**Government and Digital Engagement Technologies:
The Elusive Search for Consensus**

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August 29, 2019

Acknowledgments

We are thankful to Tara O'Donovan, Nancy Hedges, Ashley Marshall, Amadou Sangare, Deena Braun, Amy Jarek, Albert Louie, Karen Morton, Sarah Kiley, Janna Rodioukova, Grant Moss, Andrea Oslanski, Andrew Strople, Darcie Harding, Don Logan, Katherine L. Murphy, Rébecca Verrall, Keener Hachey, Jean-Denis Charlebois, Eman El-Fayomi, Jagoda Walny, Rachid Ramoul, Dimitri Temnikov, and Zaria Channer, for their invaluable contribution to our workshop. We would also like to thank Lequanne Collins-Bacchus, Justin Longo, Darshana Narayanan, and Audrey Tang for reviewing our paper and providing insightful comments.

Abstract

As new digital platforms emerge and governments look at new ways to engage with citizens, there is an increasing awareness of the role these platforms play in shaping public participation and democracy. We examine three case studies on digital engagement (vTaiwan, We the People, and social media), and discuss key considerations for effective public engagement in the digital age: Empowerment, time to deliberate, transparency, useful data, consensus, and dynamic engagement. We hope that these serve as a basis for constructing meaningful engagement.

Introduction

Beth Simone Noveck, the first United States Deputy Chief Technology Officer under President Obama, proposes that governments need to rethink democracy in the digital age.¹ Citizens need better information, better mechanisms for providing input, and at a more mature stage, decision-making power beyond voting. The objective is to improve the effectiveness of policy making.² These ideas complement the thinking of Tom R. Tyler, a leading Yale scholar who focuses on understanding why people obey laws. He argues that central to citizen's cooperation and compliance with their government is trust,³ as in the broadest sense of the concept. That poses a challenge because the data shows that trust in government is on a downward trend globally.⁴

Governments are not oblivious to these developments. They realize that in this era of instant communication and easy participation, citizens want to be engaged beyond the ballot box. From France's town-hall tour;⁵ to President Obama's "We the

¹ Beth Simone Noveck, *Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful* (Washington, DC: Brookings Institution Press, 2010).

² Justin Longo, "The Evolution of Citizen and Stakeholder Engagement in Canada, from Spicer to #Hashtags," *Canadian Public Administration* 60, no. 4 (December 1, 2017): 517–37, <https://doi.org/10.1111/capa.12229>.

³ Tom R. Tyler, "Trust in the Twenty-First Century," in *Interdisciplinary Perspectives on Trust: Towards Theoretical and Methodological Integration*, ed. Ellie Shockley et al. (Cham, Switzerland: Springer, 2016), 203–15, https://doi.org/10.1007/978-3-319-22261-5_12.

⁴ Laura Wesley, "A Study on Citizen Engagement," Open Government, 2018, <https://open.canada.ca/en/blog/study-citizen-engagement>.

⁵ "With a Town-hall Tour, Emmanuel Macron Tries to Win France Back." *The Economist*. February 09, 2019. Accessed July 21, 2019. <https://www.economist.com/europe/2019/02/09/with-a-town-hall-tour-emmanuel-macron-tries-to-win-france-back>.

People;”⁶ to Taiwan’s vTaiwan,⁷ and Join;⁸ to Canada’s “Consulting with Canadians”⁹—examples of governments’ attempts to incorporate many voices abound. Together, advances in machine learning and computing power, have created a new engagement paradigm for aggregating information.¹⁰ Yet, in spite of the advances in technology, and even in access to the internet through the ubiquitous smartphone, few governments have been able to effectively incorporate the results from these conversations into policies and legislation.

This challenge is real. Even in instances when governments engage prior to taking a decision, courts have overturned rulings based on “inadequate consultation.” Canada is a case in point. In the 2016 decision in *Gitxaala Nation v. Canada* the Federal Court of Appeal repealed approval of a pipeline project (Northern Gateway) based on inadequate consultation.¹¹ Two years later, the same Court in *Tsleil-Waututh Nation v. Canada* made a similar decision regarding another pipeline project approval

⁶ “We the People,” National Archives and Records Administration, accessed July 24, 2019, <https://petitions.obamawhitehouse.archives.gov/>.

⁷ Yu-Tang Hsiao et al., “vTaiwan: An Empirical Study of Open Consultation Process in Taiwan,” 2018, <https://doi.org/10.31235/osf.io/xyhft>; vTaiwan, “vTaiwan Project Page,” accessed July 24, 2019, <https://info.vtaiwan.tw/>.

⁸ join, “Join, Home Page,” accessed July 24, 2019, <https://join.gov.tw/>.

⁹ “Consulting with Canadians,” Government of Canada, accessed July 24, 2019, <https://www.canada.ca/en/government/system/consultations/consultingcanadians.html>.

¹⁰ Loni Hagen, Teresa M. Harrison, and Catherine L. Dumas, “Data Analytics for Policy Informatics: The Case of E-Petitioning” (Springer, Cham, 2018), 205–24, https://doi.org/10.1007/978-3-319-61762-6_9.

¹¹ *Gitxaala Nation v. Canada*, 2016 FCA 187

(Trans Mountain Expansion) on the basis that although significant improvements had been made to the consultation process, the consultation was not meaningful, did not represent true dialogue, and did not engage the federal “decision-makers.”¹² Instead, it was considered that consultation involved “note-taking” who simply recorded concerns and reported back.¹³

In the early 2000s, the use of social media helped modernize e-government from a limited use of email and static website to broader and more interactive experience.¹⁴ While the scalability and connectivity of digital technology promised to revolutionize public engagement, the recent use of social media for public discourse had the opposite effect. It contributed to polarization and mistrust.¹⁵ Perceptions of lack of authenticity or truthfulness in either the intentions or substance of the engagement/consultations result in a feedback cycle of mistrust, where the public feels justified for the lack of trust it felt in the first place. This predicament makes us wonder what is required to be considered when carrying out public engagement so that it is meaningful?

To answer this question, this paper examines existing engagement models with a view to explore their relevance to the digital era. We found that the current models only

¹² *Tsleil-Waututh Nation v. Canada*, 2018 FCA 153

¹³ Maureen Killoran et al., “Resource Projects and Indigenous Consultation – What Is Best Practice after a Year of Uncertainty?,” Mondaq, 2018, <http://www.mondaq.com/canada/x/767204/indigenous+peoples/Resource+Projects+And+Indigenous+Consultation+What+Is+Best+Practice+After+A+Year+Of+Uncertainty>.

¹⁴ Ines Mergel, “A Framework for Interpreting Social Media Interactions in the Public Sector,” *Government Information Quarterly* 30, no. 4 (October 1, 2013): 327–34, <https://doi.org/10.1016/J.GIQ.2013.05.015>.

¹⁵ Karim Amer and Jehane Noujaim, *The Great Hack* (Netflix, 2019).

take us part of the way, as we identified limits to their premise and applicability. There is a need to acknowledge that the speed and accessibility of interaction in the digital era have profoundly changed the nature of engagement.

We hope this discussion opens up a new space for understanding, testing, and conducting meaningful digital engagement between citizens and governments.

Public Engagement in the Digital Age

According to the Institute for Local Government, public engagement is the “broad range of methods through which members of the public become more informed about and/or influence public decisions.”¹⁶

Public engagement supports democracy, allows governments to create better policies by tapping into wider sources of information within their communities, contributes to cultivating knowledge in communities, and improves the quality of their decision-making.¹⁷ Equally important, is that public engagement has the potential to build public trust, and provide a sense of legitimacy to the policy design process.¹⁸

Traditional methods for public engagement include voting, contacting a government office, attending educational sessions, protesting, town halls, referendums,

¹⁶ Institute for Local Government, “What Is Public Engagement and Why Do It?,” 2016.

¹⁷ Ank Michels, “Innovations in Democratic Governance: How Does Citizen Participation Contribute to a Better Democracy?,” *International Review of Administrative Sciences* 77, no. 2 (2011): 275–93, <https://doi.org/10.1177/0020852311399851>; Noveck, *Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful*; Longo, “The Evolution of Citizen and Stakeholder Engagement in Canada, from Spicer to #Hashtags.”

¹⁸ Tyler, “Trust in the Twenty-First Century.”

public opinion polls, providing testimony to legislators, writing a letter to a newspaper, and the list goes on.¹⁹ Despite this myriad of traditional channels, in a 2017 poll, 84% of surveyed Canadians wished the government sought input from citizens on a regular basis.²⁰

New Methods for Public Engagement: Leveraging Digital Technologies

Advancements in mobile digital technology for reaching broader and more diverse publics, as well as in machine learning for sifting through the flood of information that can result from broad public engagement, provide the means to achieve scalable public engagement. Among the array of new digital engagement tools are Cornell University's Regulation Room/Smart Participation;²¹ and Discourse, Pol.is, Typeform, and Sli.do—the last three used by vTaiwan.²² The comprehensive list of digital engagement tools classified by categories shown below was compiled and published by

¹⁹ Archon Fung, "Varieties of Participation in Complex Governance," *Public Administration Review* 66 (2006): 66–75, <https://doi.org/10.1111/j.1540-6210.2006.00667.x>.

²⁰ EKOS Politics, "Rethinking Citizen Engagement 2017," 2017, <http://www.ekospolitics.com/index.php/2017/03/rethinking-citizen-engagement-2017/>.

²¹ CeRI, "SmartParticipation," accessed July 24, 2019, <http://smartparticipation.com/>; "All Good Things Must End.," RegulationRoom, accessed July 24, 2019, <http://regulationroom.org/>.

²² Hsiao et al., "VTaiwan: An Empirical Study of Open Consultation Process in Taiwan."

the International Association for Public Participation (IAP2) in their 2017 Social Media White Paper (see Figure 1 for a categorization).²³

Dialogue and Deliberation	Ideation	Mapping and Wikis	Engagement Suites
Discussion platforms to foster civic conversation	Elicit ideas and levels of support for the ideas	Collect and display geographic data	Mix of engagement tools from single provider
Loomio, Agora, Neighborland, CiviComment, Pol.is, Ethelo, PeakDemocracy	Consider.it, IdeaScale, OpenTownHall, SpigitEngage, Ideaforum, Citizenlab	LocalWiki, Wikiplanning, MapIt, Mapumental, OpenStreetMap, Neighborland	BangTheTable, 76Engage, ConsultationManager, Cap-collectif, Citizen Space, PlaceSpeak
Serious Games	Citizen Reporting	Citizens Panel	Hyper-Local Groups
Playful tools to engage on serious issues	Residents notify their (municipal) government of items in need of attention	Volunteer group shares demographics and ongoing survey responses	Neighbourhood or school-based forums for social and issue based conversations
Community PlanIt, City Creator, Super City, Crowdgauge, Busmeister, MetroQuest, Citizen Budget	SeeClickFix, FixMyStreet, PublicStuff	Vision Critical, Community Panel, various polling companies	E.democracy.org, various online forums, blogs, social media groups
Legislation Engagement	Citizen Science	Crowdfunding	Petitions
Transparency in the legislative process	Contribute data to a common collection	Distributed fundraising campaign for community projects	Collect signatures for or against something
WhatDoTheyKnow, TheyWorkForYou, Countable	Ushadi, Lake Observer, BCWF Conservation App, eBird, Journey North	Citizeninvestor, Neighborly, Kickstarter, Wayblaze	Change.org, WeThePeople, Neighborland
Social Media	Advocacy Platforms	SMS Polling and Notifications	Event RSVPs
Users create and share content with others in their networks	Digital tool suites to facilitate political or community organizing	Poll via text message or send bulk text messages	Help groups assemble at offline events
Facebook, Twitter, LinkedIn, Instagram, Snapchat, Pinterest	New Mode, Sprout Social	PollEverywhere, Textizen, Sli.do, TextTalkAct	Eventbrite, Attending.io
Surveys	Volunteer Organizing	Live Streaming	Listening
Collect responses to questions	Self-organize individual volunteer efforts	Share live video of event	Monitor social media for relevant discussions
Canadian Servers: Simple Survey, Voxco, Jitsutech, Choicebook American Servers: Google Forms, Survey Monkey, TownHallApp	CivNet, SnowCrew, Volunteer Spot, Recovers.org	Periscope, Facebook Live, YouTube Live	Hootsuite, Keyhole, Sprout Social, Google Alerts

Figure 1: Categories of Public Digital Engagement, from Lyons, Susanna Haas. "Digital Engagement, Social Media & Public Participation," 2017. www.iap2canada.ca.

²³ Susanna Haas Lyons, "Digital Engagement, Social Media & Public Participation," 2017; See also Julie Simon et al., "Digital Democracy: The Tools Transforming Political Engagement" (London, UK, 2017) for a review of successful case studies.

The prevalence of new technology has enabled governments around the world to find new ways of engaging citizens,²⁴ ranging from data collection to civic projects initiated by individuals and communities. The Knight Foundation estimates the annual growth rate in the launch of new civic tech organizations to be approximately 20 percent.²⁵ In a recent study examining the 2019 trends in the civic-tech market, around 50 percent of the civic-tech providers sampled were created in the last three years.²⁶ While most of these contribute to the digitization of governments, 27 percent focus on citizen autonomy and democracy tools, and 22 percent work on the collection of data, analysis and visualizations so that citizens can better understand civic-related information.

New public engagement technologies such as Pol.is provide scalable access to citizens. However, in determining an engagement strategy, attention needs to be paid to inequalities in digital access and digital literacy of new platforms. Without attention to digital access and literacy, digital engagement platforms can increase rather than reduce inequalities in access to information and empowerment.²⁷ In 2019's budget,

²⁴ Suvodeep Mazumdar et al., "Citizen Science Technologies and New Opportunities for Participation," in *Citizen Science*, ed. Susanne Hecker et al. (London, UK: UCL Press, 2018), 303–20, <https://doi.org/10.2307/j.ctv550cf2.28>.

²⁵ Katy Harris, "The Emergence of Civic Tech," Knight Foundation, 2013, <https://knightfoundation.org/articles/emergence-civic-tech>.

²⁶ Julien Carbonnell, "CIVIC-TECH : 100 Case Studies Tools and Platforms for Civic Engagement.," Medium, 2019, <https://medium.com/@julien.carbonnell/civic-tech-case-studies-tools-and-platforms-for-civic-engagement-93ec1f1467e6>.

²⁷ Michael B. Gurstein, "Open Data: Empowering the Empowered or Effective Data Use for Everyone?," *First Monday* 16, no. 2 (2011), <https://doi.org/10.5210/fm.v16i2.3316>; Robert M. Califf, "The Ubiquity of

government of Canada committed to connect all Canadians with high-speed internet.²⁸ Yet, according to the Canadian Radio-television and Telecommunications Commission, 16% of Canadian households do not have access to broadband internet (defined as 50Mbps Download and 10 Mbps Upload speed, and unlimited data transfer).²⁹ Other statistics suggest that rural and remote households constitute the majority of the low-access population.

To move from the theory into practice, we review three recent methods of public engagement: vTaiwan, We the People, and social media.

vTaiwan, Pol.is and Join

One of the more innovative approaches used by government for the purpose of building public consensus using civic technologies is vTaiwan, an open consultation process that brings citizens together to ‘craft national digital legislation’.³⁰ Launched in 2014, vTaiwan’s crowdsourcing functionality allows the entire public to engage in public debate on a platform that aims to go beyond political polarisation and echo-chambers so often generated by social media. Hsiao et. al. note that at the time of their

Data & Communication: A Double-Edged Sword for Disparities,” *Behavioral Science & Policy* 4, no. 1 (2019): 27–37, <https://doi.org/10.1353/bsp.2018.0002>.

²⁸ “High-Speed Access for All: Canada’s Connectivity Strategy” (Ottawa: Innovation, Science and Economic Development Canada, 2019).

²⁹ “Communications Monitoring Report” (Ottawa: Canadian Radio-television and Telecommunications Commission, 2018).

³⁰ vTaiwan, “vTaiwan Project Page.”

publication, in 2018, 26 national issues had been discussed through vTaiwan, and of these more than 80 percent led to decisive government action.³¹

The vTaiwan process consists of four key stages: proposal, opinion, reflection and legislation. Each stage is accomplished resorting to a variety of digital tools, some created by the Taiwan civic tech community g0v—<http://g0v.asia/>. For example, at the proposal stage, where participants discuss how to approach a policy topic, vTaiwan uses a real-time text editor, such as Hackpad, and to inform the broader public of ongoing discussion, a shared slide service, such as SlideShare. In addition to using a variety of tools, vTaiwan ensures that participants are guided on each stage through facilitation.

One of the key components, which makes vTaiwan so successful at achieving public consensus is Pol.is, a platform that uses machine learning to upscale online discussions, cluster groups and to find and visualize consensus.³² Pol.is is a unique example of how civic-technologies may be able to visually define and provide a space for divergent public opinion groups, whilst also identifying points of consensus. While most civic technologies allow for large number of users, Pol.is not only scales to any number of participants, it also endeavors to preserve minority opinions and stay coherent in real-time. Insights into citizen behaviour from the platform also indicate that people in Taiwan are typically 10 times more likely to vote in agreement, disagreement

³¹ Hsiao et al., “vTaiwan: An Empirical Study of Open Consultation Process in Taiwan.”

³² Colin Megill, “Pol.Is in Taiwan,” pol.is blog, 2016, <https://blog.pol.is/pol-is-in-taiwan-da7570d372b5>.

or stay neutral to a statement than to comment.³³ The unique platform feature that Pol.is uses to avoid public dissonance is that, although users can write comments, they are unable to reply to a comment. Instead, as a response, users can only vote: like, dislike; or pass.

The challenge in sustaining civic engagement and building on public trust largely depends on the efficacy of citizen participation, regardless of the design of any platform or process, and requires government buy in or support. Join, a platform for hosting and debating online petitions, similar to vTaiwan, allows senior public servants in Taiwan's government the opportunity to facilitate the engagement ecosystem.³⁴ Government agencies in Taiwan using Join deliver a 'point-by-point' response to any proposal obtaining more than 5000 signatures on the platform, thereby legitimizing the engagement process on behalf of the government. Join uses its own voting system, followed a vote-based ranking. There are examples where issues that attained prominence on Join are moved into the vTaiwan process for deliberation and legislation.³⁵ While the adoption of Join is still in an experimental phase, more than 10 million of Taiwan's 23 million inhabitants are already on the platform.³⁶

³³ McGill.

³⁴ join, "Join, Home Page."

³⁵ Personal communication from Darshana Narayanan.

³⁶ "Antonios Triantafyllakis Visits," Archive.tw - SayIt(blog), 2019, <https://sayit.pdis.nat.gov.tw/2019-08-07-antonios-triantafyllakis-visits#s314683>.

‘We the People’

‘We the People’ is an online petition tool, launched by President Obama’s White House team in 2011, and the first web-enabled petitioning system—despite being live it is not used by the current administration.³⁷ Citizens can create and promote petitions on the website. If more than 100,000 signatures are received within 30 days, the petition is reviewed by policy experts and an official response from the White House is issued. Its aim is to give citizens a direct voice to the White House on issues and concerns that matter most to them. From its creation to 2016, 321 petitions had met the threshold and received a response from the White House.

While the platform’s early popularity indicated increasing levels of civic technology uptake as a potential channel to effect policy changes, the design of the platform had to quickly evolve to accommodate the sheer volume and diversity of feedback. Graeff suggests that the platform could have been more successful if it had delivered a higher response rate to petitions, i.e. responding to a lower signature threshold.³⁸ The need to impose a high signature threshold for responses indicates a lack of capacity to deal with the significant volume of contributions. In addition, the static

³⁷ “We the People”; for a review of We the People and other national e-petitioning systems see Catherine Dumas et al., “What Do the People Think?: E-Petitioning and Policy Decision Making” (Springer, Cham, 2017), 187–207, https://doi.org/10.1007/978-3-319-54142-6_12.

³⁸ Erhardt Graeff, “The Need for Empowerment-Based Design in Civic Technology,” in *The Internet, Policy & Politics Conference* (Oxford, UK, 2018).

nature of the platform and its limited curation were considered as contributors to the site being a “virtual ghost-town.”³⁹

Social Media

From the early influence on e-government, the popularity of social media, such as Facebook and Twitter, has turned these platforms into a venue for political and policy debates.⁴⁰ This is an interesting development as these technologies were designed to optimize revenue (first as freemium—free to join and pay for good features—and later through advertising).⁴¹ It has been noted that the dominance of Silicon Valley’s technology culture creates tensions in using these platforms for public engagement.⁴² Studies examining social media use by municipal elected officials and how it impacts open government community engagement, suggest the presence of manipulation rather than empowerment.⁴³

Issues around political disinformation, ‘fake news’ and ‘echo-chambers’, in platforms like Facebook and Twitter, have been cited as catalysts for an increasing

³⁹ Dave Karpff, “How the White House’s We the People E-Petition Site Became a Virtual Ghost-Town,” TechPresident, 2014, <http://techpresident.com/news/25144/how-white-houses-we-people-e-petition-site-became-virtual-ghost-town>.

⁴⁰ Mergel, “A Framework for Interpreting Social Media Interactions in the Public Sector.”

⁴¹ Personal communication from Justin Longo.

⁴² Graeff, “The Need for Empowerment-Based Design in Civic Technology.”

⁴³ Sarah Stoeckel, “Social Media Usage by Municipal Elected Officials for Open Government Community Engagement,” *Electronic Theses and Dissertations* (University of Central Florida, 2018).

fragmentation of modern democracies.⁴⁴ Whether it is possible for social media to be used by governments in achieving their designed public engagement outcomes is unclear. While the IAP2 considers social media “a central tool for digital public engagement,”⁴⁵ others do not.⁴⁶ In fact, Facebook’s chief executive Mark Zuckerberg’s call for government to focus its attention on harmful content, election integrity, privacy and data portability call into question their suitability for this intended purpose.⁴⁷

These examples (vTaiwan, We the People, social media) show that governments are still learning to engage with the public. So far successes are limited. Although Al Gore unveiled the virtual White House 25 years ago, public digital engagement is a recent phenomenon.⁴⁸ What we have learned is that digital platforms, coupled with automated methods for processing a high volume of contributions, are tools that need to be part of an entire engagement process, anchored by a thoughtful and intentional methodology.

⁴⁴ Ben Roswell and Caroline Allante, “How Software Shapes Democracy,” *Canadian International Council* 66, no. 2 (2018): 1–13.

⁴⁵ Lyons, “Digital Engagement, Social Media & Public Participation.”

⁴⁶ Daniel Halpern and Jennifer Gibbs, “Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression,” *Computers in Human Behavior* 29, no. 3 (2013): 1159–68, <https://doi.org/10.1016/j.chb.2012.10.008>.

⁴⁷ Mike Isaac, “Mark Zuckerberg’s Call to Regulate Facebook, Explained - The New York Times,” *New York Times*, 2019, <https://www.nytimes.com/2019/03/30/technology/mark-zuckerberg-facebook-regulation-explained.html>.

⁴⁸ Justin Longo, “The Day Al Gore Gave Us Whitehouse.Gov,” 2017, <https://jlphd.wordpress.com/2017/10/20/al-gore-gave-us-the-internet/>.

As we move forward, we question what features among existing and possible methods of digital engagement help the quality of engagement. In the next section, we review features of engagement methods and suggest five elements to foster meaningful engagement.

Considerations for Meaningful Public Engagement in the Digital Era

The IAP2 framework is widely used by governments as a guide for public engagement.⁴⁹ This framework developed a public participation spectrum, based on Arnstein's ladder of citizen participation,⁵⁰ which describes the extent of public participation in decision-making across five categories: Inform; consult; involve; collaborate; and empower (see Figure 2). The framework also includes guidance on how governments can act towards these objectives, thereby providing public expectations for government action.

⁴⁹ The IAP2 was founded in 1990 as the International Association of Public Participation Practitioners (IAP3). In 1996 it changed its name to IAP2 to reflect the growing diversity and inclusiveness of membership IAP2 International Federation, "IAP2 Spectrum of Public Participation," 2018, https://cdn.ymaws.com/www.iap2.org/resource/resmgr/pillars/Spectrum_8.5x11_Print.pdf.

⁵⁰ Sherry R. Arnstein, "A Ladder Of Citizen Participation," *Journal of the American Planning Association* 35, no. 4 (1969): 216–24, <https://doi.org/10.1080/01944366908977225>.

Figure 2. IAP2 Spectrum of Public Participation.

As the field evolved, other public engagement models were developed to capture the degree of public inclusivity and the intensity of communicative exchange amongst participants.⁵¹ With the advancement of technology, attention shifted to digital methods for engagement. For example, May and Ross investigated the public's use of a leading civic tech platform, *FixMyTransport*, to understand what makes effective engagement.⁵² The authors identified the following factors that influence public participation:

⁵¹ Fung, "Varieties of Participation in Complex Governance."

⁵² Andrew May and Tracy Ross, "The Design of Civic Technology: Factors That Influence Public Participation and Impact," *Ergonomics* 61, no. 2 (2018): 214–25, <https://doi.org/10.1080/00140139.2017.1349939>.

- User friendly civic technology platforms enable broader participation;
- Data and process complexities need to be removed for greater public understanding;
- Any real-time data captured should be presented in context with their impacts;
- Explicitly eliciting emotions is important for determining customer experience;
- Feedback from stakeholders to contributors should be valued;
- Platforms should aim to make individuals feel integral to a community; and
- Harness the power of communities to bring about positive change.

These insights demonstrate the impact design has on the quality of engagement, and also how complex it is to purposefully foster greater participation. To help us deal with this complexity, and to bridge the gap between detailed user-related prescriptions and traditional engagement frameworks, we put forth five considerations. These thoughts are based on a review of existing literature and discussions among practitioners.⁵³

- On citizen empowerment;
- Time to deliberate;
- Transparency and useful and usable data;
- The aspiration for consensus;
- Dynamic versus static engagement.

⁵³ Discussions were held between authors and in a workshop on May 2nd and 3rd, 2019, at the National Energy Board, in Calgary, with engagement practitioners from the National Energy Board, Privy Council Office, Natural Resources Canada, and Canadian Digital Service.

On Citizen Empowerment

Citizen empowerment can be defined as “where people create or are given opportunities to control their own destiny and influence the decisions that affect their lives.”⁵⁴ Whether we are referring to individuals or communities, there is wide agreement that engagement and a clear sense of the impact on the outcomes are tightly connected. There is also consensus that achieving these outcomes is a challenge.

As an example, Aladalah et. al. observed low levels of citizen participation in Gov2.0.⁵⁵ To understand this lack of appetite to engage, the authors developed a research model premised on the idea that participation is the outcome of citizen empowerment.

Their model is based on four empowerment theory factors:

- *Sense of impact*—the degree to which individuals can influence an outcome;
- *Competence*—the degree to which individuals can perform an activity skillfully;
- *Meaningfulness*—the value and importance of the task or its purpose; and
- *Sense of control*—the degree of choice or autonomy in an activity.

All of which are expected to influence citizen participation in Gov2.0. Empowering experiences allow individuals and groups to participate in their own terms, not

⁵⁴ Marc A. Zimmerman, “Psychological Empowerment: Issues and Illustrations,” *American Journal of Community Psychology* 23, no. 5 (October 1995): 581–99, <https://doi.org/10.1007/BF02506983>.

⁵⁵ Gov2.0 is defined as “The use of social networking platforms, content creation and sharing tools, web logs, and microblogging tools within government organisations and their interactions with citizens.” Mohammed Aladalah, Yen Cheung, and Vincent Lee, “Enabling Citizen Participation in Gov 2.0: An Empowerment Perspective,” *Electronic Journal of E-Government* 13, no. 2 (2015): 77–93.

government's, and promote a virtuous cycle of civic participation, which may itself be a predictor of future engagement.⁵⁶ In contrast to the previous model, the IAP2's Public Participation Spectrum provides a more prescriptive approach and a strict explanation of empowerment.⁵⁷

Considerations

We note that when we apply Aladalah et al.'s empowerment factors to the IAP2's Public Participation Spectrum, citizen empowerment can happen at any time of the journey. For instance, once an individual receives and understands the information provided, they can feel empowered and choose to "not engage." Another example of an empowered citizen, outside of IAP2 "Empower" stage would be when government solicits public feedback on a policy proposition and provides a mechanism by which individuals can voice and observe the impact of their idea (such as provided by Pol.is or direct responses with policy action).

If we follow this logic we can posit that meaningful engagement—where an individual is satisfied with the outcome—is not exclusively tied to a place where the "final decision-making is in the hands of the public," which is the definition of "Empower" in the IAP2 Spectrum. Neither is it tied to getting the exact outcome one promoted in the first place. This is important because if governments equate meaningful with the strict

⁵⁶ Graeff, "The Need for Empowerment-Based Design in Civic Technology."

⁵⁷ IAP2 International Federation, "IAP2 Spectrum of Public Participation."

definition of empowerment on every issue, the implementation challenge would be unsurmountable.

Time to Deliberate

We take the definition of deliberation to be the processes of: “promot[ing] thorough discussion” and the “weighing of reasons for and against propositions presented by others.”⁵⁸ We also take the learnings of patience and trust from the Indigenous Peoples and other nations who rely on oral tradition including storytelling as a foundation for relationship building and experiential learning.⁵⁹

It is hard to define where digital engagement platforms sit regarding deliberation. They have been both hypothesized as ideal for engagement involving deliberation, because of written and asynchronous contributions, to unsuited, because they are impersonal and participants tend to contribute to spaces consistent with their views.⁶⁰ In practice, user experience design (UX design) has delivered both outcomes: increasing and decreasing time to deliberate. UX designers have been “slowing things down” as a way to build trust and increase robustness in the system.⁶¹ For example, the double

⁵⁸ As used in Halpern and Gibbs, “Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression.”

⁵⁹ Sylvia Currie and June Kaminski, “Storytelling,” First Nations Pedagogy Online, accessed July 24, 2019, <https://firstnationspedagogy.ca/storytelling.html>.

⁶⁰ Halpern and Gibbs, “Social Media as a Catalyst for Online Deliberation? Exploring the Affordances of Facebook and YouTube for Political Expression.”

⁶¹ Zoltan Kollin, “Designing Friction For A Better User Experience,” Smashing Magazine, 2018, <https://www.smashingmagazine.com/2018/01/friction-ux-design-tool/>.

authentication in Gmail is a case in point, whereas Amazon 1-Click has the opposite effect on deliberation.

What we do know, however, is that it is increasingly hard to move from the fast pace of our lives to the slow and deliberate space needed to think about complex issues. Thoughtful work, such as necessary for engagement on policies, or impactful decisions, requires time to think.

It seems that by design, civic technology systems and processes do not contribute to slowing down. According to Gordon and Walter they are likely to follow a logic of technological efficiency at the expense of free spaces where citizens can develop their understanding and ideas more organically.⁶²

Considerations

Although much of the public engagement literature refers to deliberation as part of the engagement process, few processes purposely create empty space to allow individuals time to deliberate. Further, to date, the design of digital technology has not focused on creating visual spaces that invite deliberation.

This is where we think we should take a page from the storytelling tradition. According to Archibald, “patience and trust are essential for preparing to listen to stories. Listening involves more than just using the auditory sense. Listening encompasses visualizing the characters and their actions and letting the emotions

⁶² Eric Gordon and Stephen Walter, “Meaningful Inefficiencies : Resisting the Logic of Technological Efficiency in the Design of Civic Systems,” in *The Playful Citizen: Civic Engagement in a Mediatized Culture*, ed. René Glas et al. (Amsterdam, Netherlands: Amsterdam University Press, 2019), 310–334, <https://doi.org/10.1515/9789048535200-019>.

surface. Some say we should listen with three ears: two on our head and one in our heart.”⁶³

We put forth the idea that creating “time to deliberate” in our engagement processes would help all parties, including government, be more open to new ideas.

Transparency and Useful and Usable Data

Transparency in government plays a critical role in functioning democracies as it promotes government accountability, and is a key element for good governance.⁶⁴

Recent open government initiatives, which include guidelines on publicly releasing government data and information by default, wherever possible, have prompted governments to explore new ways of presenting information and communicating with their citizens.⁶⁵

For governments to be successful in public engagement, and for there to be an alignment of government intention with public perception, access to useful and usable information is a must.⁶⁶ While governments at all levels slowly restructure their data and

⁶³ Jo-ann Archibald, “Coyote Learns to Make a Storybasket : The Place of First Nations Stories in Education” (Simon Fraser University, 1997).

⁶⁴ James R. Hollyer, B. Peter Rosendorff, and James Raymond Vreeland, “Democracy and Transparency,” *Journal of Politics* 73, no. 4 (2011): 1191–1205, <https://doi.org/10.1017/S0022381611000880>.

⁶⁵ Annette Hester and Ryan Hum, “How Data Visualization in Government Can Empower Dialogue,” 2019, <https://policyoptions.irpp.org/magazines/february-2019/data-visualization-government-can-empower-dialogue/>.

⁶⁶ Hester and Hum.

create user-friendly systems, the gap is being filled by a growing proliferation of news sources. Often, professional and ‘impartial’ reporting is being superseded by more ‘authentic’ personal narratives and storytelling when assessing for truthfulness.⁶⁷

Another challenge related to high volume of information pertains to governments being able to evaluate a large number of contributions that arise in digital engagement. As we discussed, without proper aggregation of input, as in Pol.is, platforms run the risk of being undereffective.

This overload of available information combined with the difficulty in assessing its trustworthiness adds to the challenge of engaging with the public in this digital era.

Considerations

We started our paper with the issue of trust, and how trust is a central element to cooperation and compliance with governments. One of the determinants of trust is transparency through the provision of useful and usable information—at the start and throughout the engagement process.⁶⁸

Hence, in addition to transparency of content, technologies created for the purpose of public engagement need to include transparency measures of the platform itself, including its capabilities and information on data collected and the implications of these, to sustain public engagement and trust. Issues around data privacy and data, as

⁶⁷ Mona Baker and Bolette Blaagaard, *Citizen Media and Public Spaces : Diverse Expressions of Citizenship and Dissent* (London, UK: Routledge, n.d.).

⁶⁸ Through procedural fairness.

well as ethical considerations in the design of these platforms play an important role towards providing greater public transparency.

We suggest that the quality of information provided by governments to their citizens, which extends beyond content accuracy and quantity to include context and user-friendly formats, play a key role in positive public engagement experiences and help build trust. A step beyond content curation is to design public engagement technologies in a way that includes content with context, across a variety of perspectives.

The Aspiration of Consensus

According to Duhaime's Law Dictionary consensus is “a decision achieved through negotiation whereby a hybrid resolution is arrived on an issue, dispute or disagreement, comprising typically of concessions made by all parties, and to which all parties then subscribe unanimously as an acceptable resolution.”⁶⁹

From the discussion in this paper, although many governments are focused on public engagement, there appears to be a general phenomenon of polarization in society where widely used social media platforms are a significant and contributing factor. The experience of Taiwan, however, points to the potential of achieving some measure of consensus in specific policy issues. According to Audrey Tang, Taiwan's

⁶⁹ “Consensus Definition,” accessed July 24, 2019, <http://www.duhaime.org/LegalDictionary/C/Consensus.aspx>.

digital minister, achieving common ground is driven by access to broadband internet being treated as a human right, so no one is left behind.⁷⁰

Considerations

Expectations of what consensus is possible in polarized societies came up in our discussions. The question of whether meaningful engagement translates into individuals believing that the only acceptable outcome is to have their position be adopted was raised in our discussions. Should that prove to be the case, governments would be in an impossible position. The search for consensus might even be misguided, since there is evidence that individuals are willing to accept legal decisions that they disagree with, as long as the decision process has been inclusive, neutral, respectful, and trustworthy.⁷¹ Another way to reach agreement might be to bring awareness of the trade-offs that are always in front of us. Pol.is does this, by exposing different and shared values back to citizens, during the engagement process.

Audrey Tang points out that Taiwan's digital engagement objectives are better defined by the word "gong shi" (共識) which means "common understanding" in contrast to "consensus" which is a laudable goal and very difficult to reach. Gong shi translates to a rough consensus, or the closest two parties can get to in any given issue, even if

⁷⁰ "Audrey Tang Interview with Kai Strittmatter," Archive.tw - SayIt(blog), accessed July 24, 2019, <https://sayit.pdis.nat.gov.tw/2018-10-17-interview-with-kai-strittmatter#s303710>.

⁷¹ Tom R. Tyler, "Procedural Justice and the Courts," *Court Review: The Journal of the American Judges Association* 44, no. 1/2 (2008): 26–31.

closest means divergent.⁷² Translating this concept to western culture we would say, we agree to disagree and we are still able to move forward constructively.

On Dynamic vs. Static Engagement Frameworks

Methodologies and frameworks, by design, evolve over time. Hence, it is not surprising this has been the case for digital technologies. In the case of governments, once a framework has been adopted, such as the IAP2's Public Participation Spectrum, reconsideration and adaptation to new environments is generally slow and uneven across departments and agencies. This becomes a considerable challenge in the digital era where the speed of change and technological evolution is fast and broad. The gulf between the speed of technological change and the pace of government adoption of dynamic and interactive frameworks merits attention.

Another aspect of dynamic vs. static refers to an individual's relationship to the engagement process, rather than the speed of change of the process. Digital technology allows individuals to come in and out of the engagement process, in contrast to traditional engagement methods that demand a much greater commitment. For instance, writing a letter or attending a meeting requires concentrated effort, in contrast to voting on an idea in a platform such as Pol.is. The fact that digital public engagement will likely include individuals that choose to enter and exit the process at different phases and those who will be committed to the full proceedings add complexity to this scenario.

⁷² "Audrey Tang Interview with Kai Strittmatter."

Considerations

The need to consider the dynamic nature of today's engagement was a recurrent theme in our discussions. At the same time, there was a heightened awareness that governments are expected to consult on very complex issues that demand time to incorporate information, i.e., time to deliberate.

Although we have not been able to distill a definitive way forward that is balanced, at the Canada Energy Regulator (previously National Energy Board) we are experimenting with sharing information through interactive visualizations that are designed to create a visual space for exploration. While this is only one tool, we hope its use generates insights that help us understand where the equilibrium between the speed of technology and the time needed to absorb information lies.

Conclusion

In our research of what leads to meaningful engagement, we found a wide gap between government intentions and engagement outcomes, including public perception, trust, and effective policy making.

New and emerging technologies offer governments the opportunity to scale and enhance public engagement in unprecedented ways. Yet, successes have been limited. Where they exist, they come from an adaptive methodology combined with digital technologies used for the purpose they were designed for. In contrast, many governments use a static engagement framework coupled with social media. The results—such as polarization and mistrust—are clearly contrary to the commitment many governments have made to digital public engagement.

To move the conversation forward, we highlighted five considerations that we think are crucial for successful digital engagement. We hope these ideas provide a basis for future frameworks. Our discussion has opened new questions: What is the relative importance of each of these considerations? How do we measure the presence of each of these concepts (such as transparency or time to deliberate)? Can these considerations be turned into a set of practical prescriptions?

We look forward to your thoughts.

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