective to the initiative's broader vision of improving the city's democracy and the lives of its citizens. Additionally, if its users' contributions continuously fail to produce outcomes, then they may get discouraged. Thus, administrators must discover a way to invite more useful proposals and mitigate 'noise' without limiting overall engagement.

Impact

Overall, Decide Madrid has been very successful on some fronts but has fallen short of producing substantial tangible impacts in other areas. Madrid's City Council has succeeded in creating an open, transparent platform where citizens can collaborate with one another on a range of issues. Placing every part of the process in full view of the public and providing a link to an open data repository has helped meet the goal of promoting transparency within the government. Engaging hundreds of thousands of citizens, Decide Madrid has moved over 500 participatory budgeting

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[7] Pablo Aragon, Yago Bermejo, Vicenc Gomez, and Andreas Kaltenbrunner. "Interactive Discovery System for Direct Democracy." 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM). IEEE, 2018

projects into the process of being implemented and crowdsourced opinions to make nearly 40 decisions through the "process" section.

Unfortunately, the extremely low impact of the propuestas (proposals) feature--the aspect that has the most direct influence on the solution identification stage of the lawmaking process--is cause for relative concern. Furthermore, the political climate in Spain remains turbulent as trust in government continues to decline and there is a real concern that a lack of outcomes will lead to further frustration.

Learnings

Decide Madrid provides several learnings for governments and institutions that look to emulate its CrowdLaw processes. Giving the public the opportunity to influence law and policymaking directly is responding to a deeply felt need as evidenced by the huge number of participants and submissions.

> Giving the public the opportunity to influence law and policymaking directly is responding to a deeply felt need as evidenced by the huge number of participants and submissions.

However, the failure by the government -- a failure created by legal compliance -- to participate actively in and respond to public proposals is depressing the quality of submissions.

Finally, the case of Decide Madrid highlights the importance of technology in these processes. Above all, using open source software is a core value when designing a digital democracy platform. When asked about the Consul software, Miguel Arana, Director of Citizen Participation for the City Council of Madrid, remarked, "This is the tool we imagined when we started doing digital democracy practices in the squares and streets of 15M."[8] He continued to explain how he believes that, "free software is always a gift to the world." The influence of free software is well-supported,[9] and Decide Madrid's co-founders are proud that their vision was able to be reimagined in the many instances that followed.

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[8] Tarancón, Sara Calvo. "La hacker de Carmena." Público, January, 14 2018.

[9] "What is free software." Free Software Foundation.

Conclusion and Future Direction

Whether Decide Madrid has enabled citizens to directly influence the City's policies and leverage citizen participation for solution identification currently lies in a grey area. While the platform has granted citizens with the ability to identify and propose alternative solutions to public problems directly to the City Council, their capacity to prompt real change remains questionable as long as citizen proposals continue to produce very few substantive results. On a positive note, the organizers have been mapping and tracking user data and participation and are eagerly working on improving the process to help accomplish its goal. They have set the foundation for their government to work collaboratively with the public and civil societies, and have done so in a way that is replicable for other institutions.

RAHVAKOGU

TURNING THE E-REPUBLIC INTO AN E-DEMOCRACY

https://rahvakogu.ee

CASE STUDY

RAHVAKOGU I TURNING THE E-REPUBLIC INTO AN E-DEMOCRACY

Introduction

Rahvakogu ("The People's Assembly") was a one-off initiative in early 2013 in which Estonian citizens proposed and discussed policy ideas to remedy political corruption via an online crowdsourcing platform and in-person deliberation. The project applied Estonia's experience of using technology[1] for the delivery of public services to the development of an online crowdsourcing[2] platform, furthering the country's role as a leader in e-Governance and open government. Rahvakogu demonstrates that during the Solution Identification stage of lawmaking, actors outside of the elected government can play a key role in facilitating public engagement in lawmaking, and that this process can happen rapidly through the use of online platforms.

Background

Rahvakogu originated as a reaction by Estonia's people to perceived corruption in the country's major political parties following a series of scandals. In December of 2011, the Riigikogu (Estonia's Parliament) attempted to pass a legislative amendment that would have allocated close to €1 million in public funding to finance political party campaigns- a motion that was widely supported by the major political parties but criticized by civil society. Additionally, early in 2012, protesters targeted the Reform Party, and particularly its leader, Prime Minister Andrus Ansip, for the party's support of the global Anti-Counterfeiting Trade Agreement (ACTA). The most notable scandal, dubbed "Silvergate," came on the heels of these controversies. In May of 2012, Silver Meikar, a Member of Parliament from the ruling Reform Party, published an article in the Estonian newspaper Postimes detailing an incident in which party leaders instructed him to donate €7,600 from an unknown source to the party, under his own name. Although this is illegal under Estonian law, Meikar claimed that this was a common practice, and that other Reform Party Members had done the same in the past (Praxis, 2014). Though the party denied Meikar's allegations, and the subsequent investigation yielded nothing due to a lack of evidence, the stage was set for a popular backlash against the party.

This backlash took the form of street protests and rallies, calling for more openness, transparency, and an end to corruption in Estonia's political system. In November of 2012, 17 activists published Harta 12 ("Charter 12"), an online petition signed by 18,210 people (a large group for a country of

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[1] See Nathan Heller's (2017) article "Estonia, The Digital Republic" in *The New Yorker*.

[2] The platform was built upon an existing open-source Icelandic platform (See "Mechanics of Rahvakogu").

only 1.3 million) on the petisioon.ee platform, calling for all Estonian people to establish "a new social contract" between civil society and the government (Karlsson, Jonsson, & Astrom, 2015), one in which:

- The public has an unobstructed view of all revenue sources and political associations
- Parties work in a transparent manner that is in the interest of the people
- Representatives must regularly report to their constituents and act in their interests
- There is a clear, open, and simple path of access to Parliament, and with no monopolization of power
- There are tools other than elections by which citizens can articulate their will

Figure 1: Pro-Charter 12 Protests

Source: https://mises.ee/in-english/report-on-estonia/

In response to Harta 12, the then-President of Estonia, Toomas Hendrik Ilves, called a meeting of political scientists, lawyers, political party members, and interest groups, held in an old Jääkelder, or ice-cellar building. It was at this "Ice-Cellar Meeting" that the group agreed on a course of action that included a proposal phase where members of the public could submit policy proposals via an online crowdsourcing platform, and a "Deliberation Day" in which the proposals could be discussed and voted upon. A team spearheaded by the Estonian Cooperation Assembly and other stakeholders, including the President's Office, the Praxis Centre for Policy Studies, the Open

Estonia Foundation (OEF), the Network of Estonian Non-profit Organizations (NENO), the e-Governance Academy, and IT and communications groups, was responsible for actualizing the plan developed during the Ice-Cellar Meeting (Praxis).

The plan developed by the Estonian Cooperation Assembly drew upon the country's strength at using information technology in the public sphere (Heller, 2017). After gaining independence from the Soviet Union in 1991, Estonia oriented its economy around technological innovation. The government created the technological investment fund Tiger Leap Foundation in the early 1990s in part to fund computer programming education in primary schools (Mansel, 2013). Estonians have been able to directly pay taxes online since 2002. In 2001, the state chartered the creation of X-Road, a decentralized database used to store data for over 900 public and private services. In 2002, Estonia introduced a mandatory national identification card that can be used online for electronic banking, healthcare services, signing contracts, and even purchasing public transit tickets (Economist Magazine, 2014). In 2005, Estonia used its electronic ID system to become the first country to allow online voting, which has risen in popularity in subsequent parliamentary and general elections.

Several platforms for electronic citizen participation existed prior to Rahvakogu. One such platform, osale.ee ("Participate"), was created by the State Chancellery of Estonia in 2007 to allow individuals and groups to submit policy ideas and consultation about draft legislation.[3] However, not all draft acts are required to be published on the website and the protocol for whether or not to respond to public submissions is left at the discretion of the ministry involved. While still online as of June 2018, the platform is under-promoted, rarely updated, and "has only a small number of active users" (ECAa, 2017). Another platform, petitsioon.ee, was created by the Estonian Association of Homeowners (a private non-profit) in 2010 as a channel for the public to submit, discuss, and vote in support of proposals on any topic. Though proposals made on this privately-managed forum had no force of law behind them, the platform did host the Harta 12 petition that eventually sparked the Ice-Cellar Meeting and the creation of Rahvakogu.

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[3] The osale.ee platform replaced the earlier Täna Otsustan Mina ("Today I Decide", or TOM) platform, which was created by the Estonian Government in 2001. TOM was a stand-alone platform that allowed citizens to propose, discuss and vote on policy ideas. In contrast to TOM, osale.ee is coordinated with Estonia's Electronic Coordination System for Draft Legislation (EIS), a database that hosts draft legislation and supporting documents for public view and coordination between government agencies. In 2008, a consortium led by the e-Governance Academy, State Chancellery of the Republic of Estonia and the European Union Democracy Observatory spun off the TOM into the open-source TID+ platform, with the intention of disseminating the e-participation tool to governments and NGOs in the European Union and beyond.

GOVLAB

Mechanics of Rahvakogu

Rahvakogu was conducted in four phases: Proposals, Grouping, Synthesis, and Deliberation. The Proposals phase began in January of 2013 and was hosted online at rahvakogu.ee. The crowdsourcing mechanism was based on Your Priorities, a software platform developed in 2008 by the Icelandic nonprofit Citizens Foundation for use in the Better Reykjavik project.4 Use of this open-source software allowed the Estonian Cooperation Assembly to quickly roll out the rahvakogu.ee webpage and to modify the platform to include a digital identification feature and a customized interface (Grimsson, Razgute, & Hinsberg, 2015).

Proposals had to fall into one of five categories: the electoral system, the functioning of political parties, the financing of political parties, public participation in political decision-making, and the politicization of public offices. Proposals that did not fit into any of these categories were not discussed. This strategy effectively focused the discussion on topics relevant to the issues raised in Charter 12: a plurality of proposals dealt with elections (33%) and the funding of political parties (15%) (Liiv, Interview with the author, 2018). During the three weeks that the portal was live, from January 7 through January 31, the Rahvakogu webpage garnered over 60,000 views, with over 2,000 users posting 2,000 proposals and 4,000 comments (Praxis, 2014). Users first had to log in using an electronic ID in order to comment or submit proposals, which made the identity of the user publicly available on the crowdsourcing platform. By one account, this feature helped to "reduce public animosity," as the vast majority "…of the proposals and comments were..[written] in a neutral tone… some used more colorful language, but it was seldom hostile" (Anonymous Interviewee qtd. In Jonsson, 2015).

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4 The Better Reykjavik experience served as proof-of-concept for the platform (Grimsson & Bjarnson, 2015), and as a source of inspiration for the organizers of Rahvakogu (Jonsson, 2015). Any user can register for a Your Priorities account using either email or Facebook, and then can create a community with various groups within it. The platform allows for customization, such as whether or not to allow voting, to allow only certain users to propose ideas, to define the timespan for voting on ideas, and to designate users as moderators. As the platform is free and open-source, further customization can be done by downloading the source code from the application's GitHub page.

GOVLAB
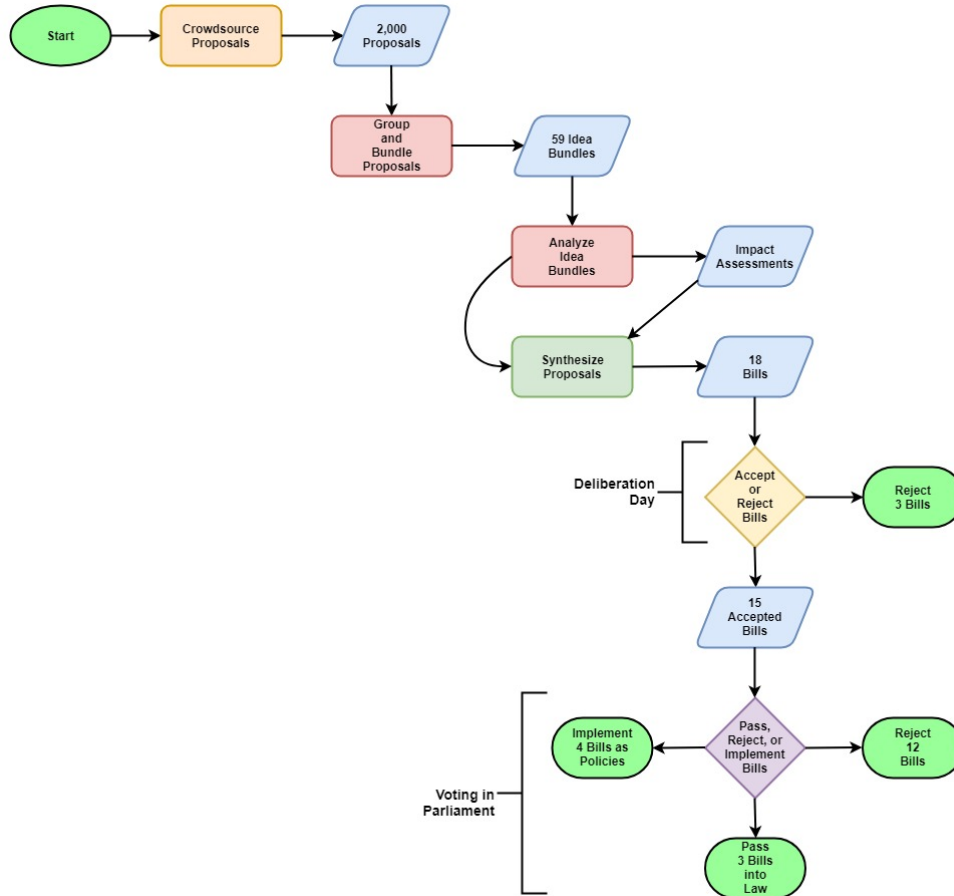
Figure 2: Mechanics of Rahvakogu Flowchart

Figure 3: Voting on Rahvakogu Proposals. Source: Democracy Day One

In February, during the Grouping phase, the proposals were referred to a group of analysts from the Praxis Center, who divided the five categories into subcategories. Analysts at Praxis (an independent, non-profit, civil initiative think tank) read, summarized, and then grouped the proposals into 59 "bundles" by "applying essentially a methodology similar to grounded theory to find repeating motifs" (Liiv, interview with the author, 2018). In other words, the researchers identified patterns in the data by grouping the unorganized proposals into meaningful categories. The NGOs/Estonian Cooperation Assembly consortium invited a group of 30 experts in the fields of political science, law, and economics to analyze these bundles and to provide an impact assessment of what effect the proposals would have if enacted. While the use of domain experts was a strength of this approach from a data analytics perspective, "the lack of a digital approach to analyzing data can be then seen as the weakness" (Liiv, Interview with the author, 2018), as this behind-closed-doors process led to a lack of transparency in the offline portion of Rahvakogu.[5]

Figure 4: Deliberation Day Meeting. Source: Delfi

[5] The details of this portion of the process remain somewhat hazy. Who selected these experts and the methodology the experts used to analyze the proposals is unclear.

A series of five seminars was held during the Synthesis phase in March, at which political representatives, experts, and citizens who had submitted proposals in the crowdsourcing process were eligible to participate. After considering the expert analyses, seminar participants rated the relevance of the issue bundles in order "to single out which of the ideas put forward on the online platform could best solve the problems" previously identified (Praxis, 2014). Participants then drafted proposals and discussed them in small-group meetings to synthesize their proposals into 18 discrete bills (Jonsson, 2015), in preparation for the face-to-face Deliberation Day.[6]

The live Rahvakogu event --the Deliberation Day-- was held on April 6, 2013. The total group of 314 randomly selected and representative citizens were divided into smaller groups of ten to facilitate discussion. Armed with briefing materials prepared by the expert group, and overseen by a moderator, each group deliberated and cast a formal vote to either accept or reject the proposals. In total, 15 of the 18 proposals were accepted by the People's Assembly, which were then passed along to the Riigikogu (Estonia's unicameral parliament). implemented or redefined ascommitments in the government coalition programme" (Praxis, 2014) and the other eight were rejected.[7]

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[6] The term refers to Bruce Ackerman's and James Fishkin's (2004) book of the same name, in which the authors propose changes to the American political system to remedy the problems of lackluster civic engagement, the commodification of political campaigns, the failures of campaign finance reform. The keynote proposal of the book is Deliberation Day, which the authors describe as a two-day civic holiday held two weeks before the national election, where voters are invited to take part in small and large group meetings about central campaign issues, in order to foster "a more attentive and informed public" (Ackerman & Fishkin, 2004, p.3).

[7] As articulated by Grimmson, Razgute, and Hinsberg (2015) of the Citizens Foundation, the submitted proposals were:
>   1. Regulate the process of informing the public and participating in the legislative process.*
>   2. Legalisation of citizen initiatives (petitions).†
>   3. Facilitate the procedure for holding a referendum for legislative proposals and other issues of public life.*
>   4. Change the way political parties are financed in such a manner that 50% of the money is divided equally between all parties that exceed the threshold and 50% between all parties that participate in elections depending on the number of votes they received.‡
>   5. Criminalise illegitimate donations to political parties.‡
>   6. Expand the power of the authority or committee that supervises the financing of political parties to check all of the economic activities of the parties financed by the state and their affiliate organisations.‡
>   7. Prohibit members of the Riigikogu from being members of the supervisory boards of public enterprises.*
>   8. Establish the legal liability of the supervisory board members of public and municipal enterprises.*
>   9. Allow for a political party to be founded with 200 members, instead of 1,000.†
>   10. Establish a maximum limit for the volume and/or cost of political advertising.*
>   11. Replace the election deposit with supporters' signatures.†
>   12. Lower the threshold in Riigikogu elections from five to three per cent to get a party into parliament.*
>   13. Distribute a compensation mandate on the basis of the number of votes given to the candidate.*
>   14. Grant a mandate to an independent candidate on the condition that they collect at least 75% of the district's simple quota.‡
>   15. Stipulate that elected candidates are obliged to start working in the selected position, define list of permitted exceptions.*
>   *= Rejected
>   †= Passed into law
>   ‡= Adopted as policy or policy commitment

Since there was no formal legal mechanism for the Riigikogu to vote on laws drafted by an outside source, the President had to use his power to introduce the 15 bills to parliament. The Riigikogu eventually passed three of the proposals as law, while "four proposals have been partly.

Participation

Opportunities to participate varied considerably across the different phases of the Rahvakogu process (See Table 1). During the crowdsourcing stage, everyone was invited to participate in the submission and commenting process. A small group of volunteers with a professional background were involved in the "bundling" and analysis of the proposals. The Deliberation Day discussions and voting opportunities were only open to a representative sample of Estonian citizens who had been randomly selected and invited to participate.

The key statistics of the Rahvakogu online process reveal several striking demographic disparities in participation. One survey found that a significantly larger number of men (+28%, p < .01) than women participated in the crowdsourcing phase; 74% of participants were men, while men make up only 46% of Estonia's population (Jonsson, 2015). Likewise, crowdsourcing participants were significantly more likely to identify themselves as members of the political left (+5.4%, p<.05) or right (+5.7%, p<.05) rather than the center (-11.1%, p<.01). Compared to the general public, crowdsourcing participants were also more likely to be professionals, non-senior citizens, ethnically Estonian (as opposed to Russian, Estonia's largest minority group), and to have a higher education (Jonsson, 2015). As a whole, participants were significantly more likely to have some prior experience in political activism, such as having worked in a political party (+4.5%, p<.01), signed a petition (+66.8%, p<.01), or participated in a boycott (+39.8%, p<.01) (Jonsson, 2015). For the Deliberation Day phase, 550 Estonian citizens were invited to participate, comprising a stratified random sample proportionally representing the age, sex, and residence demographics of the Estonian population, of which 314 participated (Praxis, 2014). Compared to Estonia's population, the group who chose to participate were disproportionately made up of people 56 or older (+18%) and of those with higher level of education (+28%) (Leosk & Trechsel, 2016). All participants were volunteers and received no monetary or reward-based incentives. This may partly explain why participation was in large part limited to citizens with a history of political engagement, as others may not have seen the value in participating.

Phase	Who could participate?	Who did participate?
Crowdsourcing of Proposals	Anyone	Over 2,000 self-selected users. Most were well-educated, politically active Estonian men.
Categorization and Bundling	Praxis Center Researchers	Praxis Center Researchers
Analysis and Impact Assessment	Group of 30 Experts	Group of 30 Experts
Synthesis Seminars	Political representatives, experts, and citizens who had submitted proposals in the crowdsourcing process	Political representatives, experts, and citizens who had submitted proposals in the crowdsourcing process
Deliberation Day	Randomly-selected, representative, 550-person sample	Self-selected 314-person sample. Older and more highly educated than general population.
Riigikogu Voting on Proposals	Members of Parliament	Members of Parliament

Table 1: Opportunities for participation by phase

The public was made aware of the People's Assembly through both official and unofficial mechanisms. The high-profile Reform Party donation scandal received significant media attention, as did the subsequent protests. Charter 12 was also widely circulated in the media (Jonsson, 2015), while the Ice-Cellar Meeting was broadcast online (Praxis, 2014). Each step of the Rahvakogu process was also communicated to the population by Eesti Rahvusringhääling (ERR) --the Estonian Public Broadcasting network-- through a series of online articles from the beginning of the crowdsourcing phase (ERR, 2013a) to the introduction of the proposals to parliament (ERR, 2013b). Deliberation Day was described as a "major media event" which "attracted a great deal of public attention" (Karlsson et al., 2015).

Institutional Description and Impacts

President Ilves's office organized the Rahvakogu process together with a team of NGO's and without interference or oversight from the legislature or the political parties. The organizational structure was built upon the existing structures of the Estonian Cooperation Assembly, the Praxis

Centre for Policy Studies, the President's Office, and the other interest groups involved. These were each independent groups with various sources of funding. Primary funding was provided by the Estonian Cooperation Assembly (Hellam, Interview with the author, 2018), which itself is a network of 77 non-governmental organizations (NGOs) funded by the Estonian Government, and was established in 2007 by President Ilves to research long-term national policy recommendations. Each group took custody of one aspect of the project. The ECA was responsible for the design and management of the rahvakogu.ee portal, while the Praxis Center processed and analyzed the data submitted through the portal. OEF designed the Deliberation Day based on James Fishkin's model for a Deliberative Democracy (See Footnote 6). [Network of Estonian Nonprofit Organizations] managed the Deliberation Day event, while [Open Estonia Foundation] covered the operating costs via a €50,000 grant (Hellam, Interview with the author, 2018). Several of the other individuals involved, such as the experts panel, were unpaid volunteers (Jonsson, 2015). As Rahvakogu was an ad hoc effort that was not fully planned in advance, none of the participants or organizers received training prior to their work (Leosk, Interview with the author, 2018).

One of the adopted proposals in the 2012 process created Rahvaalgatus, a permanent mechanism by which Estonian citizens can propose and vote on policy changes (See "Mechanics of Raahvalgatus"). A second proposal lowered the required number of members to establish a political party to 500, a compromise between the People's Assembly's 200-member suggestion and the prior 1,000-member threshold. This legislation resulted in the creation of a new political party, Vabaerakond ("Free Party"), which formed with 650 members in 2014, and won eight seats in the 2015 Riigikogu elections (Leosk and Trechsel 2016). Another compromise halved the deposit required to run for election in the Riigikogu, in place of the People's Assembly's suggestion to replace the monetary deposit with supporters' signatures (Grimsson et al., 2015). In addition to these tangible changes, the overall impact of the process was the stabilization of the political climate and the easing of tensions in Estonia (Leosk, interview with the author, 2018).

Mechanics of Rahvaalgatus

Since the process was tried only once, Rahvakogu did not have the opportunity to adapt or to iterate using its experiences. However, some lessons learned were incorporated into the Rahvaalgatus ("Citizen's Initiative") platform. Hosted on the Estonian open-source CitizensOS platform (a non-profit project created by the Let's Do It! organization and funded through the Open Estonia Foundation) since March of 2016, Rahvaalgatus is the channel by which citizens can directly petition the Riigikogu. Rahvaalgatus allows citizens to create or co-create "Collective Addresses," or

policy proposals. Unlike Rahvakogu, Rahvaalgatus proposals do not need to fall into any pre-defined category.[8] Users submit proposals with an up to three page explanation of the current problem and how the Address would rectify it, eliminating the need for an outside group to bundle and draft legislation. Other users are then able to comment on and discuss the proposals. Estonian residents who are least 16 years old can then digitally sign proposals using their full name and electronic ID number, or a Google or Facebook account (the preferred forms of login for many young people) (Leosk, Interview with the author, 2018).
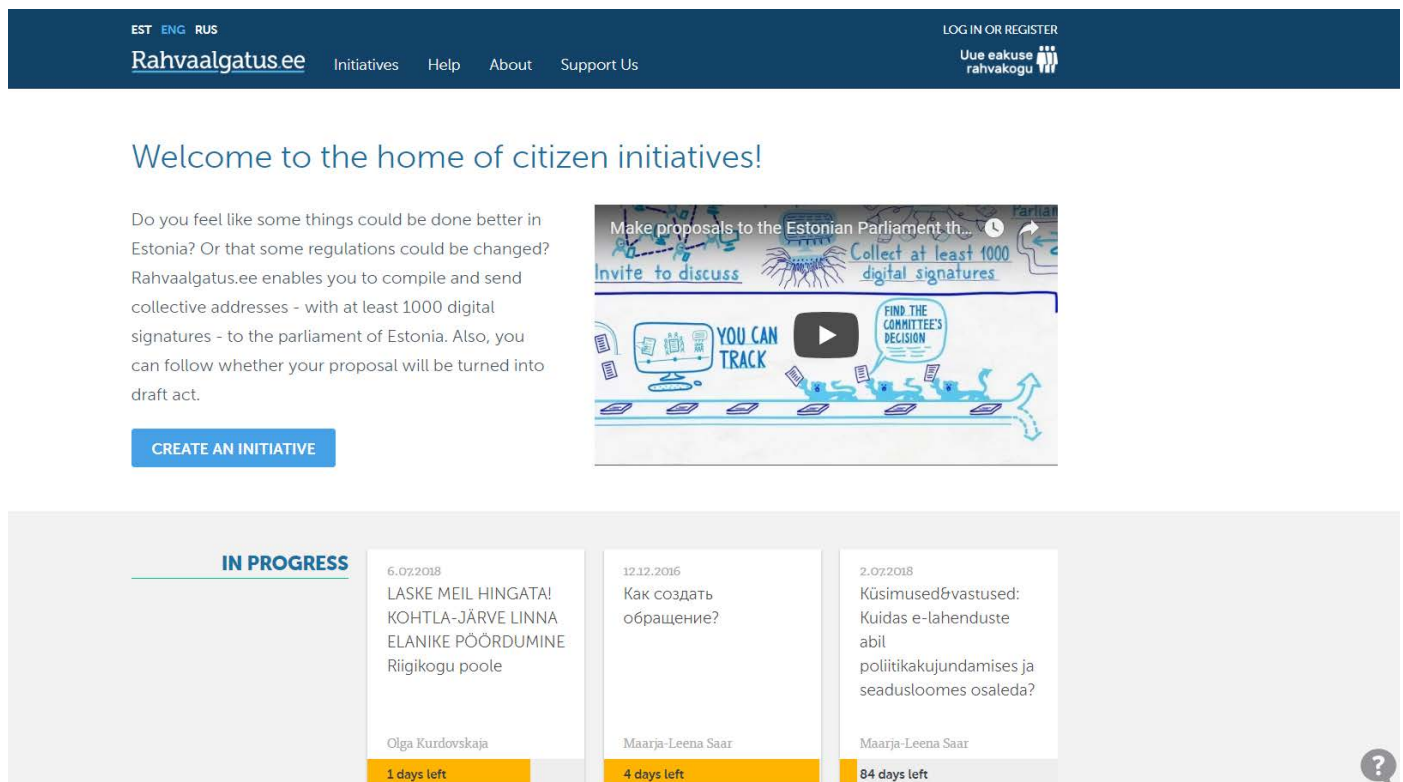
Figure 5: Rahvaalgatus.ee homepage, with in-progress proposals

Proposals that receive 1,000 signatures are then transferred to the Board of Riigikogu, a body elected by and consisting of parliament members, which then has 30 days to decide whether or not

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[8] Rahvalgaatus proposals thus far have followed two major themes: environmentalism and public health. Of the 18 proposals that have been submitted to the parliamentary committees as of May 2018, the majority were handled by the Environmental Committee (n=6) and the Social Affairs Committee (n=4). Environmental proposals submitted to the Riigikogu have ranged from the protection of the habitat of flying squirrels, to the banning of the glyphosate herbicide, to the preservation of the Väike väin strait ecosystem (ECA, 2017). In early 2017, the ECA invited citizens to submit proposals aimed at solving future problems that will be caused by Estonia's aging population, particularly access to health insurance and the diminishing funds of the country's pension system (Derlos, 2017). Another high-profile proposal submitted to the Riigikogu aimed to decriminalize cannabis possession and legalize medical marijuana (ECA, 2017).

the proposal will proceed. The Board refers accepted proposals to a relevant Riigikogu Committee, which must discuss the proposal within three months; the Committee must also invite the creator of the Address to represent the proposal during at least one Committee meeting. Within six months, the Committee must decide to accept, partially accept, or reject the Address. If the proposal is accepted, the Committee may address the issue raised by drafting legislation, calling a public hearing, forwarding the Address to a relevant governmental or non-governmental institution, or by finding "an alternative way" to solve the problem. At each stage, the acting body must inform the creators of the status of their Address and if it is rejected, the reason for its rejection (Rahvalgatus.ee, 2016).

Rahvaalgatus minimizes the burden that the right to direct petitioning could otherwise have on Members of Parliament. (MPs), as it acts as a centralized replacement to the myriad official and unofficial petitioning platforms that existed prior to Rahvakogu. This prevents MPs from being inundated by petitions from various sources. The 1,000 signature threshold acts as a filter that selects only the most relevant and compelling proposals and sifts out the others, which prevents MPs from being overloaded with information. Parliament is also not obligated to discuss proposals that are clearly out of line with Estonia's constitution, or that repeat the same topic as another Address that was discussed within a two-year time span. The commenting and voting mechanism allows for an automated, informal public consultation procedure from the very beginning of the lawmaking process. By receiving Collective Addresses, MPs can easily remain up-to-date on the issues that are most relevant to Estonian citizens. As these processes are largely automated on the Rahvaalgatus.ee platform, which itself is operated by the ECA, the workload allocated to Riigikogu Members is minimal. At the same time, the MPs ultimately retain control over which policy ideas are implemented and how this is done.

While the right to petition parliament was established in Estonia's Constitution, the second Rahvakogu proposal submitted to and passed by the Riigikogu in 2014 as the "Response to Memoranda and Requests for Explanations and Submission of Collective Addresses Act" established the 1,000 signature threshold and other rules for petitioning. The Estonian Cooperation Assembly worked also with the creators of ManaBalss.lv ("MyVoice"), a similar platform in place in Latvia since 2011, to design the new platform [Rahvaalgatus] (Hellam, Interview with the author, 2018). Like ManaBalss, the new platform incorporates such features as an electronic ID

authentication system and a signature threshold that proposals much reach in order to advance.[9] As of May 2018, the website has attracted an average of 10,000 visitors per month, with engagement on the platform growing from 2016 to 2017 (ECA & Chancellery, 2018).
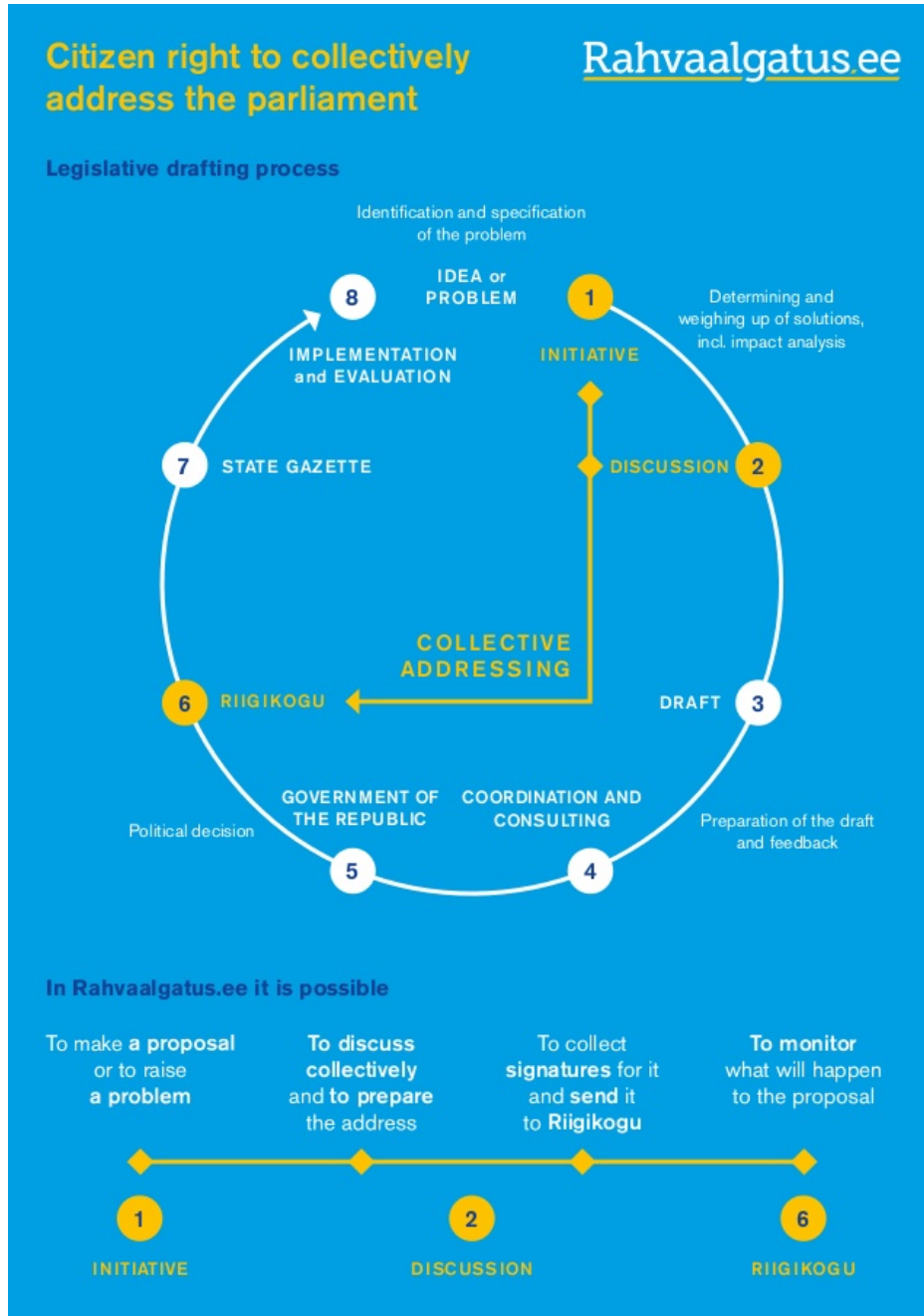

Figure 6: Process of drafting a bill through Rahvaalgatus.

Source: Rahvaalgatus One pager

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[9] Despite the countries' similar population sizes (Latvia has only about 600,000 more people than Estonia), the threshold for a proposal to advance on Latvia's platform is 10,000 signatures, significantly higher than Estonia's 1,000 signature threshold.

Risks and Challenges

There were several challenges that the organizers of Rahvakogu had to overcome. In a lecture at the Open Government Partnership Summit in 2013, Urmo Kübar, head of the Network of Estonian Nonprofit Organizations during the Rahvakogu initiative, noted that the greatest challenge the project had to overcome was skepticism (OGP, 2013). Some skeptics were apprehensive about opening up the lawmaking process to anyone, regardless of their educational background or professional experience. Mall Hellam, Director of the Open Estonia Foundation, added that some skepticism about the Rahvakogu and Rahvaalgatus was expressed by the media. (Interview with the author, 2018). An additional challenge from the initiative's onset was the fairly volatile political climate resulting from the Silver Meikar incident, in which there was a great deal of hostility directed toward Estonia's political parties by the electorate.

In this sense, there was also the added risk that the People's Assembly could be insufficient in meeting the reforms demanded by the people. Much of this risk hinged on the relationship (or lack thereof) between the People's Assembly and the Riigikogu, as the parliament could have rejected all of the proposals it heard which, in addition to nullifying the work done by the NGOs and volunteers involved with Rahvakogu, could have created more hostility toward the parties and the legislature.

These risks and challenges were partially overcome through a strategy led by the President and Estonian Cooperation Assembly rather than the legislature, with minimal input from the major political parties. As the President of Estonia is largely a figurehead position with no executive power, and since the public generally has a higher level of trust in the President's Office than in the Government as whole, this leadership strategy minimized the backlash that otherwise may have derailed the initiative (Karlsson et al., 2015). This strategy was not without criticism, however, as some in the media argued that a government-involved process could not succeed, and objected to the use of public funds.[10] Still others argued that the [Rahvakogu] initiative did not go far enough, and should have been institutionalized as a permanent system. This, however, was not feasible as, after the project's completion, there was little funding or political will to keep the project going (Hellam, Interview with the author, 2018).

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[10] Although the ECA functions like an NGO, the association was founded by Fmr. President Ilves in 2007, and receives public funding via the President's Office.

As Rahvakogu relied on technology only for the proposal stage and was able to use an open-source platform, there were few technological constraints. The one-time nature of the project enabled several of the strategies to be used that would be not be economically or politically feasible in the long-term, since the project relied on a substantial amount of labor-intensive pro bono work to transform the raw proposals submitted by the people into something useable by the legislature. Perhaps the most significant constraint on the project was time, as the project was rolled out very quickly in order to address the civil unrest brewing at the end of 2013; this accounts for the short timespan allocated to the crowdsourcing phase. Legally, the project operated in a gray area; while there was no explicit provision for civilians to propose or introduce policy changes to the Riigikogu, there was no law preventing it either.

While many of Rahvakogu's issues were addressed with the creation of Raahvalgatus in 2016, some others persist. The nature of the Rahvakogu project left much of the discretion in the hands of the Riigikogu (a lingering issue with Rahvaalgatus), which largely chose to reject the proposals that would have curbed many of the powers and privileges of its members. For instance, parliament rejected one proposal which would have prohibited legislators from serving in both the national government and in local councils, and another which would have created a procedure for voting on certain bills in public referenda. Similarly, the Rahvaalgatus mechanism leaves the ultimate fate of proposals up to one or more Riigikogu commissions. This makes it somewhat difficult to measure the impact of the platform, as even accepted proposals do not necessarily result in direct legislation.

Reactions

Many consider Rahvakogu to be a successful project with room for improvement (Liiv, interview with the author, 2018; Hellam, interview with the author, 2018). Mall Hellam states that Rahvakogu was successful as a one-time project, but that the project lacked the attention or political will to continue long-term. Also, serious effort has to be made to provide better civic education in schools, as well as offering funding opportunities for organizations in the NGO sector who aim to educate people about different forms and methods of modern democracy. Similarly, Dr. Innar Liiv, Associate Professor of Data Science at Tallinn University of Technology, sees the initiative as a success due to the role played by the President and questions whether the project could have worked without the President's involvement (Interview with the author, 2018). Nele Leosk, CEO and Senior Digital Governance Expert at International Governance Leadership, sees the project's timing as an additional strength, as the well-timed initiative captured the attention of potential participants and

the media. The country's history of public participation online readied its people to participate in Rahvakogu (Leosk, Interview with the author, 2018).

Other commentators were more critical. In a Postimees interview, MP Jüri Adams compared the People's Assembly to a lucky game of Russian Roulette which could have unraveled Estonia's parliamentary democracy, arguing that the project's "unusually sensible result" would likely not be repeated if the project were tried again (Esle, 2013).

Several experts also identified areas of improvement. One weakness of the project was that the platform disproportionately drew upon the opinions of young, professional Estonian men rather than the "crowd" as a whole. Nele Leosk notes that for projects like Rahvakogu, often one means of participation is not sufficient, because different demographic groups prefer to participate in different ways. As crowdsourcing primarily attracts a certain type of person, other methods should be considered if the goal is to reach a wider range of people (Interview with the author, 2018). On the other hand, Mall Hellam contends that similar projects in the future do not necessarily need to involve or be marketed toward the whole population, as not everyone will want to join; it is more important to engage the proper stakeholders, even if these groups are not the most visible. This requires finding an adequate source of funding to properly develop the platform and a strategy to effectively communicate the platform to stakeholders (Interview with the author, 2018).

The entire Rahvakogu process was intended to be transparent, with the entire population invited to participate, and with each step of the process explained via public media. However, Leosk notes that transparency in decision-making was lacking at some stages. For instance, the criteria or methodology on which the proposals that were debated during Deliberation Day were chosen, and how exactly these proposals were agreed upon, remains unclear. This ambiguity is partly a result of Rahvakogu's unplanned nature (Interview with the author, 2018).

An additional weakness was that Rahvakogu was unsuccessful in restoring trust in Estonia's institutions, at least among its participants. A survey of Rahvakogu participants found that 65% experienced a decrease in trust in the government, political parties and parliament, while only 10% increased their trust. By contrast, 40% of respondents increased their trust in their fellow citizens, while only 13% experienced a decrease in trust. Notably, participants who had higher levels of satisfaction in Estonia's democracy were significantly more likely to experience an increase in institutional satisfaction. Additionally, participants that gained trust in institutions were less likely to

gain trust in civil society, and vice versa (Karlsson et al., 2015). This indicates that Rahvakogu has done little to ease the dissatisfaction that some Estonians feel with their government.

Though, when put into the Estonian context, these findings are somewhat dubious. Dr. Innar Liiv remarks that Estonians experienced extraordinarily high levels of trust in government after re-gaining independence from the Soviet Union in 1991. Thereafter, Estonians' trust in government has declined naturally as it "converges" with lower levels of trust in the rest of the world (Liiv, interview with the author, 2018). An additional consideration is that Rahvakogu participants were not a representative sample of Estonia's population, and so these results may not be generalizable to Estonia's wider population. Anecdotally, some say that Rahvakogu improved the political situation and smoothened the relationship between the government and civic society (Leosk, Interview with the author, 2018). Indeed, according to data from the biyearly European Social Survey, the percentage of Estonians with lower-end levels of trust[11] in their country's parliament dropped from 55.3% in 2012 to 48% in 2014.[12] Though, as this decrease in low trust continued, dropping to 43.8% in 2016 (well after the end of Rahvakogu but before the launch of Rahvaalgatus) the improvement cannot directly be attributed to the People's Assembly.

When describing Rahvaalgatus in February of 2018, Estonian Cooperation Assembly Director Teele Pehk stated that the site has a "user-friendly approach supported with systemic work with (potential) users and stakeholders responsible for inter-linked processes," and called it the "forerunner of (e-)democracy in Estonia." Though, Pehk concluded that "30+ collective addresses [submitted through Rahvaalgatus] have not had a measurable impact on how the Estonian society is being governed or problems solved" (2017). Pehk also described a "vicious circle of distrust" that continues to hinder public participation on the Rahvaalgatus platform (2018). Likewise, Mall Hellam observed that while the [Rahvaalgatus] website works well, it is not very well publicized by the media or by Estonia's politicians.

Key Learnings

Despite its shortcomings, Rahvakogu is. a most relevant CrowdLaw exemplar because of its key features: a hybrid online and offline approach and rigorous focus on a single area of policy. The

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[11] ESS presents this question as a Likert scale ranging from zero to 10, where zero is "no trust" and 10 is "complete trust". "Lower-end" refers to a score of four or lower.

[12] Data were tabulated and weighted using the Norwegian Social Science Data Services online data tool on the ESS website. These data were weighted using the "post-stratification weight including design weight" option, as per the ESS guide on weighting data.

adoption of an existing, tested Icelandic crowdsourcing platform allowed the organizers of Rahvakogu to quickly roll out the Rahvakogu web page and to modify it to better suit their purposes. The use of predefined categories on the platform indicates that limiting proposals to a certain set of topics successfully focused the debate on identifying solutions to key issues. However, a complementary offline component was also necessary to fill the gaps in participation; as crowdsourcing platforms tend to be used disproportionately by young, well-educated, politically active men, a portion of the process where participation is assigned through random representative sampling can allow for a sample that better represents a country's population. The offline process also allowed for consultation by experts, analysts, and political representatives to ensure that proposals were high-quality and high-impact. In future projects, offline involvement should be done in as transparent a manner as possible.

Although non-governmental organizations and the executive branch rather than the legislative branch led the Rahvakogu effort, the creation of the institutionalized CrowdLaw mechanism Rahvaalgatus ultimately benefited Parliament. Through Rahvaalgatus, Members of Parliament continue to benefit from a institutionalized, centralized, and curated stream of policy ideas which prevents an overload of information, and allows MPs to remain current on the issues that are most relevant to their constituency. From an institutional perspective, actors outside of the elected government can play a key role in facilitating public engagement in lawmaking.

Governador Pergunta

USING A WIKI SURVEY TO CREATE BRAZIL'S LARGEST CONSULTATION

CASE STUDY
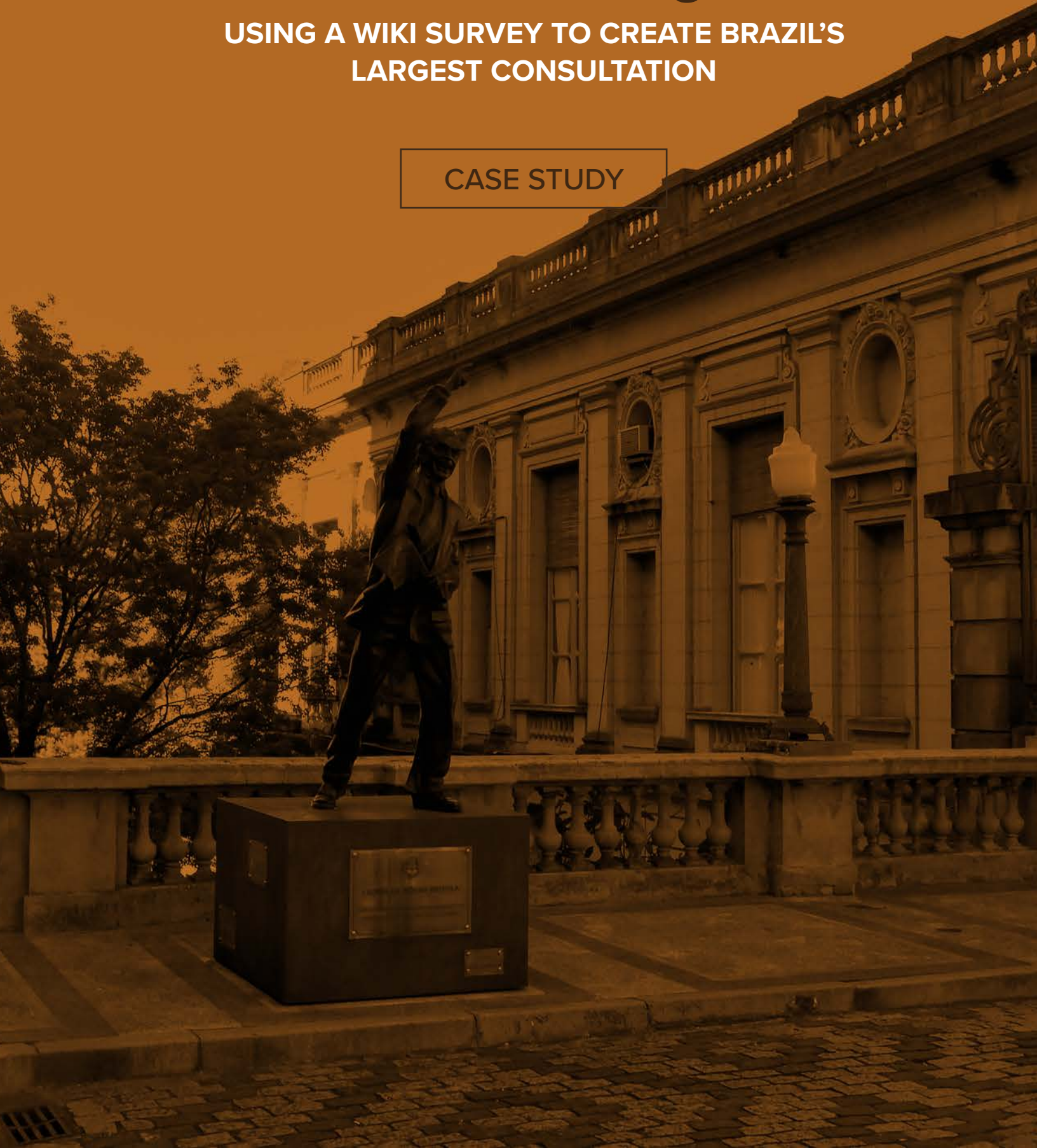
Governador Pergunta (Governor Asks) | USING A WIKI SURVEY TO CREATE BRAZIL'S LARGEST CONSULTATION

Introduction

From 2011-12, the Brazilian State of Rio Grande do Sul ran Governador Pergunta ("Governor Asks") to engage citizens in policymaking using the novel "wiki survey" technique. Invented by Princeton professor of sociology Matthew Salganik, a wiki survey presents respondents with a question and then a random series of two answer choices. People select the response they prefer (or "I can't decide" as a third answer) or they may submit their own response. As people are repeatedly selecting between two options, it is sometimes called "voting." This pairwise voting is faster and easier than responding to a long survey. People can answer as many or as few questions as they choose and, with enough people participating, the resulting list is a rank ordered list of the answer choices. Then-Governor Tarso Genro used Salganik's free and open source All Our Ideas wiki survey tool to engage residents (see Fig 1), first, on public health care in 2011 and then on traffic safety in 2012, each over a one month period.

Screenshot of the Governor Asks Wiki survey.

The online approach allowed the State to attract thousands of participants in a short time frame. The 2012 project was Brazil's largest public consultation of all time with over 100,000 participants. All Our Ideas has also been used in 14,000 citizen engagement projects around the world. Most

recently, AARP, the nation's largest nonprofit used an All Our Ideas wiki survey to engage over 6,000 members in developing policy about big health data in 2019 and the New Jersey State Future of Work Task Force used the platform to engage with workers in 2020. (The new design can be seen in Fig. 2)
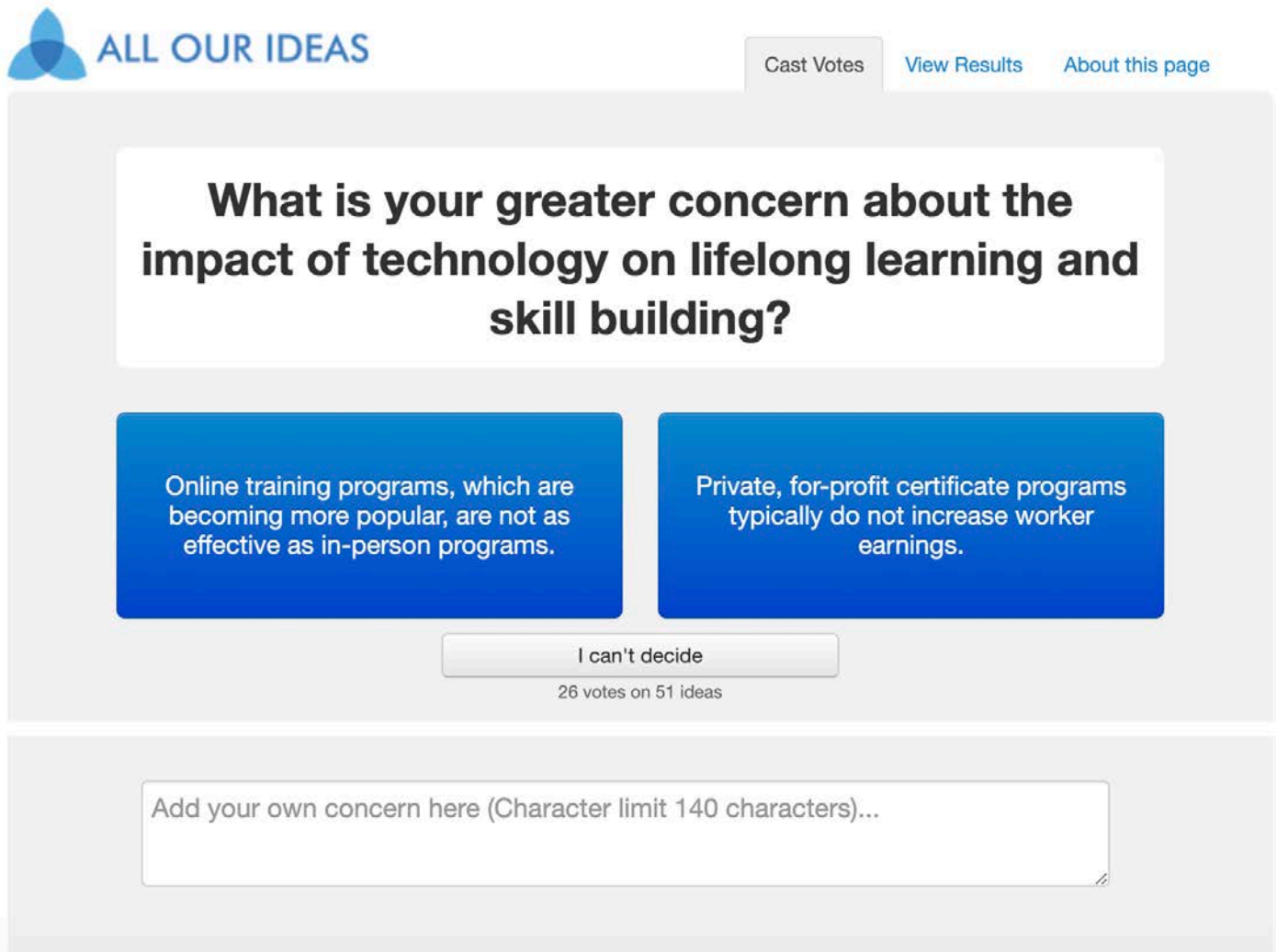
The new design of All Our Ideas. Available online at allourideas.org

Background

Rio Grande do Sul, a southern state with eleven million residents, has a rich history of innovative citizen engagement initiatives. The state's capital, Porto Alegre, hosted the world's first participatory budgeting initiative in 1989. A similar participatory budgeting program was run at the state level between 1999 and 2002. Governor Genro created the Gabinete Digital' (Digital Cabinet) in 2011 to institutionalize an online version of the participatory budgeting program while also launching three new initiatives:

▸ **Governor Asks**

▸ **Governor Responds -** a platform in which the governor responded to the inquiries raised in the Governor Asks sessions. Each month, the governor responded to the question that received the most votes in a video.

▸ **Governor Listens** - a series of public audiences (broadcast live online) in which the governor and citizens came together to discuss issues of importance to the public.

Project Description

The first edition of Governor Asks ran from November 9 to December 9, 2011 on the topic of healthcare, as it had previously been identified as a priority in the state's participatory budgeting initiative. During the first phase of the process, which ran until November 30, 2011, users submitted 13000 policy proposals to improve public health care. Specifically, citizens were asked to submit proposals according to five themes: Family Health, Comprehensive Care, Urgency and Emergency, Access to Medicines and Health in Your Region.

The platform registered 122,000 survey responses. The authors of the 50 proposals that received the most "votes" (10 from each theme) were invited to meet with Governor Genro and other authorities at Piratini Palace (the Governor's Office) to further discuss their ideas, a meeting which was live streamed on the Internet. At the outset of the process, the state government agreed that the 50 most voted proposals (10 from each theme) will receive a response from the Government and support the formulation of public policies for health. One example of implementation is shown by a proposal from Ricardo Ferriera, who asked for 24-hour healthcare clinics. In response, the government opened an emergency clinic in Lindóia. Whether the rest of the proposals were adopted or carried out is unknown, but it is likely that some action was produced as the process was repeated shortly after.

The second iteration of Governor Asks focused on the issue of traffic safety and addressed the question of how government and society can together promote "peace for drivers" (paz no trasito). The goal was to reduce by half the 2,300 traffic fatalities that occurred annually in the state by 2020. As the Governor wrote: "We are breaking down the bureaucratic barriers that exist between the state and the citizens. But changing the reality of traffic depends on a cultural change, which values civilized coexistence over speed and violence " The 2012 Governor Asks went on to become the largest digital consultation in Brazil's history. The process followed the same steps as the public health instance, with the only difference being that over 100,000 people participated and

cast over 240,000 votes on 600 proposals across five issue areas: Education, Road Safety, Communication, Legislation and Health.

Once this window for submissions closed, users had approximately one week to vote on the proposals, which included suggestions from the government as well as citizen submissions. Once again, the authors of the top voted proposals were invited to meet in person with the Governor. However, this time, the State government committed to implement the top two proposals with the most votes in each of the five categories by 2014. For example, one proposal led to the state creating free bus and metro passes for low income students.

The 2012 meeting between Governor Genro and participants at Piratini Palace
Source: https://blog.allourideas.org/post/75399372139/the-governor-asks-again

Participation

Governor Genro and the team behind Governador Pergunta made concerted efforts to engage the public at every step of both editions. Throughout the entire first iteration, the Governor held meetings and in-person events with civil societies, public health leaders, and citizens in several

municipalities, many of which were open to the public. After the window for proposal submissions closed, the Governor's office launched a major public outreach campaign to encourage people to prioritize the proposals by responding to the wiki survey. To boost participation, in addition to the public events, there was also a "voting van" equipped with computers that drove around to public spaces throughout the state so that residents could easily participate. It is estimated that the van covered 800km in the capital and metropolitan region of the state, encompassing several municipalities. Finally, more computers were even installed in public spaces in the capital along with seven Telecenters where users could respond. Approximately 60,000 people were said to have participated in Governador Pregunta in 2011.

The "voting van" (source: https://estado.rs.gov.br/entra-no-ar-o-portal-de-acesso-ao-governador-pergunta)

In the second edition of Governador Pregunta, the team increased its outreach efforts. For example, they modified their version of All Our Ideas to be optimized for mobile devices and tablets, making it easier to bring participation to people in public spaces. This modified version was developed in collaboration with UK civil society organization mysociety.org and was funded by a grant from the ICT4Gov Program at the World Bank. In this instance, two voting vans covered an estimated 1500

kilometers over 22 cities. In addition, the state set up more than 150 fixed participation points in public spaces and government agencies. There were also several cities where student organizations mobilized to support the effort. Finally, staff from the Digital Cabinet and State Traffic Committee traveled to speak at various in-person events. These endeavors proved fruitful as the number of participants increased to over 100,000 people.

Visits from the voting van in the second instance (source: https://blog.allourideas.org/post/ 75399372139/the-governor-asks-again)

Impact

Building on Brazil's history of successful public engagement experiments, Rio del Sul's extensive use of wiki surveys to rapidly engage citizens in policymaking demonstrated how it is possible to effectively marshall citizen expertise at scale. There was dramatic growth from the first to the second edition of the program with many lessons for how to market participation opportunities. Unfortunately, there is a dearth of documentation about the ultimate implementation of citizen-written and selected proposals. But the continued and repeated use of this type of pairwise voting or wiki survey tool showcases an alternative for rapid and broad engagement.

DRAFTING

Lawmaking involves turning good ideas into written proposals for a bill. WikiLegis enables Brazilians to edit and comment on draft legislative text. By giving the public insight into the drafting process, online participation enhances transparency.

MUDAMOS

THE CITIZEN INITIATIVE APP

https://mudamos.org

BRIEFING NOTE

Owner: Institute for Technology and Society (ITS Rio)
Location: Brazil
Years in Operation: 2017-present
Implementation Level: Municipal, State and National
Platforms: Mobile
Method: Collaborative drafting
Participatory Task: Ideas, Actions

MUDAMOS I THE CITIZEN INITIATIVE APP

How Does it Work?

Mudamos is a mobile application that enables Brazil's citizens to participate in lawmaking by proposing their own bills and signing onto one another's proposals using verified electronic signatures.

Mudamos comprises three parts: 1) The app's secure and verifiable digital signature technology; 2) the process for proposing, analyzing and improving proposed bills; and 3) in-person Virada Legislativa (legal draft-a-thon) events.

1. **Mudamos App -** Any citizen with a smartphone (Android or iOS) can download the app and register with his or her electoral ID, name and address, information which Mudamos keeps secure and verifies with Brazil's Electoral Court. The app issues what is known as a cryptographic key pair, a small piece of digital code used for verification. One half of the key is stored on the user's phone and the other with Mudamos, which makes it possible to authenticate a person's signature. In this way, members of the public can draft and sign petitions in a way that is verifiable and secure.

2. **Legal Analysis Team -** To address the volume and quality of submissions, Mudamos's creators have designed a volunteer lawyer program. Since January 2018, ITS Rio uses crowdsourcing to engage young lawyers to assist in the analysis of the proposals. The Mudamos volunteer legal team performs a legal analysis to verify whether the draft bill has all the constitutional requirements to be framed as a citizens' initiative bill. If it has all the constitutional requirements, the bill is uploaded on the platform and it is published for signature gathering immediately. If it has not, the bill's author receives a feedback report based on the analysis recommending changes or explaining why the proposal cannot be accepted as a citizens' initiative bill.

3. **Virada Legislativa Events -** To foster lawmaking literacy and help citizens to create their own draft bills, ITS organizes Virada Legislativa. The Virada Legislativa is a one-day in-person event to develop draft bills collectively -- a draft-a-thon -- addressing a single issue and within a timeframe.

What Are The Outcomes?

With the massive adoption within a few months after its launch, Mudamos has not only been leading, a technological turn in politics, but also fostering institutional and cultural changes by

making the once-theoretical possibility of direct democracy real in practice. Since Mudamos has been released, the platform has received more than 8,000 draft bill proposals. In its first month, Mudamos was downloaded by more than 250,000 people and by October 2018, more than 700,000 people had downloaded the app. Over half of those are active users. Since Mudamos's launch in March 2017, several legislative bodies have enacted new measures to recognize the use of Mudamos as an official channel for participatory lawmaking.

What Does It Cost?

Mudamos is a free application that can be downloaded from mobile application stores.

What Are The Benefits?

- Mudamos is a secure and affordable way for people to express themselves politically by drafting bills for legislative consideration or signing onto bills.
- The technology ensures that signatures are trackable and verifiable.
- Mudamos reduces the reliance on paper-based systems for signature collection, which in turn reduces costs.

What Are The Risks?

- Mudamos's electronic signature is not a national standard and the major risk to the Mudamos project is the contesting of the validity of its signatures by legislative bodies. Since an electronic signature standard is not established by law or even by a House of Representatives rule, the decision whether or not to accept Mudamos signatures is made subjectively.
- Another risk faced by Mudamos is the low adoption rate of the app (350,000 active users) in relation to the number of signatures required to propose a national level draft bill (1.5 million)

For more information, please contact: *crowdlaw@thegovlab.org*

CONSTITUCIÓN CDMX

CROWDSOURCING MEXICO CITY'S CONSTITUTION

constitucion.cdmx.gob.mx

BRIEFING NOTE

Owner: Mexico City's Government
Location: Mexico City, Mexico
Years in Operation: 2016-2018
Implementation Level: Municipal, State
Platforms: Web, Offline
Method: Collaborative drafting, Open Innovation
Participatory Task: Ideas, Opinions, Drafting

CONSTITUCIÓN CDMX | CROWDSOURCING MEXICO CITY'S CONSTITUTION

How Does it Work?

Mexico's Congress gave the Mayor of Mexico City exclusive authority to craft the city's constitution, which would then be ratified by a constitutional assembly. However, to increase popular legitimacy, the Mayor instead established a working group tasked with receiving public input. In turn, The Lab for Mexico City set up the Constitución CDMX (CDMX referring to "Ciudad de México") digital platform, which offered the public four ways to participate in the process: 1) a survey, 2) online petitions, 3) collaborative drafting, and 4) an event platform. The opportunities to participate were heavily advertised via social media and local high school volunteers were enlisted to get out the word on street corners.

Constitución CDMX's participation methods included the following:

1. **Survey:** This seven-question survey aimed to capture residents' hopes and fears, expectations, and ideas for the future of the city and mapped them by age, gender, and neighborhood.
2. **Online Petitions:** The City collaborated with Change.org Mexico to set up a tool where residents could petition the working group. Any petition with 5,000 signatures was analyzed and a legal opinion was sent to the petition-maker and its signees. When a petition garnered 10,000 signatures, the proposing resident(s) would present their proposal to three representatives of the Working Group. When a petition surpassed 50,000 signatures, the proposing resident(s) presented their proposal in a working session with the Mayor, who committed to explicitly include it in the constitutional draft.
3. **Collaborative Drafting:** Residents could add their comments or suggestions to essays prepared by the Working Group that addressed questions of constitutional theory, proposals of a technical nature, and related academic papers using MIT's pubpub platform.
4. **Event Platform:** An event platform was created that enabled resident-organized events related to the constitution to be promoted to increase participation. Event organizers could also upload the findings of their events to the collaborative editing platform and receive feedback from other platform users.

Each week, the Working Group reviewed a summary of the Constitución CDMX platform's activity, discussed the resident inputs and, with technical and legal support, reflected the result of their

discussion in an evolving draft of the constitution. The Working Group's final draft was then passed through the Mayor to the Constitutional Assembly which held responsibility for final review and endorsement of the constitution.

What Are The Outcomes?

Within six months, 341 proposals were submitted as online petitions, and signed by more than 400,000 unique users. Four petitions surpassed the 50,000 signatures threshold, while another 11 got more than 10,000 signatures. In total, 14 petitions were successfully included in the Constitutional draft. Additionally, the survey mechanism generated 30,000 geo-tagged responses from 1,474 neighborhoods, accounting for 90% of all neighborhoods in Mexico City; 100 essays were submitted to the collaborative drafting platform and received 1,000 comments; and 55 resident-organized events were registered. As a result, the final document is considered to be the most progressive constitution in Latin America, and it has been recognized by the United Nations as a "historical document that addresses the central challenges of development and peace," and as "a guide to fulfill the universal, indivisible and progressive nature of human rights, the Sustainable Development Goals, and the 2030 Agenda."

What Does It Cost?

The platform development cost was $15,000. There were also additional costs for outreach and marketing, as well as for digital kiosks and mobile devices which were used to encourage participation from citizens who did not have access to the Constitución CDMX platform online.

What Are The Benefits?

- Having multiple ways to participate - from filling out a survey to writing a petition - encouraged more people to participate.
- The Mayor's commitment to include language drafted by the public if it garnered enough signatures enhanced legitimacy. At the same time, the Mayor made clear that citizen proposals that did not reach the signature threshold would be considered but not automatically included. By clearly communicating these boundaries, expectations were surpassed.
- Partnership with a well-known brand name (Change.org) increased trust and participation in the process.

What Are The Risks?

- The main challenge initially encountered was the lack of trust in the process and with the government - trust was essential to robust citizen participation.
- The still-present digital divide in Mexico City created implementation challenges and necessitated offering face-to-face participation options.

For more information, please contact: *crowdlaw@thegovlab.org*

MUDAMOS

THE CITIZEN INITIATIVE APP

https://mudamos.org

CASE STUDY

MUDAMOS | THE CITIZEN INITIATIVE APP

Introduction

Brazil became known for its participatory democratic institutions and for pioneering participatory budgeting (PB) in the city of Porto Alegre in 1986, a deliberative process that enables ordinary citizens to determine how a portion of the municipal budget will be spent. Now PB is in practice in more than 1,500 cities around the world. Once again, Brazil is leading the world with a new, secure and verifiable way for citizens to write draft bills and vote to support that citizen proposals be considered by the legislature. With 700,000 people signing up in the first year of this CrowdLaw initiative, Mudamos (We Change) could be the linchpin to enabling collaborative drafting of legislation and unlocking the power of direct democracy in practice.

> Mudamos is a mobile application that enables Brazil's citizens to participate in lawmaking by proposing their own bills and signing onto one another's proposals using verified electronic signatures.

Any citizen with a smartphone (Android or iOS) can download the app and register with their electoral ID, name and address, information which Mudamos keeps secure and verifies with Brazil's Electoral Court. The app issues what is known as a cryptographic key pair, a small piece of code used for verification. One half of the key is stored on the user's phone and the other with Mudamos, which makes it possible to authenticate a person's signature. In this way, members of the public can draft and sign petitions in a manner that is verifiable and secure.

Brazil's Constitution provides several direct democratic mechanisms, including the referendum, plebiscite, and citizens' initiatives. The initiative mechanism allows any citizen to propose a draft bill to the lower house of municipal, state or federal legislatures. If the proposal gets the requisite number of signatures from registered voters in support, then the campaign organizors present the bill before the House. Once the signatures are verified, the Speaker assigns a House committee to start bill discussion that could lead (or not) to the bill becoming a law. At the federal level, the minimum amount of signatures is 1.5 million, which is problematic to organize using paper-based petitions. Popular initiatives to collect signatures are often paper-based which, apart from being

costly, also present problems of transparency and integrity. In fact, no citizen bill has ever been approved at the national level due to the verification barrier and participation costs.

The Institute for Technology and Society (ITS Rio) created Mudamos in 2017 to reduce the high costs of creating paper-based petitions by offering a verifiable online mechanism for the creation and signing of citizen petitions offering a robust means of participation that, in turn, should help to raise citizens' degree of trust in political institutions and contribute to the construction of participatory rules and norms.

Since its launch, the Mudamos CrowdLaw initiative has had significant impact:
- The large numbers of downloads, petitions and signatures enabled by the tool has positively impacted political culture.
- The availability of a secure and verifiable petition mechanism has made a constitutional provision on direct democracy real in practice.
- It had led to the creation of a model legal framework regarding electronic participation and its adoption at different institutional levels

In this report, we will describe the background conditions that allowed Mudamos to take off, the design and key features of the process and the tool. Following this section, we will describe the institutional impacts of the project in more detail and, finally, share some lessons learned from the experience.

Background

Since the Federal Constitution was approved in 1998, Brazil has had a law which allows citizens to propose draft bills once the petition has met the requisite threshold for signatures. At the federal level, a draft bill needs a minimum of 1.5 million verified signatures to be presented to the Lower House. The logistical barriers to collect and validate these signatures, together with voters' identifications and addresses, are the greatest obstacles in this process.[1] As a result, to date no citizen-drafted bill has ever been approved. In a few instances, interested politicians have "adopted" the draft bill and presented it as if they authored it, eliminating the need for verifying the signatures. In other words, members of Congress act as proxies for citizens to claim their direct participation rights.

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[1] TEIXEIRA, L. A. (2008). A Iniciativa Popular de Lei no Contexto do Processo Legislativo: Problemas, Limites e alternativas. 2008: Monografia para Curso de Especialização. Câmara dos Deputados: Centro de Formação, Treinamento e Aperfeiçoamento. Available at: http://bd.camara.gov.br/bd/handle/bdcamara/10190?show=full. p. 9.

At the national level, the following draft bills were proposed by citizens and "adopted" by a congressman:

LAW	SIGNATURES	FORMAL PROPONENT	CONGRESS DISCUSSION	LAW SUBJECT
8.930 from 1994 "Daniella Perez Law"	1.3 million	Executive Branch	From 1993 to 1994	Increase penalty for homicide crimes.
9.840 from 1999 Electoral corruption law	1.6 million	Congressman Albérico Cordeiro	1999	Against bribes for voters and other electoral offenses.
11.124 from 2005 National Housing Fund	1 million	Congressman Nilmário Miranda	From 1992 to 2005	National Housing Fund creation.
135 from 2010 "Cleanstate Law"	1.6 million	Congressmen Antonio Carlos Biscaia, Arnaldo Jardim, Camilo Cola, Carlos Sampaio, Celso Maldaner, Chico Alencar, Domingos Dutra, Dr. Rosinha and others.[2]	From 1993 to 2010	It makes ineligible for eight years any official who has the mandate revoked, resign to avoid prosecution or is condemned by decision of a court majority opinion.
Bill 4.850 from 2016 Ten anti-corruption measures	2 million	Congressmen Antonio Carlos Mendes Thame, Diego Garcia, Fernando Francischini, João Campos and others.[3]	Since 2016	Create new measures to fight against corruption and increase penalties for those convicted by corruption crimes.

FIGURE 1: NATIONAL CITIZENS' INITIATIVE DRAFT BILLS IN BRAZIL.

One of the most controversial citizen-drafted bills was called "ten anti-corruption measures." In March 2015, the Ministério Público Federal ("MPF"), the Brazilian Federal Prosecution Service, released 10 proposals to reinforce the fight against corruption in the country and in, July 2015, started a campaign to gather signatures in various Brazilian cities. Less than five months later, in December 2015, the campaign reached 1 million signatures and two months later it overcame the 1.5 million signature threshold. On March 29, 2016, members of the Federal Prosecution Service and civil society actors presented more than 2 million signatures to the National Congress in support of the draft bill.

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2 The authors list is available on <http://www.camara.gov.br/proposicoesWeb/prop_autores?idProposicao=452953>. Last access on January 18th 2017.

3 The authors list is available on <http://www.camara.gov.br/proposicoesWeb/fichadetramitacao?idProposicao=2080604>. Last access on January 18th 2017

In much the same way that citizen-drafted bills were presented to Brazil's Congress in the past, a group of members of Congress formally "adopted" the initiative (See Table 1), introducing it as formal legislation. On the next day, a fast track discussion for the Bill was approved by the legislature. While the discussion in the House of representatives received a lot of public attention, the controversial side of the new proposal was revealed when some members of Congress stated the new Bill would give too much power to the Federal Prosecutors. Many of the more stringent measures were greatly modified or removed entirely by the members of Congress. Federal Prosecutors accused members of Congress of trying to stop the "fight on corruption" while House representatives claimed the challenged provisions were authoritarian and unconstitutional. In the end, only two of ten measures were approved.[4]

On November 30, 2016, the diluted Bill was ratified by the House and sent to the Senate. However, before it was discussed in the Senate, Justice Luiz Fux of the Supreme Court decided the Bill should be sent back to the House due to the "deviant practices," employed during its consideration by the House.[5] Justice Fux also decreed that it was necessary to check all the citizen signatures provided in support of the Bill. The verification process started in February, 2017 and finished a month later. It was the first time the signatures on a popular petition had been vetted. But according to a House staff report, this process involved little more than counting the signatures and ensuring complete information (e.g., name, electoral ID, and signature), none of which was actually validated.[6]

Even though there is no publicly available information, off-the-record talks with some public servants in the House revealed that the signatures were not verified because the House did not have the means to proof two million signatures. Identification information in Brazil is held by the states' executive branches. At the national level, the Superior Electoral Court manages the country's biometric signature program. It alone has the capacity to verify the signatures of all voting age citizens. The legislature does not have the means, by itself, to compare signatures with official citizen records. In addition, verifying signatures one by one could take a long time as the House does not have personnel adequate to the task.

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[4] See http://fcpamericas.com/english/anti-corruption-compliance/brazils-10-measures-corruption-chamber-deputies-approves-lava-jato-task-force-proposal/.

[5] See http://portal.stf.jus.br/processos/detalhe.asp?incidente=5103492.

[6] See <http://www.camara.gov.br/proposicoesWeb/prop_mostrarintegra?codteor=1540249&filename=Tramitacao-PL+4850/2016>.

Aware of this problem and proposing a way to use technology to overcome this challenge, the Institute for Technology and Society (ITS Rio) wrote a project proposal to create a mobile application to allow citizens to present electronic signatures in support of citizens' initiative draft bills. The app was developed by ITS Rio with funds from the Google Impact Challenge 2016 award. ITS Rio is a Brazilian NGO which designed Mudamos and conducted the project with the support of other companies and organizations. The development started in October 2016 and in April 2017, the app was launched simultaneously on Google's Android Play Store[7] and Apple's App Store.[8] In the first month, Mudamos was downloaded by more than 250,000 people and became the trending app on Brazil's application stores, prompted by a viral video made by a Mudamos user and spread through the messaging platform WhatsApp with the message that now "people can participate directly in politics without any intermediary."[9] One year after its launch Mudamos had been downloaded by more than 650,000 people. By October 2018 that number climbed to more than 700,000 people.

Three factors made Mudamos possible at that point in time:

- **Legal Framework:** With an existing legal framework in place, citizen initiatives were theoretically possible but practically impossible due to the prohibitive cost and complexity. Digital tools bring down the cost of authoring proposals and obtaining and verifying signatures, thus creating greater incentives to political participation. It got stronger when political institutions perceived the necessity to update their norms to respond to this new digital scenario due to the difficulty of verifying signatures.
- **Technological Viability:** With the ever-growing interest and research into cryptography technologies, more professionals are discovering new applications for them. Mudamos created a cheap way to allow citizens to create strong signatures which are trackable and verifiable.
- **Funding:** The Google Impact Challenge award provided the necessary enabling capital to kickstart the project. The funding received was invested in hiring a team of specialists to design and program the app and support the project operations team.

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[7] See <https://play.google.com/store/apps/details?id=org.mudamos.petition>

[8] See <https://itunes.apple.com/br/app/mudamos/id1214485690>.

[9] See <https://www.youtube.com/watch?v=E8PU3zm9oic>.

Mechanics of Mudamos

Mudamos comprises three parts: 1) The app's secure and verifiable digital signature technology; 2) the process for proposing, analyzing and improving proposed bills; and 3) in-person Virada Legislativa (legal draft-a-thon) events. Together, this combination of technology and process make this digital citizens' initiative program workable in practice.

Mudamos Online Platform

Political behavior of both citizens and politicians has been changing rapidly together with new technological, social and political contexts; political participation is not exclusively in the offline world anymore, with institutions becoming receptive to digital engagement and the Internet.[10] [11] Currently, thanks to the Internet and other technologies, it is possible to collect signatures throughout Brazil and verify them automatically. Digital signatures already had their relevance recognized and used in common civic procedures, as instituted by the Presidency Act MPV 2200/2001, and in legal acts, as instituted by Law 11419/06.11. However, since the cost of obtaining official digital certificates is prohibitive, they did not gain widespread adoption and a mere .005% of Brazilians have them.[12]

> Political behavior of both citizens and politicians has been changing rapidly together with new technological, social and political contexts: political participation is not exclusively in the offline world anymore, with institutions becoming receptive to digital engagement and the Internet.

Digital signatures based on certificates issued by the Brazilian government have the advantage that they are legally binding, meaning any documents signed using those certificates are recognized by any authority as authentic for any purpose, from the recognition of a debt to real estate transactions. However, when we talk about political rights, we do not need signatures to be that strong because people's support of causes are the expression of their political desire, not legal intent. Signature campaigns

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[10] ALMEIDA, G. de A. (2015) Marco Civil da Internet – Antecedentes, Formulação Colaborativa e Resultados Alcançados. In: Gustavo Artese - Coordenador, Marco Civil da Internet Análise Jurídica Sob uma Perspectiva Empresarial.. São Paulo: Quartier Latin.

[11] Law No. 11419 of 2006 regulates the digitalization of the legal process.

[12] Based on the number of certificates issued in 2018 by the National Certificate Authority of Brazil over a population of 200 million people. Source: https://www.iti.gov.br/ranking-de-emissoes

need only ensure that signatories have the constitutional right to sign the draft bill and signatures only need to allow for public scrutiny to audit the political support given to the bill.

Taking this into account, Mudamos created a way to allow people to sign draft bills using self-issued certificates using their own smartphones. The technology stack used by Mudamos is the same used by certificate authorities to issue certificates, excluding the fact Mudamos is not a recognized authority to issue legally-binding certificates. That is to say, while Mudamos-issued certificates cannot be used to authenticate a contract in court, nonetheless the signatures are technically unbreakable and verifiable and well-suited to the purpose of ascertaining citizen wishes but without the cost of doing so through one of a handful of monopoly legal certificate providers. In short, Mudamos created a secure and affordable way for people to express themselves politically through digital means.

Anyone who has an electoral ID and a smartphone (Android or iOS) can download the Mudamos app and create or sign citizens' draft bills listed on the platform. When Mudamos users install the app, they get a cryptographic key pair to secure their signature. The model established by ITS Rio for Mudamos assumes that no actor in the process of collecting signatures would have all the pieces of information necessary to produce new signatures. At the same time, all users would have access to the information they need to check any new signature generated within the system using asymmetric cryptographic techniques. This type of technique is based on algorithms that require a pair of keys, the first being private (that should remain secret) and the second being public; although they are different, the key pair is mathematically linked. The private key is used to create a digital signature while the public key is used to verify a digital signature (Figure 2).[13]

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[13] See Mozilla Foundation. Introduction to Public-Key Cryptography https://developer.mozilla.org/en-US/docs/Archive/Security/Introduction_to_Public-Key_Cryptography
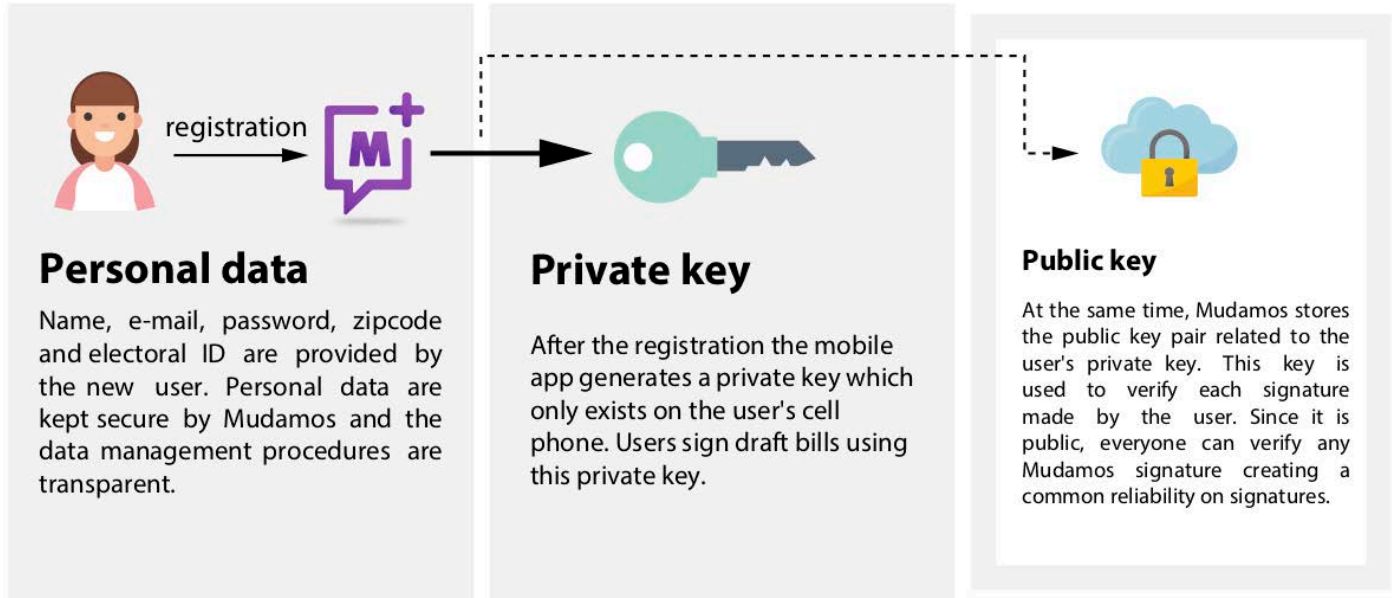
FIGURE 2: MUDAMOS REGISTRATION AND KEY PAIR GENERATION

Mudamos signatures are founded in three fundamental principles: uniqueness, verifiability and auditability.

The **uniqueness** of the signatures is guaranteed by the association of the unique electoral ID number combined with the signature timestamp and the user's private key. The private key generates a unique hash based on the data reported for the signature (Figure 3).
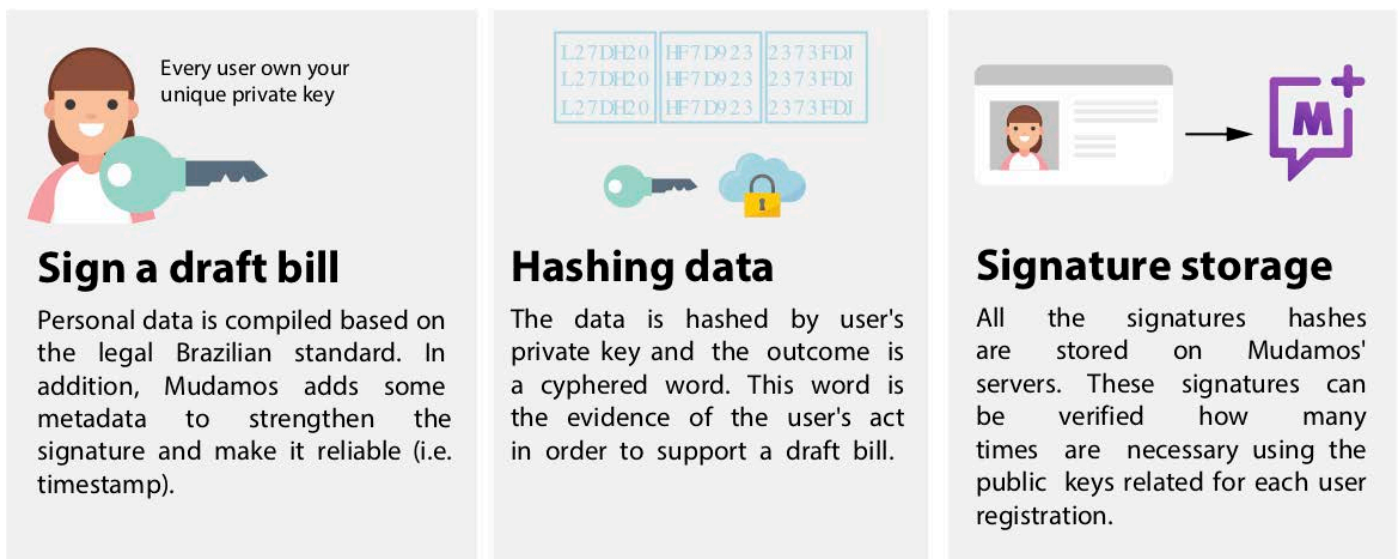

FIGURE 3: SIGN UP PROCESS

🧪 **GOV**LAB

Verifiability is guaranteed by publishing the user's public key along with the data given for the signature and the signature hash. In this way, anyone interested in checking any signature has the capability to do so.

In order to make the whole process **auditable**, Mudamos publishes the signatures list periodically by registering the files in public blockchain networks (Figure 4), where they can be publicly scrutinized.[14] This ensures that signature lists are immutable, and if an interested agent wants to audit the entire signing process, from the first signature collected, they have the capability to do it without relying on Mudamos or any other agent.

Regular publishing

Mudamos regularly compile each draft bill campaign signatures in a single document and make it public to allow every one follow the ongoing process.

Blockchain register

Every signatures document is registered on public Blockchains to ensure its authenticity and integrity, in other words, ensure they were not modified during the signature gathering campaign.

Presenting to a legislative house

The signatures document can be independently verified by the legislative house. In fact, every stakeholder can do your own signature verification without any special resources from Mudamos.

FIGURE 4: MUDAMOS SIGNATURES LIST PUBLISHING

Proposing a Bill

Mudamos not only allows users to sign in support of a bill but also to suggest new draft bills for signature collection. To propose a draft bill, the user needs to answer the following questions: 1) draft bill name; 2) draft bill content; 3) which level the bill addresses (national, state, municipality); 4) video description (optional); 5) whether there is a law related to this draft bill (yes or no).

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[14] Blockchain is a shared, trusted, public ledger of transactions, that everyone can inspect but which no single user controls. It is a cryptographic, secure, tamper-resistant distributed database. See more: https://hackernoon.com/blockchain-technology-explained-introduction-meaning-and-applications-edbd6759a2b2.

FIGURE 5: WELCOME SCREEN FOR PROPOSING DRAFT BILLS ON MUDAMOS

Legal Analysis

Since Mudamos has been released, the platform has received more than 8,000 draft bill proposals. In its early days, the Mudamos legal team consisted of a single specialist who was responsible for analyzing the large number of proposals. To address the volume, Mudamos's creators have designed a volunteer program. Since January 2018, ITS Rio uses crowdsourcing to engage young lawyers to assist in the analysis of the proposals.

The volunteer program had 63 applications, mostly by young lawyers. Many were from Rio de Janeiro, but all regions were represented in the applicant pool. After an evaluation process, Mudamos selected 26 volunteers who attended a course supported by ITS. The course was delivered as a webinar (online) in March 2018 and covered topics such as the legislative process, draft bill proposers communication protocol and experience sharing.

Before draft bills are published in the platform, the Mudamos volunteer legal team performs a legal analysis to verify whether the draft bill has all the constitutional requirements to be framed as a

formal petition. If it satisfies the constitutional requirements, the bill is uploaded on the platform and published for signature-gathering immediately. If it does not, the bill's author receives a feedback report based on the analysis recommending changes or explaining why the proposal cannot be accepted as a citizens' initiative bill.

Virada Legislativa Events

Eighteen months after its initial release, Mudamos improved not only its software platform but also its workflow. As new features were added it was necessary to create procedures to face new project challenges. When Mudamos began to accept new draft bill proposals, it quickly became clear that people did not know how to format their petitions as a formal bill.

There were many good ideas that were not properly formatted as a draft bill proposal, putting more strain on the volunteer legal team to get the bill into shape. To overcome this situation the Mudamos team created a side project called Virada Legislativa (legal draft-a-thon). The Virada Legislativa is a one-day in-person event to develop draft bills collectively -- a draft-a-thon -- addressing a single issue and within a timeframe.

The event is divided into stages. To focus on establishing the basis for the debate and an introductory reflection moment for participants to recognize each other and their ideas in the group, the first stage consists of a multi-stakeholder panel and the next stage is a fishbowl conversation with the audience, including the first stage panelists.[15]

The following three steps are directed at the actual drafting of the proposals and based on the first reflections: address the draft bill's main objective, write down general definitions and, finally, draft bill devices. At this point the group is divided into thematic areas taken as the result of the two first stages of the draft-a-thons. All working groups are supported by mentors (both specialists in the issue addressed as well as legal experts) to draft the bills.

The last two stages are the "test" of the bill and its publication on Mudamos. For the "test," the group chooses a representative to present the proposal to a standing committee formed by parliamentarians who play the role of consultants to improve the bill. The final version of the draft bill is published on Mudamos and then the signature collection starts.

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[15] See <https://en.wikipedia.org/wiki/Fishbowl_(conversation)>.

DRAFT-A-THON STEPS

Virada Legislativa Methodology

1 Sensibilization

A multistakeholder panel is formed, comprising different sectors related to the main issue of each Virada. The panel discusses the issue, presenting each diverse points of view. Prior to the event, the organization compiles a list of materials to better inform participants about that topic, raising awareness it.

After the first phase, the panel takes seats in the first round of the fish bowl discussion. In this phase, the goal is to expose various problems related to the Virada's topic that could be solved with draft bills. Using a fish bowl methodology, the participants share their ideias and opinions.

Fish Bowl 2

3 Sistematization

During the second phase, the facilitators take notes and conjugate the topics that are most addressed into thematic axes. After this, groups are formed voluntarily to work upon each axe, drafting bill that aim at solving specific problems raised in that theme.

After having discussed and chosen a problem the group wants to solve, they start drafting the bill collectively with the support from both legal and expert facilitators. Groups use available laws or drafts to get inspired and they are able to collate from these materials. Sometimes, the group produces more than one draft.

Drafting 4

5 Pitch

Once the draft is complete, the group appoints a leader to present the draft bill to a panel of legislators or counsellors. The panel can comment on the draft and suggest modifications which the group can incorporate or not. Thus, the collective generates the final draft of that bill.

Finally, the team uploads the draft bill on Mudamos app and publishes it. From this point, the bill can collect electronic safe and verifiable signatures. Once the legislation achieves the minimum amount of necessary signatures, it can be presented to the corresponding legislative house and voted upon.

Publication 6

FIGURE 6: DRAFT-A-THON PHASES AND METHODOLOGY

"Virada Legislativa" is ruled by three principles:

- **multi-stakeholderism:** the more diverse the sectors participating in the activity, the stronger will be the proposal drafted, as it will take into account various points of view and interests.
- **collaboration:** all the participants co-create the proposals, exchanging ideas and trying to reach consensus, with active listening and respectful communication. This is mediated by group facilitators previously trained by Mudamos's team.
- **open call and online/offline interaction:** the activity is open to the participation of all citizens, without any kind of selection. Despite the draft-a-thon taking place in person, it is connected to the online space through tools such as live streaming, commenting and suggesting on digital platforms.

FIGURE 7: PICTURE FROM THE FIRST VIRADA LEGISLATIVA HELD IN THE CITY OF JOÃO PESSOA, STATE OF PARAÍBA. PHOTOGRAPHER: YASMIN TAINÁ.

The first "Virada Legislativa" took place in João Pessoa and addressed urban mobility, with the collaboration of civil society organizations, academia, and local public administration. More than 100 people participated in the activity as well as 20 group facilitators and 15 city councilors. The participants collectively drafted five proposals on issues such as transport integration, sidewalk standardization and open data on the transport system. Another "Virada Legislativa" took place in Rio de Janeiro on entrepreneurship. In this legal draft-a-thon, one draft bill was developed on decreasing the highly bureaucratic procedures for opening a company in the country. Besides

these "Viradas," various workshops on this methodology have been conducted, aiming at multiplying its applicability.

FIGURE 8: : FISHBOWL CONVERSATION WITH A COUNSELOR TALKING AT THE SAME LEVEL OF OTHER PARTICIPANTS. PHOTOGRAPHER: YASMIN TAINÁ.

To date, there have been three Virada Legislativa events with 200 participants leading to 12 new draft bills on the platform which altogether have received 6,014 signatures. Despite the low levels of subsequent participation on the app, the live events had a significant impact. The best of the Viradas Legislativas saw city councilors and citizens sitting down together to collaborate around lawmaking. The city of João Pessoa, where two Viradas Legislativas took place, changed their participatory culture from an ordinary consultation process to a real collaboration between citizens and officials.

A Note on Lower Levels of Government

As noted, the Constitution provides for citizen petitions at every level of government. With the advent of the Internet, every branch of government has begun to digitize in some way. For example, the executive branch launched a Digital Transformation Agenda.[16] Although the judiciary has digitized the paperwork involved in legal proceedings, many states and cities in Brazil still face challenges with digitization.

Regional legislative houses and local councils generally do not have the technological resources to update their procedures for accepting citizen claims. Among all the Brazilian states and capitals, only Rio de Janeiro,[17] Santa Catarina[18] and Porto Alegre[19] have institutionalized citizens' initiatives electronically through the Internet. The state of Amapá[20] announced the launch of a digital portal to receive such draft bills, however it is still not available. In the state of São Paulo, Law 162 of 2008 was presented to "regulate popular initiatives started in the World Wide Web." However, the bill has still not been voted on, even after positive legal advice by the Commission of Constitution and Justice of the Legislative Assembly of the State of São Paulo. In Curitiba, Bill 005.00189 from 2013 also allows the collection of signatures on such draft bills digitally, but it is still in the process of being implemented. Against this backdrop of underdevelopment in the states, Mudamos may be the best available model for effective direct democratic participation and support for representatives and public servants in their aims to modernize.

Participation

Participation across the different aspects of the program is demographically diverse, sometimes in surprising ways. Although the ITS Rio team strove to reach young people with the project, the platform has become more popular among older people in Brazil. Mudamos users have a high average age of 43.7 and this average is increasing as time passes. At the outset the average age was 41. It is too early to draw a conclusion, although the appeal for older voters may be the result of generational views about political engagement and trust in government. While older generations

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[16] See Estratégia Brasileira para a Transformação Digital (E-Digital). https://www.governodigital.gov.br/documentos-e-arquivos/estrategiadigital.pdf/at_download/file

[17] Article No. 119 of Rio de Janeiro state Constitution.

[18] Article No. 2 of Brazilian Law 16585 of 2015.

[19] Article No. 98 of Porto Alegre Municipal Organic Law.

[20] BARBOSA, C. Assembleia Legislativa do Estado de Amapá. Pela internet, cidadão poderá ajudar a produzir projetos de lei da Assembleia Legislativa. Available at: http://www.al.ap.gov.br/pagina.php?pg=exibir_not&idnoticia=1545.

may be attracted by the time and cost saving of online participation, younger people take the online aspect for granted but want to be sure that their participation matters and will be impactful.

Of the 700,000 signed up, half are active users. Brazilian cities with the greatest number of users are São Paulo (28,651), Rio de Janeiro (24,795), Brasília (22,748) and Belo Horizonte (8,589). This distribution on Mudamos for the first three cities almost represents what was counted by the Brazilian Institute of Geography and Statistics on the last census.[21] Mudamos is well represented geographically throughout the country, but the gender distribution is heavily skewed as the vast majority of platform registered users are male (74%).

The platform and volunteers differ greatly in average age. In its volunteer program, Mudamos currently has 26 young lawyers working on draft bills proposal analysis and review. They are spread over different regions as follows: sixteen in the Southeast; two in the South; two in the Midwest; two in the Northeast; one in the North; and two overseas. Mudamos volunteers are coordinated by Mudamos staff at ITS Rio, who are responsible for distributing proposals among volunteers. Seventeen of the volunteers are women and the overall average age is 25 years.

Finally, three editions of the Virada Legislativa have had more than 170 participants. If we add in all the participating experts and stakeholders from different sectors, the number would be over two hundred. The gender distribution among all legislative draft-a-thons participants was balanced between men and women. The average age of all participants across the three editions of Virada Legislative is 35 years- in between the app's users and the volunteers who manage the program.

Institutional and cultural changes

With the massive adoption within a few months after its launch, Mudamos has not only been leading a technological turn in politics, but has also fostering institutional and cultural changes by making the once-theoretical possibility of direct democracy real in practice.

Perhaps the most significant impact of the program is the transformation of political life from a largely closed door to a more participatory process. Before Mudamos, Brazilian citizens were generally not aware they could propose draft bills. After Mudamos was released they have been excited by the "new" institutional mechanism available to them to influence politics. At the same

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[21] See <https://en.wikipedia.org/wiki/Brazilian_Institute_of_Geography_and_Statistics>. (11/26/2018). Original source in Portuguese: <ftp://ftp.ibge.gov.br/Estimativas_de_Populacao/Estimativas_2016/estimativa_dou_2016_20160913.pdf>. (11/26/2018).

> With the massive adoption within a few months after its launch, Mudamos has been leading, not only a technological turn in politics, but has also fostering institutional and cultural changes by making the once-theoretical possibility of direct democracy real in practice.

time, politicians have started to pay attention to Mudamos and its ability to ease the signature gathering for citizens' initiatives draft bills.

At the national level, in late 2016 and throughout 2017, Congress was discussing the issue of political reform. In April 2017, a few days after Mudamos's first release, ITS Rio was invited to discuss and present Mudamos to the congressional Political Reform Committee, led by its speaker Congressmember Vicente Cândido. That hearing led to draft bill 7574 of 2017, which would update the citizens' initiative law to recognize the new electronic mechanism.[22] The bill is still under negotiation in the National Lower House and is ready for a floor vote. In addition to this legislative reform, Mudamos supported the efforts of members of Congress to facilitate the use of electronic signatures for civic participation by addressing congressional internal rules and procedures. In 2017, Congressman Alessandro Molon presented two proposals to make Congress ready to receive electronic signatures for citizens' initiative draft bills.[23]

Taking into account the difficulty in making change at the national level, the Mudamos team also directed efforts on local changes. In João Pessoa, capital of Paraíba state, municipal law 13041 (2015) regulates the use of electronic signatures in petitions.[24] However, since its approval, there have been no adequate technical tools to give effect to this law. Recognizing Mudamos as a cheap and accessible technical option, on May 9, 2017, at a public ceremony held by the city council, Mudamos was designated the official channel to present citizens' initiative draft bills.

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[22] See <http://www2.camara.leg.br/atividade-legislativa/discursos-e-notas-taquigraficas/discursos-em-destaque/reforma-politica-1/relatorio-parcial-1-da-reforma-politica>.

[23] See <http://www.camara.gov.br/proposicoesWeb/prop_mostrarintegra;jsessionid=8BE310908A0DBAC8152C6D999F3CA310.proposicoesWebExterno2?codteor=1540588&filename=INC+3228/2017> and <http://www.camara.gov.br/proposicoesWeb/prop_mostrarintegra?codteor=1542795>.

[24] See <https://leismunicipais.com.br/a/pb/j/joao-pessoa/lei-ordinaria/2015/1305/13041/lei-ordinaria-n-13041-2015-disciplina-a-iniciativa-popular-de-leis-a-que-se-refere-o-art-31-da-lei-organica-do-municipio-de-joao-pessoa?q=13041>.

In addition to Mudamos being widely recognized by the general public, some public servants and representatives have also looked to make it the main channel for proposing draft bills in other states. With their experience in João Pessoa serving as inspiration for institutional change, the Mudamos team created a draft legal framework to support both legislative houses of Congress with updating their procedures. This legal framework is a collection of documents that can be used by representatives and public servants as a template to create new norms to allow electronic signatures to be accepted in their legislative houses. It is equally useful for state and local legislatures as well as the federal level. Following this framework, the City of Divinópolis in Minas Gerais institutionalized Mudamos through a memorandum of understanding where ITS Rio supports the efforts of their legislative houses to update their norms and procedures to be prepared to accept electronic signatures.

In addition to changing norms and practices, Mudamos has also strengthened Brazilian political culture and literacy on collaborative law building. Since the launch of Mudamos, the people have demonstrated they have a strong will to participate and good ideas to propose. Mudamos has received more than 8,000 ideas for possible draft bills, but none of the proposals were, in fact, written as such. Without any experience with political participation, the knowledge of how to participate in political processes is under-developed. The lack of experience combined with the arcane and legalistic nature of the lawmaking process, which is very jargon-filled and detached from citizens' everyday reality, have given rise to anticipated challenges of needing to "translate" between the needs and desires of ordinary citizens and the formalistic demands of the legislative process.

FIGURE 9: FINAL PICTURE OF JOÃO PESSOA'S VIRADA LEGISLATIVA.

ITS Rio addressed this problem by developing the "Virada Legislativa." But the need for new mechanisms to strengthen people's ability to participate in CrowdLaw processes -- and the ability of institutions to make use of their expertise and input -- is a still an ongoing process.

Risks and Challenges

Despite all it has to offer, Mudamos's electronic signature is not a national standard and the major risk to the Mudamos project is the contesting of the validity of its signatures by legislative bodies or in courts. Actually, Mudamos is facing a challenge from the legislative house of the Federal District, where Mudamos signatures were not accepted in support of a citizen's initiative draft bill, which called for reducing the House budget. Since an electronic signature standard is not established by law or even by a House of Representatives rule, the decision whether or not to accept Mudamos signatures is discretionary. To mitigate this scenario, ITS drafted a report about citizen initiatives bills arguing that electronic signatures should be accepted based on the current legislation.[25] In addition, the Mudamos team has been talking to members of Congress and other leaders, pushing for legislation to standardize electronic signatures. The Mudamos legal framework is another approach to build dialogue bridges between technicians, activists, and legislative houses to support local and national legislative change.

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[25] See https://itsrio.org/iniciativapopular. Accessed November 24, 2018.

Another risk faced by Mudamos is the adoption rate of the app (350,000 active users) in relation to the number of signatures required to propose a national level draft bill (1.5 million). Despite the fact that Mudamos had at least four viral waves since its launch, new user registrations are not growing at a substantial rate. Continuous engagement on Mudamos requires fostering internal variables, such as better user experience and strategic communication for action, and external variables, such as the participatory will of the people which leads to more interest in collaboration and representation in the political process. Mudamos launched its second major version (2.0) in January 2019, seeking user experience improvements, especially features to make sharing campaigns easier.

Mudamos started using public Blockchain as part of its technical architecture, aiming to create a completely transparent and accountable system for verifying signatures. However, after almost two years, the Mudamos team realizes that the availability of this secure infrastructure where anyone can "look under the hood" does not de facto mean anyone is actually doing so. As with the volunteer lawyers, there is a need to develop an independent, crowdsourced technical governance mechanism to ensure that the system maintains its legitimacy.

Finally, the populist, right-wing president elected in 2018, Jair Bolsonaro, has reinstated authoritarian tendencies. It is, thus far not known how changes in politics will impact political culture in Brazil in the near and longer-term. One can surmise that the trend in government toward more autocratic behavior could end up depressing political mobilization and participation. Or, to the contrary, Mudamos may become more popular than ever if it escapes legal challenge.

Conclusion

In many respects, Mudamos -- the app, the process, the model legal framework and the Virada Legislativas events -- have been an unqualified success. With 700,000 people signing up, participation across the geographic and age spectrum (albeit much gender imbalance) and 800 new bills drafted, it represents a sea change in democratic participation for Brazil. Importantly, the launch of the app reinforced the lesson that merely putting the process online would not be enough to cultivate long atrophied participation skills. If citizens are not used to doing something based on paper, they will not change their behavior to do it digitally. The addition of the volunteer, crowdsourced legal team and the live events for collaborative bill drafting have been instrumental to upgrading the quality and usefulness of participation. At the same time, after a stratospheric launch in the early months, participation is slowing especially as a result of no legislation drafted by

the public having yet been enacted. However, the steady use of social and mass media channels is necessary to keep people engaged.

Mudamos will need to update its strategy now for the longer-term to turn the idea of "crowd drafting" or direct democratic participation in the drafting of legislation into enacted law. This will require technological improvements, making the app better and introducing better governance mechanisms to enable scrutiny of the program. At the same time, they must invest in participation literacy and continue the work of making people aware of their constitutional right to introduce new legislation as well as educating them about how to do so, especially through grassroots collaboration. Finally, to realize the potential for combining direct with representative democracy, they need to institutionalize these practices by advocating for the recognition of the platform and its practices and the more regularized and systematic monitoring of citizen engagement by Brazil's legislatures. Maybe then they can aspire, as with participatory budgeting, to have Mudamos in use in every parliament, city council and congress around the world.
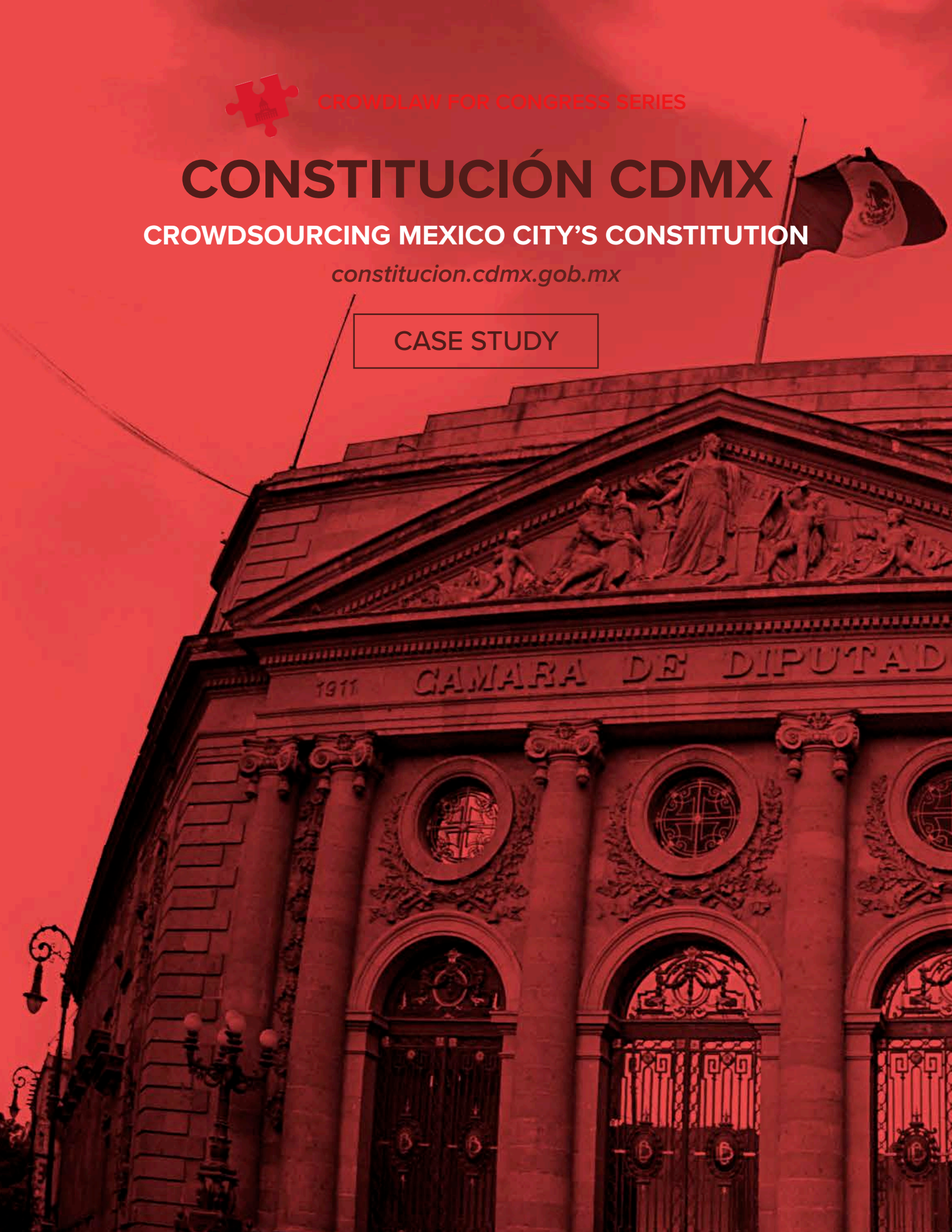
CONSTITUCIÓN CDMX

CROWDSOURCING MEXICO CITY'S CONSTITUTION

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CASE STUDY

CONSTITUCIÓN CDMX | CROWDSOURCING MEXICO CITY'S CONSTITUTION

Background

Earning the same rights and liberties as other states in the Mexican Republic had been a long fought social and political battle of Mexico's capital city. Twenty years after the first mayoral election – the President used to appoint the city's mayor – the creation of the first local constitution was supposed to be another milestone in the city's democratization process. But a complex local political scenario and a nationwide distrust in government raised questions about the real utility of a new constitution for the continent's biggest city.

Mexicans' trust in government and, more troubling, satisfaction with democracy, is at historic lows. According to the Pew Research Center, a mere 2% of the Mexican population trust their government and only 6% of Mexicans are satisfied with the democratic system itself. These levels of dissatisfaction are below any other regional or international comparisons.

Against this backdrop, when the National Congress designed a process for the creation of the city's first constitution which did not contemplate public engagement, it threatened the legitimacy of the occasion. Instead, they granted the Mayor of Mexico City the exclusive authority to create the draft of the constitution, which would then be voted on by members of a Constitutional Assembly (40% appointed by other government branches and 60% democratically elected). But no popular participation was contemplated despite the fact that the new constitution would lay the groundwork for all other legal and institutional reforms to follow.

Historically, Mexico City's laws and institutions, especially regarding public security and budgetary affairs, had to have the Federal authorities' approval. However, its new legal status granted the capital city more autonomy. Thus, following the enactment of a new constitution, a complete overhaul of existing laws would need to follow. Any lack of legitimacy of the original process could have called into question the legitimacy of these subsequent enactments and negatively impacted people's hopes and expectations for the city's future.

Given this starting point, Mexico City had to come up with creative ways to innovate and recover the population's trust in the constitutional process, while imagining new ways of communicating the importance of the new constitution in daily life. By using accessible yet substantive mechanisms,

the city's adoption of CrowdLaw practices -- enabling ordinary citizens to participate -- would transform this fraught process into a more legitimate and effective one.

Mechanics of Constitución CDMX

In order to open up the constitutive process, the Mayor established a Working Group (WG), comprised of 30 leading citizens from different spheres of city life. Among the members of this group were activists, poets, artists, Olympians, constitutional experts, and deans and academic authorities of national universities. Parallel to this, the Mayor instructed Laboratorio para la Ciudad – Mexico City's creativity and experimentation office– to develop a methodology and platform to channel popular opinions and proposals made for the Constitution to this working group.

The Mayor committed not to veto or modify any draft made by the Working Group without the platform's input.

The Lab for Mexico City hired a small civic tech startup, at the cost of $15,000, to build a digital platform to facilitate public input. Staff at Laboratorio para la Ciudad and Mexico City's General Counsel Office, who collaborated during the six-month period the platform remained active, jointly managed the process.

The challenge was to design a platform versatile enough to fully comply with the Mayor's commitment to integrate into the constitution all opinions and proposals generated by the people, regardless of the user's knowledge of constitutional affairs, their academic background, or level of interest in public affairs.

FIGURE 1: CONSTITUCIÓN CDMX DIGITAL PLATFORM

The platform offered four different options for the user to participate, depending on their interest in the matter, time availability, and level of knowledge about specific affairs, and used Change.org and volunteers from Mexico City's public high schools, who promoted offline participation in public spaces, as two mechanisms for spreading the word about the opportunity to participate.

One participatory mechanism was the survey Imagina tu Ciudad, designed to elicit the citizen's hopes and fears, expectations, challenges, and ideas for the future of the city. Through a seven-question survey, the government aimed to obtain information on a general level about the people's hopes and expectations for the future of the city, the main challenges they identified, as well as its most valuable assets. This mechanism led to 31,000 geo-tagged submissions. This survey allowed the user and the government to navigate – by neighborhood, age, and gender – citizens' gravest concerns and their visions for the future.

Another way to interact with the platform was to draft an online petition via Change.org. Mexico City's government became the first Mexican authority to commit to specific actions depending on the number of signatures the petition would gather. Any petition that obtain 5,000 signatures received a formal legal analysis by the city with that legal opinion sent to the petition-maker and signees. With 10,000 signatures, the citizen got to present their proposal to three representatives of the Working Group. Those whose petitions surpassed a 50,000 signature threshold presented their

petitions in a working session with the Mayor, who committed to explicitly include them in the constitutional draft to be debated and discussed.

Within six months, 341 proposals were submitted as online petitions, and signed by more than 400,000 unique users.[1] Four petitions surpassed the 50,000 signatures threshold, while another 11 got more than 10,000 signatures. In total, 14 petitions were successfully included in the Constitutional draft.

The third mechanism was another collaborative drafting platform but this one gave people the chance to annotate and comment on essays written by the members of the Working Group dealing with constitutional theory, technical proposals, and academic papers. This platform was based on MIT Media Lab's PubPub, which was used for policy-making and public affairs by Mexico City in previous exercises. This mechanism allowed citizens to enrich published essays with commentaries and suggestions and open up discussions over specific contents of the text they deemed relevant.

Annotation platforms might present themselves as the most obvious mechanism to engage in a CrowdLaw initiative. However, the team that implemented Constitución CDMX faced many challenges when trying to get people to engage in the discussion through it. It was the least popular participatory mechanism for the Mexico City exercise, due to the complexity of the texts it contained and its unapproachability by a general audience.

The fourth mechanism of Constitución CDMX allowed citizens to register any event they organized related to the Constitution. Additionally, organizers could upload their event's ideas and recommendations to the collaborative drafting platform and receive feedback from other users.
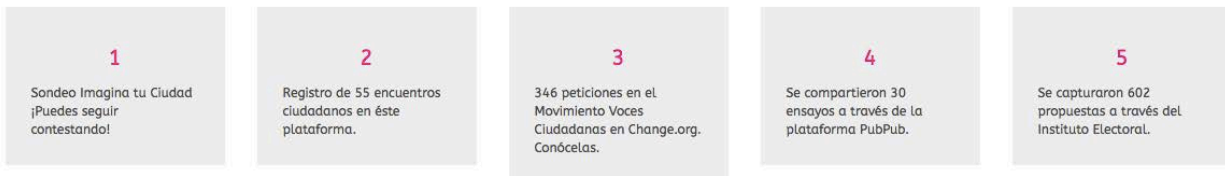
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[1] Due to inactivity, some petitions have been disabled by Change.org. Thus, the Movement's mini-site might not currently display peak numbers.

Each week, the managing team would present to the working group a summary of the platform's activity, including petitions' growth and new answers to the survey, as well as a summary of the registered events and collaborative essays. These inputs were discussed by the Group in its weekly meetings and integrated into the texts that would eventually become the city's first constitution.

Crowd Constitutionmaking in Action

Patricio, a 16-year old high school student, lives in Magdalena Contreras, a borough in the southwestern outskirts of Mexico City proper. Waters from the surrounding mountains descend to the Valley of Mexico through this borough. Being a daily witness to the deteriorating state of the rivers in his neighborhood, Patricio started an online petition asking the City to include in the constitution the cleansing and rescue of Mexico City's rivers.

Patricio's petition in Change.org gathered more than 17,000 signatures. Even though he was not old enough to cast a vote for the Constitutional Assembly that approved the constitution, his voice was part of the group of citizens whose proposals were included in the Constitutional draft. Now,

Mexico City has to set forward a 20-year programmatic strategy towards the recovery of its rivers, water bodies and resources (article 16, Section B of Mexico City's Constitution).

Patricio's story is an example of how the Constitución CDMX platform achieved its objective of including the voices of all those who wanted to participate in the drafting process of the constitution, regardless of their citizenship status, background, age or educational level. Moreover, his involvement and engagement in the process went beyond the traditional conception and mechanisms of electoral democracy, and even participatory democracy, that demand a minimum age to take into consideration the opinions and needs of many members of the community.

Institutional Impacts

Mexico City now has a constitution created through a popular co-creation process that managed to channel hundreds of thousands of citizen inputs and efficiently process them into useful insights. Besides the benefits this open process represents, it is important to note that the most progressive aspects in the constitution have their origin in the civic engagement process: Marriage equality, the explicit recognition of the Right to the City, rights of indigenous and aboriginal peoples, cultural rights, pro-choice policies, marijuana consumption, and other aspects of the constitution were supported by citizens' petitions and proposals delivered through Constitución CDMX.

By combining a process of self-selected public engagement with a selection process where members of the constitutional assembly were at least in part elected, the City was able to enhance the legitimacy of the process.

Being a progressive hub in the middle of a highly conservative country, Mexico City managed to imprint in its new constitution the will of its people to continue to lead the Human Rights agenda, the recognition of liberties, and the protection of diversity, despite Federal opposition to these subjects. On an international scale, this document set a high bar for cities worldwide in the acknowledgement and recognition of new approaches to urban challenges for the 21st century.

Approximately 84% of the content produced by this co-creation scheme was approved by a qualified majority in the Constitutional Assembly and entered into force as Mexico City's first constitution on September 17, 2018. The required majority couldn't have been reached by the Mayor's political allies on their own, but was made possible by a citizen-led process for developing the new constitution.

The depth of public engagement in the process can be demonstrated in the explicit recognition of it made by the Mexican Supreme Court in its decision regarding the constitutionality of the whole process, which was challenged by the Federal Government once the constitution was approved. The Justices argued that by having representatives of both persons with disabilities and indigenous peoples participating through the online petitions facilitated by the platform, Mexico City complied with the international consultation requirements that protect these vulnerable groups from any normative modification that could potentially affect them.

Risks and Challenges

Governments around the world are facing the challenge of rebuilding trust with citizens. The strategy implemented by Mexico City demonstrates that while opening up decision-making processes will usually cost additional time and resources, investing in openness and co-creation will ultimately lead to more reliable results.

Mexico City's constitutional process took place within a complex political and social context. The main challenge the team initially encountered when asking the citizens to participate through the platform was the lack of trust in the process. The partnership established with Change.org was a key element to regaining citizen trust. Even though the survey Imagina tu Ciudad was originally expected to be the participatory mechanism with a critical mass of users, the petition-making scheme turned out to be the most popular among users. The team behind the strategy attributes this to the fact that the mechanism was branded with the Change.org name and the platform already had a well-known reputation.

Another challenge for the implementation of Constitución CDMX was the digital divide that is still present in Mexico City. Even though the capital city ranks highest in the national measurements of households with internet access, this citywide initiative required the government to offer the opportunity to participate regardless of the people's ability to access the digital platform. To address this challenge, the city deployed digital kiosks to reach citizens on the streets and public spaces.

**FIGURE 3: HIGH SCHOOL VOLUNTEERS AND DIGITAL KIOSKS IN MEXICO CITY'S PLAZA DE LA REPÚBLICA
PHOTO CREDITS: LABORATORIO PARA LA CIUDAD.**

This outreach strategy was implemented in collaboration with the National Polytechnic Institute's High School students. A gamification strategy was designed to encourage them to recruit people to take part with awards for those who attracted the most participants. The teams used social media as well as photos and videos to certify the participation of citizens in different public spaces and public transport stations. When technology failed and the digital kiosks were not able to access the platform, the students designed an analog version of the surveys and carried on with the civic engagement in flea markets, subway stations, and other places that did not have internet coverage.

FIGURE 4: HIGH SCHOOL VOLUNTEERS SURVEYING PEOPLE IN THE STREETS. PHOTO CREDITS: LABORATORIO PARA LA CIUDAD

FIGURE 5: HIGH SCHOOL VOLUNTEERS SURVEYING IN MEXICO CITY'S FLEA MARKETS. PHOTO CREDITS: LABORATORIO PARA LA CIUDAD

Outcomes

Constitución CDMX was able to garner international media's attention, mainly due to the unprecedented collaboration with Change.org and the fact that the strategy was aiming to amass inputs from a diverse 20 million inhabitant metropolitan area. Specialized media outlets also highlighted how this CrowdLaw project was able to integrate opinions, ideas and proposals of the people that the constitution would eventually serve, going beyond the traditional conception of constitutional affairs being dealt with by a small elite, well-versed in constitutional law.

Moreover, the final document is considered to be the most progressive constitution in Latin America, and it has been recognized by the United Nations as a "historical document that addresses the central challenges of development and peace" and as "a guide to fulfill the universal, indivisible and progressive nature of human rights, the Sustainable Development Goals, and the 2030 Agenda."

Numbers and Results

- 64.41% of participants were between 18 and 34 years old.
- 69.9% of visits to the platform were made from a mobile device, 25.31% from a desktop, and 4.7% from tablets.
- 15% of all visitors returned to the platform a second time.
- The Metropolitan Area of the Valley of Mexico concentrated 63% of all visits.
- The State of Jalisco 4.75%, Nuevo León 3.5% and Baja California 3.01%.

Petition-Making Mechanism

- 341 proposals, more than 400,000 unique followers
- Reception of proposals went on from March 30 to July 15, 2016
- Petitions that exceeded 10,000 signatures but fell short of 50,000: 9
- Petitions that exceeded 50,000 signatures: 4
- Petitions between 1,000 and 5,000 signatures: 7
- Petitions between 100 and 900 signatures: 44
- Petitions with less than 100 signatures: 282
- Number of unique supporters: 274,644
- Total number of supporters: 427,815
- 35.8% of the supporters signed more than one petition
- Number of Change.org users following Constitución CDMX updates: 479,212

Imagina tu Ciudad Survey

The influence area of this component of the strategy was all of Mexico City's 16 boroughs. The 30,000 georeferrentiated answers had representation of 1,474 neighborhoods, accounting for 90% of all the neighborhoods in the city. Also, the Imagina tu Ciudad survey database is available as open data, providing Mexico City's inhabitants with a raw resource for prospective analysis of their communities, and citizens from all over the world with input to further explore conversations around urban futures. This database has been used by Laboratorio para la Ciudad during the fifth edition of its Open Government Encounter, where it was the main input for a data visualization workshop, and it served as well for the definition of the challenges for the second edition of the Code for the City experiment.

- Number of effective surveys in the Metropolitan Area: 30,143
- In Mexico City: 26,040
- In the conurbated municipalities: 4,094
- Number of surveys conducted by high school volunteers: 14,934
- Number of volunteers: 183
- Total amount of hours of volunteering: 1,494 hours

Citizen-Led Events Registration Mechanism.

- Registered citizen events: 55
- Essays with conclusions uploaded to the collaborative editing platform: 26
- Number of comments in all essays: 17
- Events with most visits on the platform:
    - Forum of Proposals for the Constitution of the CDMX, organized by the National Bar of Lawyers, on April 5, 2016. *509 visits.*
    - The Constituent Marathon, organized by private and public universities present in Mexico City on April 15, 2016. *496 visits.*
    - Forum on the Right to the City in the Constitution, on May 30, 2016. *323 visits.*
- PubPub: Collaborative Editing Platform
- 100 essays uploaded on the platform.
- 1000 comments received in the published documents.

Users' Experience and Perceptions After Engaging With Constitución CDMX

Thanks to the interaction between the group of petition-makers and the city officials, perceptions of, and confidence in, one another changed. Francisco Fontano, the first petition-maker to reach the benchmark of 10,000 signatures, is a sports journalist that advocated for the constitution to include a minimum requirement of green areas per capita. Manuel Granados served as Mexico City's General Counsel, in charge of coordinating the works of the Drafting Group as well as the interactions with citizens derived from the platform. Before Francisco got to present his proposal to the General Counsel and 3 representatives of the WG, he told the Lab's team about how nervous he was meeting firsthand a senior government official. What Francisco didn't know is that Granados was even more nervous to hold a working session with an unknown citizen representing more than 10,000 other people. Before this collaboration scheme took place, Change.org was regarded by public officials as a tool for opposition members, activists or pressure groups to generate bad press for Government, and thus its real usefulness was regarded with skepticism.

As these meetings continued, trust between both parties evolved. This renewed relationship based on trust can be perceived in the series of interviews Laboratorio para la Ciudad conducted with the petition-makers, as well as in the messages they sent to their thousands of supporters in their petitions.

Mexico City's approach of offering a series of diverse approaches and mechanisms, each of which was accompanied by a firm commitment from the City to act on the engagement, offered a more democratic, citizen-friendly and replicable method that can be replicated for any legislative crowdsourcing strategy.
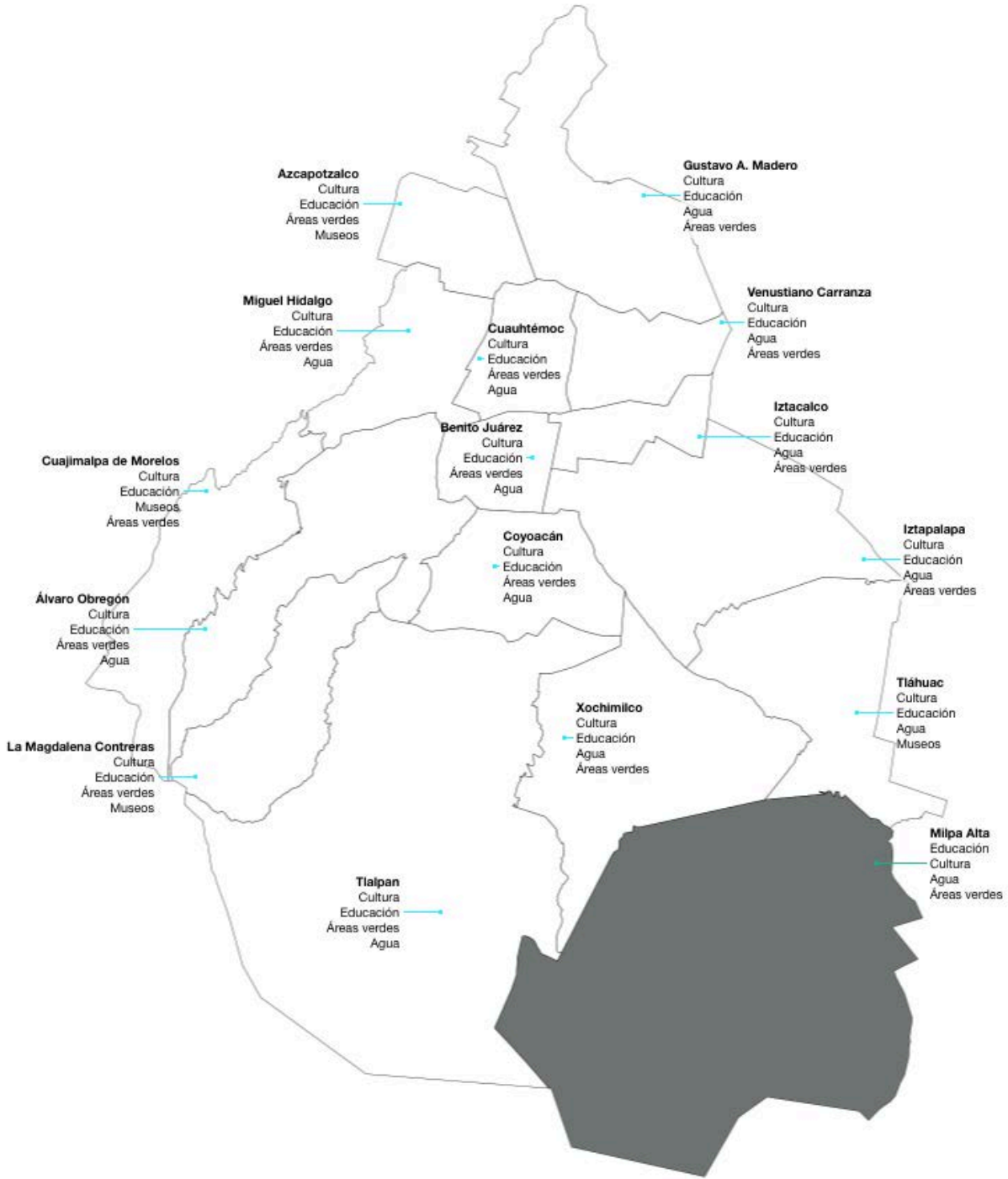
MAP 1: IMAGINA TU CIUDAD BY BOROUGH. "WHAT IS MEXICO CITY'S MOST VALUABLE ASSET?"
CREDITS: URBAN GEOGRAPHY DEPARTMENT, LABORATORIO PARA LA CIUDAD.

NÚMERO DE PARTICIPANTES

0 ••••● 462

MAP 2: IMAGINA TU CIUDAD SURVEY PARTICIPATION BY NEIGHBORHOOD.
CREDITS: URBAN GEOGRAPHY DEPARTMENT, LABORATORIO PARA LA CIUDAD.

Retos CDMX según Cuauhtémoc y sus colonias

NUMERO DE PARTICIPANTES

13 ○ ○ ○ ○ ○ 374

RETOS
- AGUA
- CORRUPCIÓN
- EMPLEO
- EQUIDAD DE GÉNERO
- POBREZA Y DESIGUALDAD ECONÓMICA
- TRANSPORTE Y MOVILIDAD
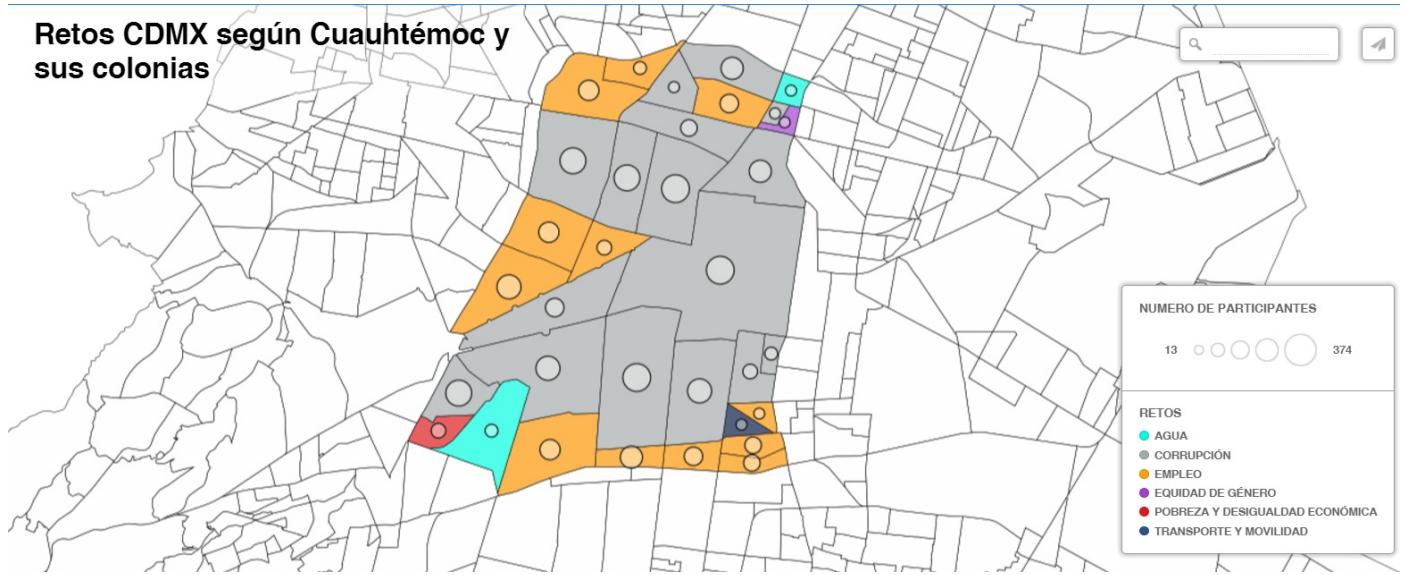
MAP. 3: CUAUHTÉMOC BOROUGH AND ITS NEIGHBORHOODS.
"WHAT ARE MEXICO CITY'S THREE MAIN CHALLENGES FOR THE NEXT 20 YEARS?"
CREDITS: URBAN GEOGRAPHY DEPARTMENT, LABORATORIO PARA LA CIUDAD.

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Online Petition	Petition-maker	# of signatures	Constitutional Draft	Final text of the Constitution
Publicity of tax records, declarations of interest and properties owned by public servants.	Alejandro Ortega Salinas	63,508	Art. 70, 2	Art. 64, 2.
Right to a good Public Administration (anti-corruption)	Alejandra Núñez	50,386	Art. 12, A	Art. 2, 3. Art. 7, A; Título Sexto
I want Mexico City to be a Smart City – #SmartCDMX	Nicolás Ávila Pineda	50,664	Art. 21, F, b Transversal	Artículo 7, 8-C Art. 24
Guardianship and protection for animals in the Constitution CDMX	Nydia Cervera	54,157	Art. 14, I	Art. 13, B
Guaranteeing minimum areas of green spaces per inhabitant	Francisco Fontano Patán	39,182	Art. 17, A	Art. 16, 3.
Sustainable mobility for Mexico City	Alejandro Posadas Zumaya	29,382	Art. 17, E	Art. 12, E. Art. 16, H.
Digital Rights and free and universal internet access in Mexico City.	José Alberto Escorcia Giordano	21,270	Art. 13, B, 1	Art. 8, C.
An inclusive Constitution for Mexico City (Measures for people with disabilities)	Juventino Jiménez Martínez	16,803	Art. 16, F Transversal	Art. 11, G.
¡Rescue Mexico City's rivers! We need a comprehensive hydric policy in Mexico City	Carlo Patricio Pérez Castillo	17,306	Art. 14, H	Art. 16, A, 3, 4, B.
Mexico City's Constitution with all the rights for all the women	María Fátima Moneta Arce	14,889	Art. 4 Transversal	Art. 4, B, 4. Art. 6, E. Art. 11, C.
CDMX: maternity and paternity leave for all	Sonia Lopezcastro	15,010	Art. 15, E, e	X
LGBTI rights in our new Constitution	Alianza Ciudadana LGBTI Roberto Pérez Baeza	11,322	Art. 16, G Transversal	Art. 11, H.

TABLE 1: ONLINE PETITIONS THAT SURPASSED THE ESTABLISHED THRESHOLDS OF DIGITAL SIGNATURES IN THE CONSTITUCIÓN CDMX STRATEGY.

OVERSIGHT AND EVALUATION

Evaluation examines how a law is working. With new technology, a watchful community can collectively monitor legislative impact. In the UK, the public is helping to evaluate evidence submitted to certain parliamentary committees, enhancing accountability.

EVIDENCE CHECKS UK

EVIDENCE-BASED POLICYMAKING

https://parliament.uk/

BRIEFING NOTE

Owner: UK Parliament
Location: United Kingdom
Years in Operation: 2014-present
Implementation Level: National
Platforms: Web, Offline
Method: Online Brainstorming
Participatory Task: Ideas, Evidence

EVIDENCE CHECKS UK | EVIDENCE-BASED POLICYMAKING

How Does it Work?

"Evidence Checks" are one-month exercises in which members of the public are invited to provide comments online on the rigor of evidence on which policy is based. This process allows a large and diverse group of people with relevant experience and expertise to identify gaps in research that require further review. In the UK House of Commons, there is a Select Committee conducting oversight for each government department, examining spending, policies and administration. In an Evidence Check, government departments supply information to the Committee about an issue. Committee staff publishes the information on a new page within their own parliament.uk page that is dedicated to the evidence check, and shares the task of scrutinizing that evidence with a wider pool of experts, stakeholders and members of the general public for comment. Typically, the Committee uploads the government statement as a publicly-viewable PDF and frames the request with specific questions and problems which they would like participants to address. The process comprises three steps:

1. The Committee requests a submission from the government department responsible for a policy. The Department is asked to supply information about the policy in question and the evidence upon which the policy is based.
2. The Committee publishes the departmental submission and adds a page to their website to collect comments over a period of 3-4 weeks, inviting academics, stakeholders, practitioners and members of the public affected by the policy, to comment on the departmental advice. This can include comments on the strength of the evidence provided by the department, highlighting contrasting evidence, selection biases, and gaps in the evidence. The web forum is public but committee staff may choose to review comments before and after users post them to check they are not defamatory, abusive, or otherwise inappropriate.
3. The Committee assesses comments and uses them to guide further investigation of the policy and/or integrates the commentary into its final report which is supplied to the relevant government Minister for response.

Within this broad approach, Commons Select Committees have implemented evidence checks in varying ways.

In 2014/15 the Education Select Committee used the process to help it develop its work program. Initially, the Committee requested a 2-page statement on 9 topics from the Department of Education, inviting public comment via web forums on each, as well as comment on the Department's approach to the use of evidence generally. Comments in the web forums then informed Committee decisions regarding what areas to focus on and hold oral evidence sessions for.

In 2016, the Science and Technology Select Committee published 7 government statements on policy areas including driverless cars, smart cities, digital government, smart meters and flexible working arrangements. It sought comments that aligned with a framework that the Institute for Government developed in partnership with the Alliance for Useful Evidence and Sense About Science, which covered diagnosis of the issue, evidence-based action by government, implementation method, value for money, and testing and evaluation.

Targeted outreach, including social media, guest blogs on civil society organization websites, and leveraging the networks of organizations with expertise in the related policy topic, is crucial for obtaining high quality participation on an array of policy topics.

What Are The Outcomes?

Evidence Checks help committees more efficiently and effectively hold government to account by leveraging the collective intelligence of a broader expert audience. In 2016, the evidence check conducted by the Women and Equalities Committee into sexual harassment in schools (dubbed a 'Fact Check) generated contributions from knowledgeable stakeholders, students with lived experience of harassment, and led to a revised (upwards) estimate of the incidence of harassment and information from contributions was incorporated into the subsequent Ministerial Briefing on the issue.

What Does It Cost?

There are no documented costs with what is essentially expanding the hearing process to the Web, enabling a broader audience to scrutinize what has been presented to the Committee. Because the process runs via the Committee's own webpage, the overhead is low.

What Are The Benefits?

- The online collection of comments reduces temporal and geographic barriers to accessing relevant experts, increasing the level of expertise and experience to which the Committee has access.
- Web forums where members of the public can submit their comments, to be reviewed by Parliament can encourage more members of the public with compelling lived experiences to contribute through less formal (but still transparent) processes.
- Does not require sophisticated technology and is a low cost option compared to other methods of collecting large-scale public opinion.
- Solicits specific responses to clearly identified and granular problems posed by the Committees, rather than vague responses to broad problems.

What Are The Risks?

- Without the right level of outreach to interested individuals and groups, participation will be low to non-existent.
- Questions have to be clearly framed lest participation fail to address the relevant questions of the reliability of evidence.

For more information, please contact: ***crowdlaw@thegovlab.org***

The GovLab acknowledges the support of NESTA, the Institute for Government, Sense About Science, and the Alliance for Useful Evidence in creating this document.

EVALUACIÓN DE LA LEY

EVALUATING LAWS IN CHILE

https://evaluaciondelaley.cl

BRIEFING NOTE

Owner: Chamber of Deputies of Chile

Location: Chile

Years in Operation: 2011-present

Implementation Level: National

Platforms: Web, Offline

Method: Social Auditing

Participatory Task: Ideas, Opinions

EVALUACIÓN DE LA LEY | EVALUATING LAWS IN CHILE

What is it?

Evaluación de la Ley is an ex-post evaluation methodology for assessing the effectiveness of active laws, led by the Law Evaluation Department in the Chilean Chamber of Deputies using offline and online focus groups.

Background

The bicameral Congress of Chile is the first national parliament in Latin America to implement a system for evaluating current laws and one of the first in the world to institutionalize an ex-post evaluation mechanism of the effects of legislation.

The Law Evaluation Department is a professional support unit within the administration of the Chamber of Deputies (lower house). It develops and publishes reports that analyze the impact that important laws have had after being in effect over a period of years. Their aim is to assess fulfillment of the objectives that the legislators sought when introducing a law, to detect unintended consequences, to have a record of the citizen's perception of the impact of the law on their lives, and to serve as useful input for updating and revising the evaluated laws.

Created in 2010 by officials from the Chamber of Deputies, the initiative received technical support from the OECD through a program of cooperation and exchange in matters of legal evaluation. In 2011, the new department developed a plan for how it would work and carried out a pilot to validate the proposed methodology and assess the relevance of having an ex-post evaluation mechanism.

Project Description

Although the Law Evaluation Department is part of the administrative structure of the Chamber of Deputies, the decision as to which laws to evaluate is made by the Law Evaluation Committee, a group comprising elected members of Congress from multiple parties that functions similarly to a standing committee and meets every two months.

The Committee prepares the list of potential laws to be evaluated based on the requests they receive from Deputies or other political bodies (standing committees, the Speaker Of The House, etc.). To select the laws chosen for evaluation, the Law Evaluation Department assesses the laws according to selection criteria such as technical feasibility, general applicability of the law, political

neutrality, among others, and then presents the filtered list to the Committee for them to agree which law to evaluate next. Due to human resources constraints, the Committee selects no more than one or two laws each year.

Today the Evaluation Department employs a multidisciplinary team of four full-time professionals. These are trained researchers and facilitators with expertise in both quantitative and qualitative research methods and the moderation of group discussions.

They perform the evaluation of the laws by using a four-month process that unfolds in three stages:

1. Technical study of the law
2. Citizen perception study
3. Final report

1) Technical Study (6 weeks) - The technical study includes a thorough investigation of the legislative history and parliamentary debate to identify the objectives of the law, the tools chosen by legislators to achieve its goals, the institutions involved in its implementation, and the interest groups and areas of society affected. In this stage, interviews are carried out with specialists and those responsible for the implementation of the law, and indicators for the quantitative measurement of the impact of the law are drawn up.

2) Citizen Perception Study (3 weeks) - To measure the citizen perception of the law, the technical study helps identify the groups of people who will be invited to participate and identifies the most appropriate methodologies according to the type of law: interviews, surveys, focus groups, workshops, citizen meetings, face-to-face forums, debates with experts and/or seminars. The convened participants can come from one or more of the following groups: frontline public officials from the public agencies responsible for the implementation of the law; groups of citizens affected by the law; intermediate organizations that bring together natural or legal persons affected by the law; civil society organizations whose beneficiaries are persons reached by the law; specialist practitioners or academics.

3) Final Report (11 weeks)- Finally, the technical report and citizen perception report are both compiled, and conclusions are drawn about the effects of the application of the regulation. Based on the conclusions, recommendations are made to improve the quality or effectiveness of the regulation, correct unexpected effects, cover legal gaps or expand its scope, among others. The report is delivered to the Law Evaluation Committee for review and the committee president reports

on it in a plenary session. Then, it is distributed to the relevant standing committees and to the public and private entities that participated in the evaluation process.

The stages are subject to modification. Given the heterogeneity of the country's laws, a flexible methodology was designed in which, for each stage, the team can select the activities that it considers most appropriate, according to the characteristics of each law to be evaluated. For example, for some laws it may be necessary to conduct an international law analysis; in cases where it is known in advance that the law is failing to meet its objectives, it is necessary to deepen the study into the possible causes.

When conducting its first pilot evaluation in 2011, the Law Evaluation Department implemented an online forum to collect opinions from self-selected citizens interested in volunteering to participate. However, with insufficient resources and technical support to keep it running and analyze the comments received, the online forum was disabled at the time.

Now, in 2019, the National Congress of Chile is promoting a bidding process to build an online platform called "Virtual Congress" that aims to facilitate interaction between members of the congress and their staff and citizens. One of the features of this future platform will allow the Law Evaluation Department to collect opinions, evidence and expertise from the public in response to targeted questions. The Evaluation Department's main motivation for incorporating an online, CrowdLaw component of this social auditing process is to be able to increase both, the territorial scope and the quantity of citizens consulted.

Impact

Between 2011 and 2018, 12 laws have been evaluated collaboratively, for which a total of 305 people were interviewed, 36 focus groups held (11 in the capital city of Santiago and 6 in Valparaíso, headquarters of the parliament and 19 in other cities) in which 391 citizens participated and 55 other citizens participated in workshops and panels with experts. In short, somewhere on the order of 800 people have participated in these activities.

There is no detailed demographic information, however, about who took part in those focus groups but anecdotal reporting by the Evaluation Department staff suggests that mainly white-collar professionals and administrative agency officials participated in interviews. No attempt was made to select representative samples of the population, but rather to gauge the opinion of well-informed

people on the subject including experts in the area, members of the teams that implemented the law from the administrative agencies and citizens with knowledge based on lived experience related to the law being evaluated.

The qualitative inputs provided by the citizen, experts and implementers of the law during these focus groups provide an on-the-ground perspective of the real world impact of legislation that would be missing based only on other instruments, such as opinion surveys and quantitative data analysis.

By contacting both the public agencies responsible for implementing the law and citizens and representatives of civil society affected by it, the Law Evaluation Department team has the opportunity to identify the points of the process in which the implementation of the law is inadequate. In addition, contact is made with a wider and more diverse array of people who may not have been consulted when the the law was enacted.

All the reports presented contain recommendations for both the executive and legislative branches to improve and update the laws, some of which have been used as input for legal modifications. Eighteen bills have been introduced, amending existing law and citing the work of the Law Evaluation Department. For example, the report on organ donation was used to prepare amendments to current law. The report on the Private Data Protection Law was cited by the executive branch when it sought to introduce a bill updating the legislation.

What Are The Benefits?

- The multi-partisan political committee that selects the law to be evaluated from a list prepared by professionals according to technical criteria reduces bias in the selection and gives political support both to the evaluation process and to the reports produced.
- Giving the multi-partisan committee the power to select which law to evaluate and to oversee the Law Evaluation Department work, helped to overcome the initial resistance of some congress members who were afraid that this evaluation process could be aimed to audit or scrutinize their work.
- Interviewing frontline public workers and citizens affected by the the law allows for an understanding of the "situation on the ground."
- The technical and financial capacity required to operate the process are both relatively low.

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What Are The Risks?

The process does not yet take much advantage of the role that technology could play. Using technology could enable the team to gauge public opinion at a much larger scale and engage people who cannot currently participate.

For more information, please contact: *crowdlaw@thegovlab.org*

SOCIAL AUDITS

COMMUNITY-LED EVIDENCE GATHERING

BRIEFING NOTE

Owner: Brazil's Comptroller General
TransGov Ghana
Connecticut Policyand Economic Council (CPEC)
Location: Brazil, Ghana, USA
Years in Operation: 2000-present
Implementation Level: National, Local
Platforms: Web, Offline
Method: Social Auditing
Participatory Task: Ideas, Opinions
Platforms: The Promise Tracker Tool - *https://monitor.promisetracker.org/*
TransGov - *https://www.transgovgh.org/*
Casio Pocket PCs, Digital Cameras

SOCIAL AUDITS | COMMUNITY-LED EVIDENCE GATHERING

How Does it Work?

The Internet creates the opportunity for asking the public how to measure impact of laws and policies, what data to use for that purpose and enlisting people in the process of evidence gathering to support better evaluation and oversight. Such participation has the potential to enhance accountability and improve results. Although only one of these social auditing projects involves the legislative branch of government, the success of these initiatives, coupled with the absence of many legislative examples (UK Evidence Checks and Chile's Evaluación de Leyes are two notable exceptions), leads us to include them as worthy exemplars for legislatures looking to engage the public in oversight and evaluation.

1. **Projeto Controladoria na Escola -** this project involved asking students to collect data about their local school environments, report the major issues they faced, identify the root causes of those issues and propose ideas to fix them, initially by hand, and then using the Promise Tracker tool. In the pilot phase students from 10 schools identified over 600 issues such as burnt out light bulbs, missing fire extinguishers and broken chairs. The Comptroller General visited each school later that year to monitor the results of the project and to oversee the resolution of the issues.

2. **TransGov -** Created in 2014, TransGov is a platform to help Ghanaian citizens monitor the progress of local development projects. The creators of TransGov (Jerry Akanyi-King, Kennedy Anyinatoe, Kwame Yeboah and Prince Anim) found that citizens were unaware of whom to hold accountable for faulty or incomplete infrastructure projects (such as the construction of public schools and flyovers) and service delivery in their localities. The solution they developed was "to curate a list of development projects in local communities and give people the ability to comment, give feedback and let their voices be heard." The platform also allows people to report issues such as burst pipelines or potholes and track the status of their complaints.

3. **CPEC -** In 2000, the Connecticut Policy and Economic Council (CPEC) conducted a pilot project to engage local residents in collecting data to evaluate public projects in order to hold the local government accountable for its commitments to clean up derelict land use sites and advocate for change. The project, called CityScan, began in Hartford, Connecticut, and was later extended to half a dozen other cities in the state. It provided ordinary citizens with what was, at

the time, state-of-the-art technology, including handheld computers, wireless modems and first generation digital cameras. Citizens were also trained in how to collect data to assess the performance of government agencies and hold them accountable. This "social auditing" effort was part of a broader initiative by the Council to introduce citizen-based performance assessment (CBPA) in local neighborhoods and eventually statewide, making CityScan one of the earliest examples of technology-enabled social auditing anywhere in the world.

What Are The Outcomes?

Projeto Controladoria na Escola - In one school alone, the students identified 115 issues and within just 3 months, 45% of the issues were fixed either by the department of education or, where possible, by the students and school management themselves. More recently, 4,000 students from 104 public schools participated in the campaign and helped evaluate the state of classrooms, availability of Wi-Fi and computer labs, toilet paper in bathrooms and other issues by collecting evidence in response to a questionnaire administered through Promise Tracker. Now the project is expanding to 200 schools.

TransGov - Today, TransGov has 600,000 registered users who provide feedback through the TransGov website, mobile app, by SMS or by phone. By posting complaints received on TransGov to social media sites, the time taken to resolve complaints reduced by nearly 60% a public officials were subjected to the heightened scrutiny. On average it takes 3 days to fix a pothole and 48 hours to fix a burst pipe reported via TransGov compared with nearly a week to fix a pothole and more than 3 days to fix a pipe before TransGov's social auditing process.

CPEC - In Hartford, CityScan played an important role in enabling other organizations to improve their own work. The most prominent example of such an organization was "Hartford Proud & Beautiful," a private-public partnership which worked towards clearing graffiti from public sites. They used data about graffiti in public spaces in 90 sites in Hartford collected by CityScan volunteers to clean the graffiti. Following the success of the two pilots in Parkville, CityScan expanded to eighteen more neighborhoods in Hartford and eventually, to seven more cities in Connecticut.

What Are The Benefits?

- Whether in the US, Ghana or Brazil, using a distributed community network made it possible for government and civil society to get a clearer picture of on-the-ground conditions.

- Using digital cameras, smartphones and other tools, they often created an actual picture or even video of conditions that could be used to hold institutions to account.
- Cooperation between the network of volunteers and government institutions is crucial for impact. CPEC got local governments to commit to the clean-up of derelict land-use sites and volunteers, using hand-held devices, were able to take the pictures needed to hold them to account.

What Are The Risks?

- Social auditing needs to be tied to measurable outcomes, such as increasing the number of problems fixed in schools or derelict land use sites to be cleaned up. Without clear outcomes, the project will fail.
- The "crowd" volunteering to participate in social auditing needs to understand clearly what is being asked of it.
- Without an institutional actor ready to respond, the efforts of the social auditing community will not lead to outcomes.
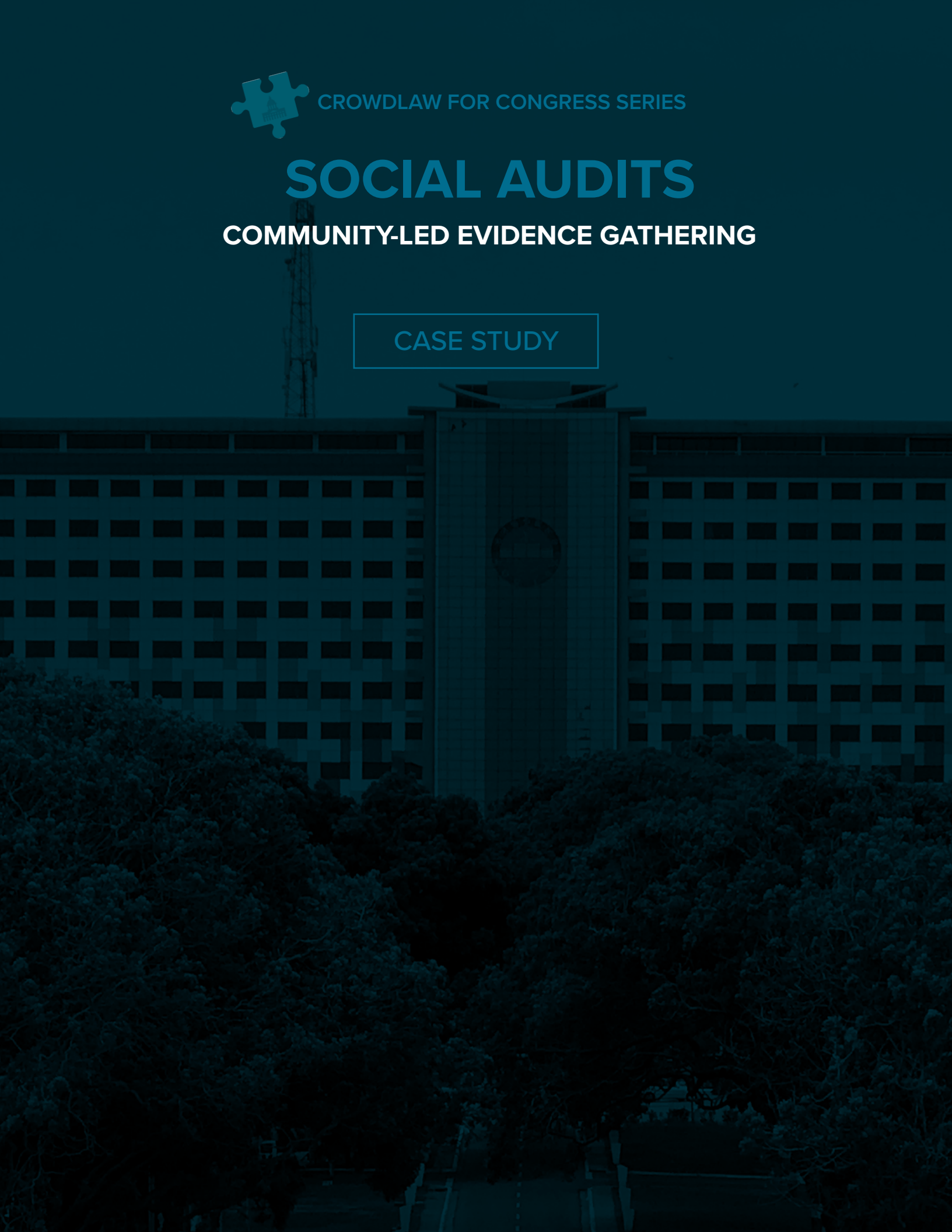
For more information, please contact: ***crowdlaw@thegovlab.org***

SOCIAL AUDITS

COMMUNITY-LED EVIDENCE GATHERING

CASE STUDY

SOCIAL AUDITS I COMMUNITY-LED EVIDENCE GATHERING

Policy evaluation is the process of "understanding how a policy or other intervention was implemented, what effects it had, for whom, how and why."[1] It serves as an important piece in the feedback loop to improve existing service delivery and inform future policy formulation. However, some of the oft-cited challenges to effective evaluation include scarcity of resources and access to relevant data.[2] The Internet creates the opportunity for engagement by asking the public how to measure impact, what data to use for that purpose and enlisting people in the process of evidence gathering to support better evaluation and oversight. Such participation has the potential to enhance accountability and improve results. Below, we summarize three so-called social auditing (also called civic auditing) initiatives that have enabled greater citizen participation in monitoring government projects. Although only one of these involves the legislative branch of government, the success of these projects, coupled with the absence of many legislative examples (UK Evidence Checks and Chile's Evaluación de Leyes are two notable exceptions), leads us to include them as worthy exemplars for legislatures looking to engage the public in oversight and evaluation.[3]

Student-led Civic Audits in Brazil

In late 2016, at an event to mark the launch of a new Brazilian government transparency portal, the director of a high school from the rural area of Gama, Brazil publicly rued the severe lack of resources dedicated by the government to his institution - a story that is not uncommon in Brazilian public schools:

> "I bought the taps installed in the bathrooms. I turned my living room into a pantry for food. I am very sad about this situation"
> - Edgard Vasconcelos, Director of CED Casa Grande

A decree passed in 2007 ensures that Brazil's public schools have the autonomy needed to spend funds assigned to them by the federal district for maintaining and operating the school. The intention behind the decree (called Programa de Descentralização Administrativa e Financeira (PDAF)) was to help public school management respond in an agile manner to local needs, which they are best-suited to know.

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[1] "The magenta book: Guidance for evaluation." *Her Majesty's Treasury,* April 2011.

[2] . "Brief 1: Overview of Policy Evaluation." *Center for Disease Control,* 2015.

[3] Special thanks to Prince Anim (co-founder, TransGov Ghana), Emilie Reiser (Project Director, Promise Tracker) and Eric Pettersen and Michael Meotti (CPEC) for their inputs.

Between 2007, when the decree was passed, and 2016, over R$ 445 million was provided to public schools for school maintenance and local repairs with R$ 84 million being provided in the year 2016 alone. Despite this, audits conducted in random municipalities by the nation's Comptroller have shown that there are deficiencies in school infrastructure quality across the country. Studies have attributed these deficiencies to several causes, including lack of resources, corruption[4] and student behavior, but there is less information available at granular levels to pinpoint issues such as those faced by the Casa Grande high school in Gama. School administrators have often complained that they are constrained by delays in funding transfers while government officials have passed the blame back to schools.

In 2016, the Comptroller General of the Federal District (CGDF) launched an initiative called the Projeto Controladoria na Escola (Controllership in Schools) to engage students in 10 public schools in Brazil in the process of auditing school infrastructure, mapping commonly raised issues and fostering civic education in schools.[5]

The initiative was in accordance with the National Social Participation Policy (PNPS) that aims to prevent corruption by ensuring that public resources are spent transparently and with effective participation of society. It was also one of the 22 projects[6] selected from over 90 proposals submitted to the #TodosJuntosContraCorrupcao campaign, a national anti-corruption campaign by the "ENCCLA," the National Strategy to Combat Corruption and Money Laundering.[7]

Pilot Phase

Projeto Controladoria na Escola involved asking students to collect data about their local school environments, report the major issues they faced, identify the root causes of those issues and propose ideas to fix them. In the pilot phase, students from 10 schools (including Edgard's CED Casa Grande) participated in the process. In total, they identified over 600 issues, including burnt

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4 Claudio Ferez, Frederico Finan, and Diana Moreira. "Corrupting learning: Evidence from missing federal education funds in Brazil." *Journal of Public Economics* 96.9-10 (2012): 712-726.

5 The office of the CGDF (Corregedoria-Geral do Distrito Federal) is responsible for overseeing public spending and plays the role of ombudsman in the federal district. "Publicação DODF nº 250." *Comptroller General of the Federal District*, Dec. 27, 2002, Págs. 167/168

6 The office of the CGDF (Corregedoria-Geral do Distrito Federal) is responsible for overseeing public spending and plays the role of ombudsman in the federal district. "Publicação DODF nº 250." *Comptroller General of the Federal District*, Dec. 27, 2002, Págs. 167/168

7 "Estratégia Nacional de Combate à Corrupção e Lavagem de Dinheiro."

out light bulbs, missing fire extinguishers and broken chairs. The students, as well as teachers, were also surveyed on the mode of transportation they use to go to school and their opinions about the school on a wide range of issues, ranging from the quality of educational materials provided to them to the state of the sports arena and labs. The CGDF compiled the issues identified and survey responses from each school into a report and detailed the audit findings which included images, descriptions and deadlines, which were then presented to the Department of Education. The Comptroller General visited each school later that year to monitor the results of the project and to oversee the resolution of the issues. In one school alone, the students identified 115 issues and within just 3 months, 45% of the issues were fixed either by the Department of Education or, where possible, by the students and school management themselves.[8]

Institutional Impact

The success of the project was two-fold. It not only enhanced the CGDF's ability to conduct detailed audits of every public school but also generated greater buy-in from the schools to identify, report and fix issues in their surroundings. The buy-in from school management was a critical takeaway for the CGDF. By allowing the schools themselves to identify the issues, the CGDF was able to perform a full audit of the schools and see how public funds were spent without the negative connotation associated with being "overseen or audited." Rather, the schools were able to see for themselves how misusing funds or neglecting the upkeep of school property was creating several issues for the students and teachers and the Department of Education was made aware of the most urgent issues public schools in Brazil were facing.

"This is the best way to fight against corruption. When the citizen understands that the public good belongs to him, he takes care of it" said Ziller. "Controladoria na Escola involves students in identifying and solving the institution's problems. This makes them aware, for example, that if they vandalize a bathroom, they lose resources that could be invested in improving the college."

Expansion: The School Audit Award (2017)

The project's great success was also evidenced by the fact that the social (also called civic) audit model was replicated the following year (2017), this time in 104 schools with over 4,000 students

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[8] Moll, Gabriella. "Horta comunitária será usada na merenda do CEF 404, em Samambaia." *Governo Do Distrito Federal*, Nov. 7, 2016.

competing for a R$ 140,000 ($43,000 USD) grant award. It was called the "school audit award" and by the end of the campaign, students had submitted around 7,500 responses[9] to the survey.

In 2018, the program was set to expand to over 200 schools in the country.[10]

How It Worked

The scale of participation in the first school audit award was much larger than the pilot. Hence, manually compiling reports from the data collected by the students was infeasible. Instead, the CGDF deployed Promise Tracker - a data collection tool developed by the MIT Center for Civic Media. Promise Tracker is a mobile application which allows campaign organizers to create surveys for distribution in order to collect information in the form of pictures, text and location data.

The school audit award campaign consisted of 5 phases:[11]
1. Training for teachers to guide students through the data collection process
2. Theatrical shows and debates to show the value of citizenship and public participation
3. Student-led evaluation of school infrastructure (using Promise Tracker)
4. Student-led assessment of the problems identified
5. Student-led development of solutions to fix them

Judges from the Comptroller General's office scored each school based on its performance in each of the activities and the top 10 schools[12] shared the R$ 140,000 ($43,000) grant award.[13]

Nearly 4,000 students from 104 public schools participated in the campaign and helped evaluate the state of classrooms, availability of Wi-Fi and computer labs, toilet paper in bathrooms and other issues by collecting evidence in response to a questionnaire administered through Promise Tracker. Using the information they gathered, the students then went through a process to determine the root causes (such as student behavior, lack of resources and administrative issues) of the most

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9 Sarmento, Larissa. "Projeto Controladoria na Escola premia dez instituições de ensino do DF." *Governo Do Distrito Federal*, Dec. 8, 2017.

10 . Sarmento, Larissa. "Projeto Controladoria na Escola inicia etapa de preparação para 2018", *Governo Do Distrito Federal,* Feb. 8, 2018.

11 Reiser, Emilie. "Civic Audit to launch in 100 schools in Brasília." *Promise Tracker*, Aug. 22, 2017.

12 Moreira, Cibele. "Controladoria-Geral do DF lança prêmio Escola de Atitude." *Governo Do Distrito Federal,* Aug. 17, 2017.

13 Moreira, Cibele. "Controladoria-Geral do DF lança prêmio Escola de Atitude." *Governo Do Distrito Federal,* Aug. 17, 2017.

commonly reported issues and went on to propose projects to address the issues they felt they could have an influence on.

Nearly 4,000 students from 104 public schools participated in the campaign and helped evaluate the state of classrooms, availability of Wi-Fi and computer labs, toilet paper in bathrooms and other issues by collecting evidence in response to a questionnaire administered through Promise Tracker.

By the end of the competition, all 104 schools had not only proposed but also implemented at least one - if not more - student-designed initiatives even though only the top 10 teams stood a chance to win the grant award.[14] Among other reasons, giving participants the ability to intervene in their local environments in order to effect real change was a critical factor in achieving such large-scale participation.[15]

Among the projects the students developed was the Monitoring My School app designed to monitor the cleanliness of classrooms and common areas. The app also allowed janitorial staff to provide feedback on how the students maintained the tidiness of the school. Another school launched a web-based radio station by renovating an old, out-of-use computer lab to motivate students and teachers to maintain the space well.[16]

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[14] Interview with Emilie Reiser, Project Lead, Promise Tracker on February 14, 2018.

[15] Interview with Emilie Reiser, Project Lead, Promise Tracker on February 14, 2018.

[16] Reiser, Emilie. "Students take Brasília." *Promise Tracker*, Dec. 15, 2017.

Figure 1: The winners of the civic audit received a certificate from the Comptroller-General, Henrique Ziller, Source: Andre Borges/Agência Brasília

Technology: The open source Promise Tracker Tool

URL: https://monitor.promisetracker.org/[17]

How it Works: Creating a campaign using Promise Tracker

Step 1: Describe Project: The tool asks the campaign organizer to describe the project and its targeted audience.

Step 2: Set up Survey: The tool then allows the organizer to create a survey which can be disseminated among the public for data collection. The organizer can ask users to respond with text, images and/or location information.

Step 3: Design Survey Page: Next, the organizer is asked to design the look and feel of the survey page. Once complete, the tool provides a QR code, a machine-readable code
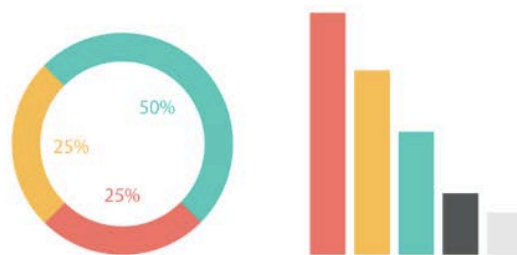
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[17] The Promise Tracker Tool is open source and is available at https://github.com/mitmedialab/Promise-Tracker-Builder

consisting of an array of black and white squares, used for storing URLs, and links for sharing the survey with the public. If required, the organizer can choose to be anonymous.

Step 4: Test Survey: The organizer can test the final survey to make sure all the fields work as required prior to making it public.

Step 5: Collect Data: Once the survey is live, the organizer can view the results on a dashboard which visualizes the results, displaying graphs, maps and photos.

Figure 2: Source: monitor.promisetracker.org

How it works: Responding to the survey

Step 1: Download Mobile App: After downloading the Promise Tracker mobile app, the user can download the campaign survey using a 6-digit code shared by the organizer.

Step 2: Data Collection: The type of data a user must collect depends on the requirement of the campaign. This might include text, images or location information.

Learnings

- Design the initiative in a way that generates buy-in: Some schools were hesitant to take part in a campaign that was going to "monitor and audit" their activities. However, engaging students and teachers and giving them the power to create change persuaded schools that it would be a value-add to the school rather than become "monitoring" in a negative sense.
- Technology is a small piece - focus on networks for engagement: Working with community groups on the ground who already have a certain network and issues they care about was critical to the success of the campaign.

The civic audit model employed in Brazil is a great example of organizing citizen-led campaigns to foster civic education and to help government oversight agencies understand local issues in granular detail. It also helps build a sense of community and, when done right, motivates citizens to take action to fix those issues. It is still unclear, however, if the campaign improved educational outcomes and if the medium and long-term solutions were implemented.

It is important to ensure that issues reported by citizens are used to enhance government accountability and improve policy implementation and formulation. If citizens don't see that the data they collect is being acted on, they are less likely to participate in subsequent iterations of the project. On the other hand, government can take action only if the information from citizens is routed to the appropriate departments. For instance, reporting a leaky roof in a school to the Department of Education is likely to be less impactful and slower (or entirely useless) if the relevant authority to fix the issue is actually the public works department. In other words, there needs to be a feedback loop which carries citizen input to the relevant authority and one that informs the citizen when their report has been acted upon.

An interesting example of a platform which attempts to do this comes from Ghana and a platform called TransGov Ghana.

TransGov Ghana

Background

Created in 2014, TransGov is a platform to help Ghanaian citizens monitor the progress of local development projects.[18] The creators of TransGov (Jerry Akanyi-King, Kennedy Anyinatoe, Kwame Yeboah and Prince Anim) found that citizens were unaware of whom to hold accountable for faulty or incomplete infrastructure projects (such as the construction of public schools and flyovers) and service delivery in their localities. The solution they developed was "to curate a list of development projects in local communities and give people the ability to comment, give feedback and let their voices be heard."[19] The platform also allows people to report issues such as burst pipelines or potholes and track the status of their complaint. Today, TransGov has 600,000 registered users[20] who can provide feedback through the TransGov website, mobile app, by SMS or by phone. The

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[18] TransGov Ghana Facebook Page

[19] Interview with Prince Anim, Co-founder, TransGov Ghana

[20] Approximately 40% active users. *Active users*: Users who, in the preceding month, engaged on the platform by reporting issues and retweeting or tagging posts.

platform is run by a small team of 6 employees who handle the technology, management and communications of the project.

Problem It Solves

In Ghana, there are no official mechanisms to allow citizens to easily find details of local infrastructure projects. For over four years now, the Ghanaian parliament has deliberated on the passage of a right to information bill but it is unclear when it will materialize. Ghana is part of the Open Government Partnership (OGP) and puts out open data on the national open data portal (data.gov.gh). But even though the portal boasts of "133 datasets," only 15 datasets (mostly census data) are available to view or download and they are rarely updated. In fact, the OGP end-of-term review report in 2017 found[21] that Ghana had made "limited" progress in its commitment to make datasets publicly accessible on the portal. Without a right to information bill or a robust open data portal, Ghanaian citizens have to resort to speaking with the government officials in the relevant departments and requesting information from them.

This poses two challenges: 1) It is often unclear which government authority is responsible for executing a certain project; and 2) citizens have to find the individual within the department who is responsible for the project or any related information.

> "This lack of clarity and accountability often means that citizens' complaints or requests for information remain unresolved and increase their apathy towards government."
>
> - Prince Anim, Co-founder, TransGov Ghana

How It Works

TransGov serves two purposes: 1) tracking the progress of public projects and sharing relevant details with citizens; and 2) serving as a platform for citizens to report faults in service delivery (like broken pipes or potholes) and directing those complaints to the competent authority.

1. Monitoring the progress of public projects: TransGov provides a snapshot of important information related to local infrastructure projects. This information includes details like proposed completion dates, funding, contractor information and current status. The fields are populated by a combination of crowdsourced data collection (where users submit pictures and comment on the

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[21] OGP End-of-Term report: Ghana, OGP 2017

status of the project) and curated data collection from official sources and interviews with contractors and officials. TransGov also shares this data with Ghana's national open data portal.[22]

Additional Information

| Project Information | Images | Map |

2 Storey 6-Unit Classroom Block with Ancillary Facilities at Achimota Anglican School

PROJECT STATUS	PROJECT CATEGORY	COMPLETENESS
On Halt	school	50 %
AMOUNT ALLOCATED	**ESTIMATED BUDGET GOG**	**ESTIMATED BUDGET IGF**
¢191,900.79	0	0
ESTIMATED BUDGET DONOR	**ACTUAL BUDGET SPEND**	**SUB METRO**
0	0	Okaikoi North Sub Metro
PROJECT CONTACT PERSON	**PROJECT CONTRACTOR**	**START DATE**
--	--	Feb. 3, 2011
END DATE	**PROJECT LOCATION**	**SOURCE OF INFORMATION**
Oct. 6, 2011	Achimota	Accra Metropolitan Assembly

Figure 3: Sample project on TransGov Ghana. **Source**: http://transgovgh.org

2. Reporting complaints: A registered user can post a complaint (including pictures and videos) on TransGov through the web platform or using the mobile app. The complaints are forwarded to the relevant department where officials view the complaints on a dashboard and take action. The department updates the status of the complaint when it is resolved and a notification is sent to the complainant to confirm if it was indeed resolved. To streamline the flow of information to government departments, every complaint is "tagged" and every department's dashboard only displays the complaints tagged to them.

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[22] Ghana Makes Public Works Data Accessible

Institutional Support

The TransGov team's first challenge was to identify individuals within government departments who had the vision to support TransGov's efforts. In association with partners like the World Bank office in Ghana, Prince Anim and his team carried out a "power mapping" exercise to strategically find the individuals and departments to work with and then narrowed down their focus to three government departments: 1) the ministry of finance; 2) the ministry of roads and housing; and 3) the Ghana water agency. While they work in tandem with these agencies, there is no dedicated unit or staff within government to deal with the complaints received through TransGov.

Communicating Strategy

The second challenge was to inform citizens about TransGov and how it could be used. The team used a combination of online and offline engagement strategies to build the initial user base of TransGov. For example, the team used Facebook ads to spread the word online and laid the groundwork for further promotions. They also organized townhall meetings (often in the presence of local district heads) to educate people about their rights and to demonstrate the platform's functioning.

> "A large part of the initial registrations for TransGov came through word of mouth advertising from friends and followers"
> - Prince Anim, Co-founder, TransGov Ghana

Impact

Overcoming people's apathy and fostering participation was a big challenge for the TransGov team as was getting government to respond more quickly. But TransGov's success, according to Prince Anim, should be measured by two metrics: 1) number of issues it resolves; and 2) the timeframe of responses to complaints. TransGov serves as a conduit between citizens and the concerned department. This helps improve interactions between the two but does little to improve the process or pace of resolving the actual complaint. TransGov has taken steps to improve that aspect as well. By posting complaints received on TransGov to social media sites, the time taken to resolve complaints reduced by nearly 60% since public officials were subjected to the heightened scrutiny. On average it takes 3 days to fix a pothole and 48 hours to fix a burst pipe reported via TransGov compared with nearly a week to fix a pothole and more than 3 days to fix a pipe before TransGov's social auditing process. There is still plenty of room for improvement.

Connecticut Policy and Economic Council (CPEC): City Scan

In 2000, the Connecticut Policy and Economic Council (CPEC) conducted a pilot project to engage local residents in collecting data to evaluate public projects in order to hold the local government accountable for its commitments to clean up derelict land use sites and advocate for change. The project, called CityScan, began in Hartford, Connecticut, and was later extended to half a dozen other cities in the state. It provided ordinary citizens with what was, at the time, state-of-the-art technology, including handheld computers, wireless modems and first generation digital cameras. Citizens were also trained in how to collect data to assess the performance of government agencies and hold them accountable. This "social auditing" effort was part of a broader initiative by the Council to introduce citizen-based performance assessment (CBPA) in local neighborhoods and eventually statewide, making CityScan one of the earliest examples of technology-enabled social auditing anywhere in the world. The most important lesson of the CityScan experience is that creating collaborations between local citizens and government is critical to the success of citizen engagement, reinforcing what's been seen in more recent projects of a similar nature.

> The most important lesson of the CityScan experience is that creating collaborations between local citizens and government is critical to the success of citizen engagement, reinforcing what's been seen in more recent projects of a similar nature.

Background

CityScan was considered a national model of citizen-based assessment of city governments. CityScan was a project of the Connecticut Policy and Economic Council (CPEC) - an independent, not-for-profit organization which provides resources to citizens and civic organizations to help improve government performance. CityScan was developed as part of CPEC's efforts to enhance the ability of neighborhood groups to advocate for change in their own localities through CBPA. CPEC designed pilots for CityScan in two cities with contrasting characteristics.

The first pilot of CityScan in Hartford was carried out in the Parkville Neighborhood with students of a Hartford high school. Seven students and their teacher, assisted by CPEC staff, collected location information (GIS), took pictures and made videos of land use conditions in five neighborhood parks. CPEC found that the Hartford city government's responsiveness to citizen needs was poor and that

there was little information available regarding the quality of service delivery.[23] Local residents and community advocates therefore lacked the ability either to contribute feedback to government or to access performance data. CPEC's CityScan was a way for Hartford residents to identify and prioritize public problems and to gather evidence in order to pressure the city to take action, and offered a way for the city government to communicate better with citizens.

Stamford, Connecticut was the second pilot site for CityScan in 2001. Stamford had an administration which was more supportive of citizen engagement and performance assessment than Hartford's. According to CPEC, Stamford, in contrast with Hartford, was "a thriving, growing urban center with many resources to call upon for civic improvement." The Stamford project aimed 1) to identify high-priority areas for citizens through surveys and focus groups; 2) to implement citizen-led measures to address these priority areas; and 3) to conduct CityScan activities to collect evidence.

Subsequently, CPEC implemented CityScan in Norwalk and Waterbury, two other cities in Connecticut, with plans for statewide expansion. However, by their own admission, CityScan's success depended on building relationships with both citizen groups and government officials - a process that takes time to replicate across jurisdictions and political realities - making rapid statewide expansion unrealistic, according to Michelle Doucette, Project Director, CPEC.

Project Description

The data collected varied from project to project and was dependent on the priorities of the neighborhood group. Citizens decided what data to collect, carried out the collection exercise and used the resulting evidence to advocate for change. The issue to be documented had to be visible to the naked eye from the street, sidewalk or within public parks. In subsequent years, CityScan engaged several hundred students to document graffiti, abandoned buildings, garbage dumping sites, overgrown vegetation and abandoned vehicles in all of Hartford's residential neighborhoods.[24] In each case, participants were provided with cutting-edge technologies (at the time) like Pocket PCs and digital cameras and were equipped with wireless modems and GPS receivers.

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[23] CityScan project case study, Michelle Doucette Cunningham available online at http://web.archive.org/web/20040620033401/http://www.city-scan.com:80/moreinfo/city_scan_case_study.pdf. Last accessed on June 18, 2018

[24] http://www.townofwindsorct.com/townmanager/tm-reports.php?report=100

Students were divided into groups which "scanned" the area to identify both problem areas as well as positive conditions, entered the relevant data into the pocket PC (sometimes responding to checklists or questionnaires), took images and synchronized the device with a central database. Following the data collection phase, students sorted and categorized images so that they could be analyzed and compiled into a detailed report posted on the CityScan website.[25] The detailed findings were later presented to city government officials. The following year, CPEC staff conducted a "rescan" of the areas covered in the report to measure the effectiveness of the project.

Between 2000 and 2002, CPEC carried out several CityScan "scans" in 30 neighborhoods in Connecticut in partnership with community groups, schools and local government offices. However, in many cases, they also found that several promises of improvement by the department of public works remained unfulfilled. In the case of graffiti, even places where action was taken saw new graffiti replace the old. Still, the experience proved to be an important learning exercise since CPEC went on to build a stronger relationship with department of public works in the following years.

Participation

Local community leaders and students were the main participants in CityScan. Engaging students was a key part of the CityScan project for two reasons:

     1. Adult volunteers often did not have adequate time for data collection.

     2. CityScan served as an after-school program for young people between the ages of 13-17 years and gave them an opportunity to understand their local environments better.

The testimonials from student volunteers suggests that projects like CityScan played an important role in instilling values of civic responsibility as well as offer a firsthand experience for the younger population to be changemakers in their own communities.

> "CityScan gave me the sense that I gave back to the community and positively affected its future"
>
>   - 19 year old male participant in CityScan[26]

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[25] City-scan.com. Accessed through wayback machine on June 18, 2018

[26] Retrieved from http://www.city-scan.com:80/section.php?section=youth through wayback machine at http://web.archive.org/web/20040229111921/http://www.city-scan.com:80/section.php?section=youth on June 18, 2018

Given the enthusiastic participation of students and the benefits for their participation offers, it is no surprise that CPEC recommended[27] building partnerships with local academic institutions.

However, students were not the only participants in CityScan activities. In conjunction with the Neighborhood Revitalization Zone Committee of Parkville, a second pilot was carried out in Hartford. This time, the project used adult volunteers who collected data on their own time in the evenings and on weekends after an initial group training session. Their focus was the renovation of abandoned buildings in the city. The volunteers and city officials together negotiated an agreement by which citizens would pick their top 5 priority buildings for securing and cleaning up and the department of licensing and inspection would follow up on the progress each month.

Funding

The Alfred P. Sloan Foundation awarded a $435,000 grant to CPEC and in fall 2001, CPEC received a grant from the U.S Department of State to support CityScan. Additionally, CPEC received support from Microsoft Corporation which donated the Casio Pocket PCs used by the volunteers and from the William Caspar Graustein Memorial fund, which provided the funds to purchase video cameras and video editing software. CityScan was staffed by 6 full-time administrative and program professionals and also hired students and teachers on a part-time basis for each neighborhood scan.

Impact

In Hartford, CityScan played an important role in enabling other organizations to improve their own work. The most prominent example of such an organization was "Hartford Proud & Beautiful," a private-public partnership which worked towards clearing graffiti from public sites. They used data about graffiti in public spaces in 90 sites in Hartford collected by CityScan volunteers to clean the graffiti. Following the success of the two pilots in Parkville, CityScan expanded to eighteen more neighborhoods in Hartford and eventually, to seven more cities in Connecticut.

In Norwalk, Connecticut, the city administration worked with CityScan staff to develop a process for handling the scan reports generated by volunteers and requested modifications to the scan conditions list (the parameters on which volunteers collect data) to better assign repairs by

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[27] CityScan project case study, Michelle Doucette Cunningham available online at http://web.archive.org/web/20040620033401/http://www.city-scan.com:80/moreinfo/city_scan_case_study.pdf. Last accessed on June 18, 2018

department. The city used the scan reports as work orders for city departments as well as review points by a citywide neighborhood preservation task force.[28]

Summary Learnings

CityScan offers several learnings. Primary among them is the importance of building relationships with local citizen groups, academic institutions, non-profit organizations and government officials in order to ensure that priorities are set, data is collected and action is taken to resolve the issue.

Another lesson from CityScan is that scaling a project like this one is not simple because building coalitions and partnerships takes time and is subject to political and jurisdictional realities. Hence, starting small is most likely to have more impact. Finally, CityScan's experience in Waterbury, Connecticut showed that some local governments might be ill-equipped to deal with citizen input even if they would like to. Despite the success in Hartford, Norwalk, Stamford and other jurisdictions, the process of creating on-the-ground change was slow in Waterbury mainly because the government there had to create new systems to handle the new source of citizen input.

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[28] CityScan project case study, Michelle Doucette Cunningham available online at http://web.archive.org/web/20040620033401/http://www.city-scan.com:80/moreinfo/city_scan_case_study.pdf. Last accessed on June 18, 2018

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