

## Assessing the Rise of Dedicated Digital Engagement Platforms for Local Planning

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### Résumé de l'article

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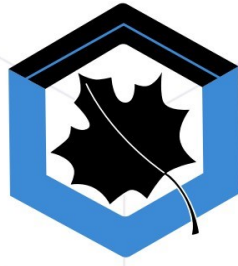


# Technology and the City

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**CANADIAN PLANNING  
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# Assessing the Rise of Dedicated Digital Engagement Platforms for Local Planning

Morgan Boyco<sup>a</sup> 

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## Abstract

Digitally mediated participation in planning processes has grown significantly. In an emergent digital turn for participatory planning scholarship, there is a growing body of research attempting to trace this growth and grapple with its implications. This paper explores how planning scholars and practitioners can deepen their critical stance toward digital modes of participatory planning. In Canada, this approach becomes especially important given the recent and widespread adoption of a specific digital platform type used to support participatory decision-making at the municipal level. Across the country, many towns and cities have embraced what I call Dedicated Digital Engagement Platforms (DDEPs). Despite their growing influence, these platforms for community involvement have not been previously quantified at a nation-wide level, nor thoroughly examined in planning scholarship. New evidence presented here defines DDEPs and documents the extent of their use by local and regional municipalities across Canada. In light of the growing prominence of these platforms, this article then provides the foundation for a more critical digital participation research agenda that draws on important debates in wider planning theory regarding democratic decision-making, the commercialization of deliberative democracy, and the platformization of public participation.

## Résumé

La participation par voie numérique aux processus d'aménagement a augmenté considérablement. Dans le contexte d'un tournant numérique émergent pour le savoir en matière d'aménagement participatif, il y a un nombre croissant de recherches tentant de tracer cette augmentation et de s'attaquer à ses implications. Cet article explore comment les chercheurs et praticiens en aménagement peuvent approfondir leur position critique par rapport aux modes numériques d'aménagement participatif. Au Canada, cette approche devient particulièrement importante compte tenu de l'adoption récente et répandue d'un type spécifique de plateforme numérique utilisée pour soutenir la prise de décision participative au niveau municipal. À travers le pays, de nombreuses villes et villages ont adopté ce que j'appelle des plateformes d'engagement numérique dédiées (DDEP). Malgré leur influence croissante, ces plateformes de participation communautaire n'ont pas encore été quantifiées à l'échelle nationale ni examinées de manière approfondie dans le savoir de l'aménagement. Les nouvelles preuves présentées ici définissent les DDEP et documentent l'étendue de leur utilisation par les municipalités locales et régionales à travers le Canada. En tenant en compte l'importance croissante de ces plateformes, cet article fournit ensuite la base pour un agenda de recherche en participation numérique plus critique qui s'appuie sur des débats importants dans la théorie de l'aménagement concernant la prise de décision démocratique, la commercialisation de la démocratie délibérative et la plateforme de la participation publique.

## Keywords:

public participation, digital engagement, platformization, municipal planning

## Mots-clés:

participation publique, engagement numérique, plateforme, aménagement municipal

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## Introduction

In planning, digital spaces are taking an increasingly prominent role in participatory process, particularly since the COVID-19 pandemic when much in-person engagement had been forced into the socially-distanced realm of the virtual public sphere (Einstein et al., 2022; Milz & Gervich, 2021; Robinson & Johnson, 2021). For some, hope lies in the increasing power and ubiquity of web-based technologies and their potential to improve participatory decision-making, especially over the deficient in-person processes characterizing the politics and participation of old (Åström & Grönlund, 2012; Kennedy et al., 2021). In local planning and urban design processes, new digital participatory tools hold the promise, or at least potential, to support more inclusive and democratic decision-making. Indeed, across Canada, as this paper will demonstrate, municipalities have rapidly adopted a new category of digital platform that claims to advance the goals of deliberative democracy.

While scholars and practitioners have been taking note of the increasing digitization of public participation for several years, experimenting with new forms of online community engagement and assessing the risks and rewards, digital participation systems for urban and regional planning have been described as “still novel” (Hofmann et al., 2019). And as Elstub et al. (2021) note, “despite recent developments, online deliberation research is still in its infancy” (p. 240). Calls persist for more empirical examination of the use of digital participatory tools in context (Cho et al., 2021; Wilson & Tewdwr-Jones, 2022) and for more integration of these studies with planning theory (Potts, 2020). This paper responds to these calls for both more empirical evidence chronicling digital participatory approaches in local planning as well as a deeper engagement with planning theory in our examinations of digital engagement.

Beginning with a review of digital participatory planning literature, I make the case that the nascent digital turn in planning scholarship is overly focused on functionality and practical implementation questions for digital participatory technologies. Evaluative metrics and any theoretical framing, where it exists, are most often arranged around how these tools can help achieve the deliberative democratic goals of participatory planning. As this paper will demonstrate, digital participatory planning has not been fully drawn into the productive debates around theories of participation for democratic planning.

Following the literature review, I present new empirical evidence chronicling the digitization of democracy through the uptake of what I term Dedicated Digital Engagement Platforms (DDEPs) at the local level. These platforms, a sub-set of what are referred to as Online Participatory Technologies in planning literature, are purpose-built multifunctional online hubs that consolidate multiple participatory projects across a municipality into one interactive digital engagement webpage. An emergent category of digital participatory software, DDEPs are increasingly shaping local planning processes across this country and elsewhere but have received little dedicated attention in planning scholarship. My findings indicate that a majority of Canadians reside within a local or regional government jurisdiction that uses a DDEP, with the bulk of these communities relying on a single commercial software provider, highlighting an ongoing consolidation of this platformization.

The widespread use of the DDEP platform type and the consolidation around a single commercial software provider provides a strong prima facie justification for a more detailed and critical examination of this phenomenon. In other words, while the extent of DDEP uptake in Canada indicates the platform’s importance, it also warrants a closer, more critical examination to fully understand



its implications. Indeed, the very nature and extent of DDEP uptake demands a more critical stance than the one offered by much digital participatory planning scholarship to date. I argue that to critically examine the deliberative claims and participatory planning impacts of digital platforms, we should be deepening our critical stance toward such technologies as practitioners and in our empirical research programs.

In the discussion, I draw on three areas of scholarship that offer important referential frames for examining the use of these participatory platforms in context: consideration of the platformization of public participation, the commercialization of deliberative democracy, and critiques of communicative planning. Taken together, these provide the foundation for a robust digital participation research agenda. The critical strands of theory pulled together in this paper also have practical implications for the practicing planner who is interacting with or deploying DDEPs in their local planning work. These implications are presented in the final section as a series of questions and reflections for planners and public engagement professionals involved in digital participatory planning.

### **Platforms for the Public Good and The Digitization of Communicative Planning**

Following a brief period of optimism that the internet would help save our troubled democracies (Rheingold, 1993), the equivocal role of web platforms in politics in both authoritarian and non-authoritarian societies has become widely recognized (Tucker et al., 2017). With some of the most pointed critiques arriving recently on a cresting wave of “techlash” (Botsman, 2018), the “toxic hellscape” (Phillips, 2020) of the internet and its capitalistic platforms have now been blamed for imperiling democracy itself in numerous insidious

ways (Hindman, 2018; Sadowski, 2020; Vaidhyathan, 2018; Zuboff, 2019). But standing in contrast to the rest of the contemporary internet “trash fire” (Nakamura, 2019), some have highlighted the opportunities afforded by what can be labelled “civic tech”, which broadly refers to “the use of technology for the public good” (Stempeck et al., 2016). This expanding ecosystem of technology-based innovations built specifically for promoting positive civic outcomes includes web-based tools aimed at deepening democracy. Online, the civic tech space is made up of several converging fields, processes, and supportive technology products, including those related to government data and data collection, community organizing, crowdfunding, peer-to-peer sharing, and social networks (Patel et al., 2013). While there is much fuzziness in the definition of civic tech across the literature, I adopt the somewhat focused description provided by Gilman (2017) that centres democratic institutions and processes: civic tech is “technology that is explicitly leveraged to increase and deepen democratic participation” (pg. 745). This can include technologies developed by for-profit entities as well as publicly-funded projects—any innovations focused on collaborative and inclusive governance.

There are several stated or hoped-for benefits of civic tech for democracy. Gilman and Peixoto (2019), working with a framework developed by Smith (2009) for evaluating democratic innovations, outline four key democratic goods that civic tech has promised to deliver: inclusiveness (lowering barriers to participation and enabling a broader range of people to participate), popular control (providing everyday people with the information and entryways needed to influence decisions that affect them), considered judgement (emphasizing rational dialogue), and transparency (ensuring information and rules for dialogue are clearly presented to all participants). These democratic goods closely reflect principles of deliberative democracy, defined by

Bohman (1998) as “any one of a family of views according to which the public deliberation of free and equal citizens is the core of legitimate political decision-making and self-government” (p. 401). Deliberative democracy is an approach that has become “the predominant framework in normative democratic theory” (Talisie, 2017, p. 108) and the “main game” in democratic practice (Curato et al., 2018, p. 2). And in scholarship on democracy and the internet, some deliberative theorists have arrived at a measured hope that civic tech can diverge from the big tech platforms and the toxic conflagrations of social media and address, rather than exacerbate, some recognized challenges of achieving a more deliberative democracy, even if they would not be a panacea (e.g., Gastil, 2021; Zhang et al., 2021).

One component of the deliberative civic tech ecosystem includes what Brabham and Guth (2017) refer to as “consultative layer” solutions—technologies that “provide a bridge or infrastructure for communication between citizens and government...typically for the sake of public consultation on government decisions, such as policies or urban plans” (p. 446). In planning scholarship, these are often referred to as Online Participatory Technologies (OPTs). Some digital participatory planning scholars bucket OPTs into two broad categories: those that were not specifically designed for public engagement in participatory planning processes but can be used for such ends (e.g., Facebook, Twitter, Nextdoor), and those civic tech tools purpose-built for advancing participation and the public good (Afzalan et al., 2017; Fredericks & Foth, 2013). While OPTs have vastly expanded the potential opportunities for community members to engage with planning, how well these developments address the well-known obstacles to public participation has been the subject of some study (Afzalan & Muller, 2018; Gün et al., 2020; Johnson et al., 2020). In particular, planners have noted numerous and varied challenges of utilizing

the first type of OPTs—those not explicitly designed for public participation—especially the attempted use of dominant social media platforms for collaborative decision-making (Afzalan & Muller, 2014; Kleinhans et al., 2015; Lin, 2022; Mattila & Nummi, 2022; Robinson & DeRuyter, 2016). But many participative planning practitioners have embraced the advent of the second OPT type—purpose-built civic tech—heralding a “new generation” (Evans-Cowley & Hollander, 2010) of public participation as the “supply side” of digital engagement software options has expanded significantly in recent years (Afzalan & Muller, 2018; Afzalan et al., 2017; Le Blanc, 2020).

Much of the planning literature examining OPTs focuses on describing the tech and suggesting various ways for how to better use or design the tools to optimize participatory process and take advantage of their advertised benefits (e.g., Afzalan & Muller, 2018; Glaas et al., 2020). Online participatory tools and their capabilities are catalogued (Afzalan et al., 2017; Ertiö, 2015), and functionality is probed (Hjerpe et al., 2018), while the more transformative claims are tempered (Levenda et al., 2020; Sieber et al., 2016), and practical challenges are outlined (Robinson & DeRuyter, 2016). While still an emergent area of study, a preponderance of the literature in planning that does examine digital participatory process is focused on these sorts of pros, cons, practical guidelines, and keeping pace with the latest technological developments. And in many accounts (e.g., Afzalan & Muller, 2018; Hofmann et al., 2019), effectiveness in achieving participation goals is evaluated against the normative principles of the dominant approach to democratic theory and conceptions of participatory planning—deliberative democracy and its planning correlate, communicative planning theory.

Over the past 30 years or more, communicative planning, rooted in deliberative democratic theory, has become the dominant approach to how planning



is both taught and enacted (Allmendinger & Haughton, 2012; Tewdwr-Jones & Allmendinger, 1998). Communicative planning asserts that through collaborative and consensus-based dialogue processes that incorporate different voices as well as emancipatory knowledge, we can come up with just planning solutions and best approximate the public interest. What Healey (1992) described as the communicative turn in planning theory has gone on to inspire significant change in the practice generally (Carr, 2012; Legacy, 2023), as well as in digital participatory practice and scholarship specifically. Indeed, the communicative turn that has occurred alongside the evolution of participative internet technologies has come to define how many researchers and practitioners approach digital participatory planning.

Much of the writing in this digital participatory planning space offers planning practitioners helpful and practical recommendations for selecting and deploying various OPTs based on their abilities to support communicative practice or more deliberative processes. Researchers are often describing technical capabilities, explore opportunities associated with digital tools, and highlight challenges to successful adoption from the communicative planning perspective (Afzalan et al., 2017; Åström & Grönlund, 2012). For instance, empirical work assessing the use of digital participatory platforms in practice often utilize communicative planning and deliberative democracy markers, such as the importance of rational public discourse, collaborative process, inclusive dialogue, and consensus-building, as foundations for their evaluation. Gower et al. (2023), for example, explicitly link their assessment of an emerging digital participatory tool to communicative planning theory. Lin and Benneker (2022) develop a conceptual framework based on communicative planning principles for assessing a mobile digital engagement app (for other examples, see also: Fredericks & Foth, 2013; Glaas et al., 2020;

Hjerpe et al., 2018; Levenda et al., 2020; Schulz & Newig, 2015; van der Does & Bos, 2021). And of the more planning theory-oriented works that critically examine the role of OPTs, many scholars have taken communicative planning theory, deliberation, and consensus, either implicitly or explicitly, as the foundational starting point of analysis, and both the means and ends of digital participation (Afzalan & Muller, 2018; Ertiö, 2015; Hofmann et al., 2019; Mattila & Nummi, 2022). For instance, Afzalan et al. (2017) state that participatory planning theories that are informed by communicative rationality (Habermas, 1984) should provide the normative insights to help us understand the role of OPTs and guide the adoption or selection of appropriate tools.

In sum, many planning scholars engaged in examinations of digital civic engagement focus on functionality and implementation questions for digital tools. And in any evaluative or theoretical framing, digital participatory planning scholarship often takes the deliberative conception of democracy as a given and builds from its corollary of communicative planning theory. While the adoption of the dominant approach to participatory planning for our investigations of digital participation might seem obvious and benign, communicative planning and deliberative procedures themselves are subject to much debate in wider planning and democratic theory. In the wholesale adoption of communicative planning theory, digital participatory planning is missing these important debates and perhaps occluding a fulsome view of these platforms and their impacts. With little interwoven critique of communicative planning itself, there is a dearth of scholarship examining whether and how digital tools might replicate or exacerbate the deficiencies of deliberative participative approaches that have been identified in broader planning theory and in other areas of scholarship. Furthermore, the social and democratic impacts of digital platform arrangements themselves are not always thoroughly examined in



participatory planning literature. I argue that a deepened critical scholarship around digital participation is especially important in light of the digital platformization and a consolidation of online public participation occurring in many Canadian towns and cities, described in the following section.

### **Dedicated Digital Engagement Platforms: The Platformization of Participation in Canada**

One example of civic tech that has received limited empirical attention and that by its nature demands that deepened critical scholarship are the subset of OPTs that I label Dedicated Digital Engagement Platforms. As this section will establish, this unique platform type has seen recent, rapid, and widespread adoption at the municipal government level in Canada.

I define Dedicated Digital Engagement Platforms as purpose-built civic technology explicitly designed to support public participation and collaboration through an easy-to-deploy web-based content management system intended to act as a hub to house multiple participatory projects, serviced by multiple digital participatory tools, all within one platform. They are usually designed to allow administrators with no web coding expertise to launch multiple engagement projects and administer the site. These tools are wholly distinct from social media platforms, such as Facebook and X (Twitter), or more general website builders and content management systems, such as Wordpress or Squarespace. Usually offered through a subscription-based Software as a Service (SaaS) model that is centrally hosted and proprietary (although some open-source examples do exist), DDEPs in Canada are primarily deployed by governments to support democratic decision making. They appear most often at the local government level, although they are also used by provincial and federal ministries and

agencies, school boards, health authorities, and Indigenous communities. Private sector actors also deploy DDEPs to solicit feedback directly from citizens on their proposals.

DDEPs can be understood as a sub-type of what Robinson and Johnson (2023) describe as “convenor platforms,” which are “a platform urbanism tool that serves as a service and access intermediary between governments and their residents” (p. 76) (also described by Falco and Kleinhans [2018] as “digital participatory platforms”). What distinguishes DDEPs from these broader platform categories, however, is how they are advertised and promoted to municipalities as offering the ability to manage entire digital engagement processes, across multiple projects, providing residents with a single access point for all engagement opportunities in their local community. DDEP platform, PublicInput, for instance, promises a “community engagement platform that solves every dimension of your public engagement process” (PublicInput, n.d.).

Functionalities of DDEPs are bundled together and can include project information homepages; document and multimedia sharing; surveys and polls; discussion forums; collective idea and solution generation; storytelling spaces; collaborative mapping; participatory budgeting; synchronous virtual meeting spaces; participant databases and contact management; e-newsletters; analytics and reporting; 24/7 human moderation; and, increasingly, AI-driven insights, such as feedback and sentiment analysis or computer-assisted content moderation. These “Have Your Say” web pages provision the planner, proponent, or government authority with an entire suite of digital tools necessary to augment and extend more traditional in-person engagement techniques and conduct online dialogues (see Figure 1).

For this research, I examined the adoption of DDEPs, as I have defined them, for all local and

Figure 1. Screenshot of “Engage Ottawa” Dedicated Digital Engagement Platform Built Using EngagementHQ



regional governments across Canada serving populations over 5,000 (local municipalities are the cities, towns, villages, townships, rural municipalities, or other types of local government entities; regional municipalities, where they exist, are groupings of

neighbouring municipalities created by the provinces and territories for purposes like regional planning, managing shared services, and implementing various provincial policies). This sample included 149 regional municipalities and 690 local municipalities

**Table 1.** Dedicated Digital Engagement Platforms Used in Canada

Platform Name	Company Description	Number of Instances in Local and Regional Municipalities Over 5,000 Population
EngagementHQ	Founded in 2007 by software company Bang the Table in Australia; acquired in 2021 by US-based government technology provider Granicus	211
Social Pinpoint	Recently merged with another DDEP, The HiVE, and part of Australia-based MySite; Social Pinpoint also recently acquired MetroQuest, a longstanding British Columbia-based digital survey platform	9
Cocoriko	Quebec-based software; only used in Quebec in this sample	7
V+	Quebec-based software; only used in Quebec in this sample	5
Pando	Quebec-based software; only used in Quebec in this sample	5
PlaceSpeak	Vancouver-based	5
Zencity	Israel-based; recently acquired Canadian DDEP platform, Civil Space	3
ArcGIS Hub	Developed by American multinational GIS software company, Esri	1
CiviKit	Developed by Upanup, digital solutions provider based in Victoria, British Columbia	1
Other	Various custom-built solutions	9

across the country. Using Google search, I navigated to and recorded all official local and regional government website URLs for all 839 of these communities included in the sample and searched those websites for links or references to any Dedicated Digital Engagement Platform being used by the government authority for public participation. Where I could find no obvious link to a DDEP through the government website, I also conducted Google searches using search terms such as “[municipality name] public engagement”, “[municipality name] have your say”, or “[municipality name] [platform name]”. I also used similar search terms in French for municipalities in Quebec. Finally, I utilized the web technology profiling tool BuiltWith to search for additional engagement platform use across Canada that I might have missed. Municipalities that appeared to be using the platform as an engagement hub for multiple projects, rather than as a one-off for a single project, were included in the final count of DDEP users. All 839 communities were profiled in this way between March 4-12, 2023. Since that initial comprehensive

review, some records have been updated based on new results reported by BuiltWith up to September 4, 2023.

My review of local and regional governments across Canada indicates that adoption of DDEPs is widespread. Of the 839 jurisdictions analyzed, over 30% (256) are using one of 9 DDEP software providers, with a small handful of communities (9) using custom-built engagement hubs. Platforms in use in Canada are summarized in [Table 1](#).

DDEPs are more common at the local government level (over 33% of local municipalities sampled) compared to the regional government level (about 19% of regional municipalities sampled). However, nearly all local municipalities with over 250,000 residents across Canada utilize a DDEP for digital community participation, with the sole exceptions of Longueuil, Quebec, and Toronto, Ontario. (While Toronto has employed DDEPs for individual projects, it has not adopted a city-wide digital engagement hub for all projects and departments, and so was not included as a DDEP

**Table 2.** All Canadian Cities Over 250,000 Population and DDEP Use

City Name	Province	City Population (2021)	DDEP Platform
Toronto	Ontario	2,794,356	None
Montréal	Quebec	1,762,949	EngagementHQ
Calgary	Alberta	1,306,784	Social Pinpoint
Ottawa	Ontario	1,017,449	EngagementHQ
Edmonton	Alberta	1,010,899	EngagementHQ
Winnipeg	Manitoba	749,607	EngagementHQ
Mississauga	Ontario	717,961	EngagementHQ
Vancouver	British Columbia	662,248	EngagementHQ
Brampton	Ontario	656,480	EngagementHQ
Hamilton	Ontario	569,353	EngagementHQ
Surrey	British Columbia	568,322	EngagementHQ
Québec	Quebec	549,459	EngagementHQ
Halifax	Nova Scotia	439,819	EngagementHQ
Laval	Quebec	438,366	EngagementHQ
London	Ontario	422,324	EngagementHQ
Markham	Ontario	338,503	EngagementHQ
Vaughan	Ontario	323,103	EngagementHQ
Gatineau	Quebec	291,041	Cocoriko
Saskatoon	Saskatchewan	266,141	Custom
Kitchener	Ontario	256,885	EngagementHQ
Longueuil	Quebec	254,483	None

user by the definition created here.) Sixteen of those nineteen larger urban centres utilize EngagementHQ (see Table 2). DDEP adoption levels are highest in British Columbia (approximately 60% of that province's records) and lowest in Manitoba where only two out of the 31 communities included in the study use dedicated participatory platforms (see Table 3 for a full summary). With the exceptions of Toronto and Iqaluit, every provincial and territorial capital city utilizes a DDEP, most using EngagementHQ.

When roughly calculating the population numbers contained within all local and regional municipalities that have adopted a DDEP, my research indicates that digital access to participation

in municipal decision-making processes for the majority of Canadians is now mediated by a single platform provider. Of the local or regional governments included in this study that use a DDEP, over 82% (211 of 256 records) are using EngagementHQ (see Figure 2). In all, considering the list of municipalities in this dataset, roughly two-thirds of Canada's total population resides within a jurisdiction that uses a DDEP, with the vast majority of those accessing online engagement opportunities with their local and/or regional government through EngagementHQ.

Like many OPTs generally (Afzalan et al., 2017), these DDEPs that are sold to municipal governments in Canada are meant to give digital structure and

**Table 3.** Local and Regional Municipalities Sampled (Over 5,000 Population) and DDEP Instances

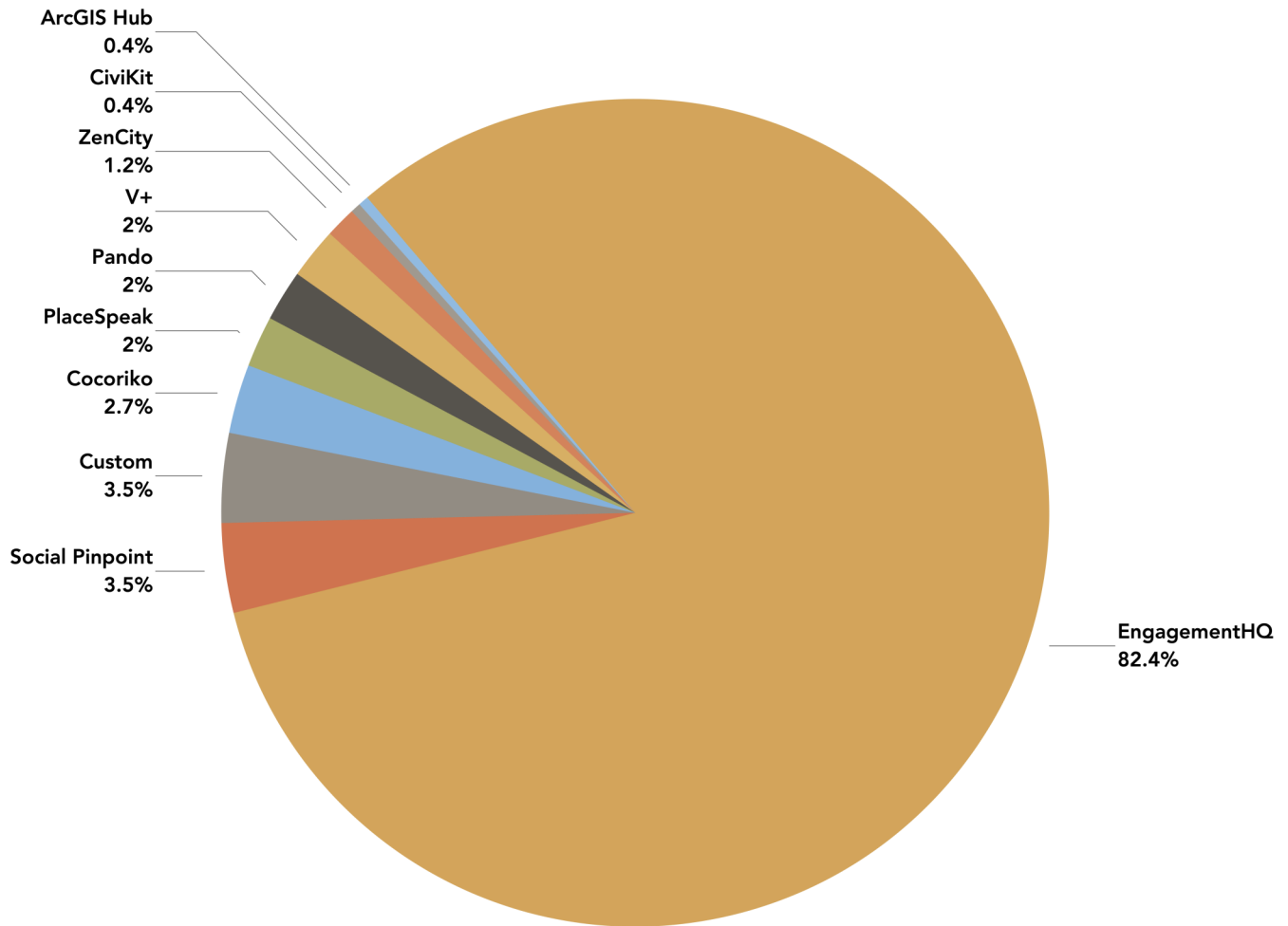
Province/ Territory	Total Local Municipalities Sampled	Count of Local DDEP Use/ Percentage of Total	Total Regional Municipalities Sampled	Count of Regional DDEP Use/ Percentage of Total	Totals
Newfoundland & Labrador	15	2 (13%)	-	-	2
Prince Edward Island	5	1 (20%)	-	-	1
Nova Scotia	19	6 (32%)	12	1 (8%)	7
New Brunswick	19	5 (26%)	-	-	5
Quebec	187	34 (18%)	81	3 (4%)	37
Ontario	228	90 (39%)	30	10 (33%)	100
Manitoba	31	2 (6%)	-	-	2
Saskatchewan	16	5 (31%)	-	-	5
Alberta	86	30 (35%)	-	-	30
British Columbia	81	50 (62%)	26	15 (58%)	65
Yukon	1	1 (100%)	-	-	1
Northwest Territories	1	1 (100%)	-	-	1
Nunavut	1	-	-	-	-
<b>Totals:</b>	690	227 (33%)	149	29 (19%)	256

expression to the normative deliberative democracy framework. According to their own promotional literature, DDEPs are part of a new generation of online participatory tools that aspire to create an internet space that embodies the virtues of deliberative democracy. And as Brabham and Guth (2017) have uncovered in their investigations of these and other consultative layer platforms, founders and designers of this type of civic tech inject particular normative ideals of democracy into their products—namely, the predominant ideals of a deliberative conception of democracy. DDEPs specifically, I have found, hold promise for the communicative planner in their potential to deepen and extend rational and deliberative civic participation in planning and policymaking processes—all through one web portal. Social Pinpoint commits to “[e]nsuring your community has a positive and productive place to engage in deliberative dialogue” (Social Pinpoint, n.d.). PlaceSpeak provides space for “deliberation without the pressures of time or peers that often results in simple and heated in person

discussions” (Artibise, n.d.). And coupled with careful engagement planning, DDEP platform, The HiVE (now part of Social Pinpoint), had claimed that it “is more than capable of supporting and enabling deliberative processes” (Lobo-Pulo, 2020).

EngagementHQ, in particular, purports to offer planners and communities a tool for “deliberative dialogue” (Butteriss et al., 2020; Crozier & Hussey, 2022), drawing a distinction with social media. EngagementHQ can “spur civil debate” and “inspire deliberative dialogue” in part by “[taking] the conversation off of social media” (Granicus, 2021). The platform is offered as a solution to the limitations of social media as a community engagement tool, which is “not a place for effective community engagement.” Instead, its dedicated community engagement platform solves these issues, creating “a safe space for two-way dialogue between local leaders and stakeholders to brainstorm ideas, gather quantitative community data, and analyze the information quickly” (Granicus, n.d.-b).

**Figure 2.** Dedicated Digital Engagement Platforms Adopted by Local and Regional Municipalities Over 5,000 Population



The growing influence of these platforms, the deliberative democratic claims they make, and the consolidation of digital participation around DDEPs and a single commercial provider at the local government level behooves planning researchers and

practitioners to expand our typical approach to digital participatory planning outlined in the previous section. However, there is little scholarly research on the DDEP software type and no studies I could uncover that examine EngagementHQ, the most

prominent platform in Canada, specifically. Considering the promises of these platforms and the nature of their adoption as I have outlined here, I believe there are three areas of scholarship that offer additional critical reflections that will help round out any future examinations of DDEP adoption for local planning.

### **Platformization, Professionalization, and Communicative Critiques: Crucial Questions for the Era of Platform Participation**

The Dedicated Digital Engagement Platforms that I have identified as prominent in Canada have become an important part of the civic tech ecosystem that aims to deepen democracy and extend deliberative involvement in municipal decision making. Considering that growing prominence, the ways in which these new digital intermediaries in democratic process are likely reworking participatory planning and refracting the relationship between planners and community members warrants critical attention from planning scholarship. What sort of critical attention does the nature of DDEP proliferation warrant? As I have outlined earlier, much of what is written about technology-enabled participatory planning takes the deliberative conception of democracy as a given and builds from its corollary of communicative planning theory. But as Brabham & Guth (2017) have highlighted in their discussion of consultative civic tech generally, “[c]ontracting with the consultative layer without critical reflection may normalize particular visions of democratic communication embedded in the technology platforms it produces” (p. 446). While several researchers have evaluated various digital engagement technologies against the objectives of furthering deliberative democracy, very little research explores how participatory platforms might extend and exacerbate the limitations of this dominant approach to democratic decision-making—limitations that are

being thoroughly debated and are well-recognized in wider planning and democratic theory.

In this discussion, I urge those deeper investigations of DDEPs that go beyond the template set by much of digital participatory planning research to-date. A deepening of our critical stance as both practitioners considering the use of DDEPs and scholars investigating their impacts would mean moving beyond cataloguing features and functionalities and beyond evaluations centred solely on communicative planning conceptualizations of participation. In this discussion, I will draw attention to some additional helpful frameworks that will push researchers and practitioners to reflect in other ways about the emergence and influence of DDEPs. These important critical perspectives have implications for local planners by generating new questions for those working with or deploying DDEPs. The three areas of scholarship I will highlight here—platformization, the professionalization of participation, and an application of agonistic critiques of deliberative democracy to digital participation—bring additional nuance, widening the digital turn already underway in participatory planning theory and practice.

#### **Platformization**

Granicus (n.d.-a) describes EngagementHQ as, “An all-in-one digital community engagement platform that helps you balance everything your community needs to be engaged.” But what exactly is a “platform” and how can we think about their impacts? Internet scholarship examining platforms and platformization is the first area of critical theory that can generate important questions about the increasing prominence of DDEPs. Poell et al. (2019) define platforms as “(re-)programmable digital infrastructures that facilitate and shape personalised interactions among end-users and complementors, organised through the systematic collection, algorithmic processing, monetisation, and circulation



of data” (p. 3). A common example of end-users and complementors would be you as an end-user purchasing a handy new to-do list app from a third-party developer (a complementor) through your mobile phone’s app store (the app store itself being the platform, owned and operated by the platform owner, such as Apple or Google). Or a host (a complementor) creates a listing page and rents out their apartment to a tourist (end-user) through AirBnB (the platform owner). These are multi-sided markets in which much of the value creation for the platform is occurring outside of the platform owner by these complementors, which has allowed platform businesses to scale so rapidly (Parker et al., 2016).

In the circumstances under study here, end-users could be understood as the community members offering their feedback on planning issues and interacting on the DDEP. Complementors are the local governments who are operating their engagement initiatives on the platform they have licensed (they are also the platform owner’s clients). The platform owners (Granicus, Social Pinpoint, etc.) create and license the platform and define the “platform boundary resources” and “platform affordances”—the platform’s tools that define technical access to the platform, terms and rules that govern its use, and the features that shape and dictate user-complementor interaction.

But platforms are so much more than a technical construct or a business model. The term “platform” is also deployed by software companies as a discursive construct, one that implies an openness and neutrality invoked in a way that elides or obscures a tension between neutrally serving communities and the business imperatives that guide the platform company (Gillespie, 2010). Platforms are also a growing piece of societal infrastructure, but one that is entangled with an opaque “corporate-computational infrastructure” (Pierson, 2021, p. 1). As Poell et al. (2019) go on to describe,

platformization refers to “the penetration of the infrastructures, economic processes, and governmental frameworks of platforms in different economic sectors and spheres of life” and a process that sees “the reorganisation of cultural practices and imaginations around platforms” (p. 5-6). They have, as van Dijck et al. (2018) assert, “penetrated the heart of societies.” Platforms, they argue, “do not reflect the social: they produce the social structures we live in” (p. 2). The platform is more mediator than intermediary, “because it shapes sociocultural performance rather than merely facilitating tools” (Andersson Schwarz, 2017, p. 377). The ways in which the platform business model is transforming and governing the economy and many facets of public and private life extends to democratic processes and key aspects of urban life as well—a process or state of affairs also under study in the burgeoning field of “platform urbanism” (Barns, 2020).

These perspectives should prompt planners to reflect upon and work to understand both the positive and limiting affordances that shape platform use and thereby dictate the format, depth, and extent of democratic process taking place thereon. Through its rules, terms of use, technical capabilities, templates, defaults, and setup, all of which limit its use and modification, how does a DDEP delimit or pattern democratic interaction? Despite its modularity and somewhat autonomous deployment of the platform by its government complementor, boundaries and affordances ultimately bracket participation. There is a risk that a measure of technological determinism of DDEPs will shape and limit the structure of local democratic processes. Planners also need to consider how “proprietary opacities” of platforms (Mackenzie, 2019)—under-the-hood proprietary code that determines how the platform functions—could shape what community members can say, how they can participate, who can participate, and who will be heard. In one example,



as Robinson and Johnson (2023) have found, platforms for public participation appear to be positioned “towards more limited, unitized forms of participation” (p. 74).

Furthermore, while the platforms themselves may be promoted to enable bottom-up participation from community members, implementation in all the cases recorded for this study are inherently top-down—the local or regional municipal government is the platform licensee and administrator, dictating which projects they will consult with the community on via the platform and which tools and depth of participation will be enabled. With plug-and-play standardized tools for democratic participation, dictated by platform affordances as well as structured top-down by government implementors, could there be misalignment with local contextual realities or the democratic desires of the community? While platformized participation allows for rapid and easy deployment of engagement projects (and efficient and assumingly more profitable service delivery by platform providers), what is the trade-off between the use of standard tools and context-sensitive engagement design? Or as Ghose and Johnson (2020) ask, if “Smart City” projects are opening up new channels of public participation, are other existing channels being simultaneously closed off?

Governments and planners utilizing the more popular DDEPs in Canada should also be considering the implications of these affordances being created by third-party for-profit software developers. What happens when a singular platform becomes an essential piece of the infrastructure of democracy in the local communities of so many Canadians? What is the effect of proprietary algorithms potentially moderating democratic debate online or processing input from participants? What are the ethical obligations of planners to understand and disclose this automation (Robinson, 2022)? And in addition to concerns about data privacy when

using commercial software tools, what are the impacts on an engagement process when data quantity is privileged over data quality (Robinson & Johnson, 2023)? As Wilson and Chakraborty (2019) urge, discussions about the benefits for community members of new technologies deployed to support public service delivery cannot be an afterthought: “Which technologies are deployed, what types of data collected, and who has access to those data are all fundamentally important questions that determine to whom the potential benefits of Smart City development are distributed” (p. 42-3). The platformization perspective challenges planners to critically reflect on how platforms like DDEPs both expand and constrain participatory practice and to consider the likely beneficiaries and the potential unintended consequences.

### Professionalization

Examinations of the professionalization of public participation is another relevant area of scholarship that raises important questions for practicing planners and could be linked to critical analysis of DDEP proliferation. In some parallels with the platformization literature, professionalization research draws attention to similar market forces and logics of standardization, consolidation, interoperability, and efficiency, and their impacts on participatory planning. As Lee (2015) has established, public engagement can now be considered an entire “industry.” The field has become a large, professionally-serviced ecosystem comprised of various for-profit and non-profit actors who are paid to supply public engagement facilitation services and products (Lee, 2015). This ecosystem includes the sale of deliberative solutions and the marketing of specialized public engagement consultants to clients, including public sector managers (Hendriks & Carson, 2008; Lee & Romano, 2013). Increasingly, the deliberative industry as it intersects with participatory planning is



defined and legitimized by its own standards and credentialing systems (Barry & Legacy, 2023). And it is an industry that is not only responding to market demands for deliberative solutions, but in some cases can be a driving force in the ongoing participatory turn in local government (Mazeaud & Nonjon, 2020). I would situate DDEPs as one of the deliberative commercial goods developed and sold as part of this “market of participation” (Hendriks & Carson, 2008; Lee, 2015; Mazeaud & Nonjon, 2020).

There are several implications associated with the commercialization of deliberative democratic ideals and the professionalization of participation. It is a complicated field wherein the public participation professional is working not only on behalf of the sponsor of the engagement process (the paying client), but also, purportedly, in the interests of citizens involved and on behalf of democratic values more generally (Bherer et al., 2017). The professionals involved are often well aware of the tensions associated with the professionalization of public participation (Lee, 2015). However, there are risks that the “expertise” required in professionally administered community engagement processes can be used to shield the process itself or the outcomes from critique. Public deliberation and the “channeling” of participation into approved processes can become “a technique to manage stakeholder disillusionment and unrest” (Lee & Romano, 2013, p. 735). For instance, as a case study by Lederman (2019) of an expert-driven engagement process found, the “performance” of participatory planning can be “deeply constrained by rules set from on high” and that “analyses of participation must move beyond the interpersonal practices that characterize these forums to examine the rules and regulations that govern them and the ability of participants to change these rules” (p. 94). And while professional standards for public participation professionals encourage a minimum level of quality

and can legitimize a process, questions arise around how standardized frameworks might stifle creativity or hinder contextually sensitive approaches (Legacy et al., 2023).

Drawing these critiques into this discussion of digital participatory planning, I am raising a concern about how digital participatory tools, especially those becoming as widespread as DDEPs, might extend or exacerbate the problematic elements of the professionalization of public participation. Technical tools, such as DDEPs, deployed by these same participation professionals may further their ability to “narrowly [frame] the empowerment dimension, with participants granted little control over the scope and nature of participation” (Lederman, 2019, p. 98). Planners working with these commercial tools of public participation need to be aware of the ways digital platforms circumscribe participation—both inadvertently and by design. When resources are directed to expert-driven processes and purpose-built platforms, how are those spaces of engagement legitimated or elevated while other mechanisms, including more activist, informal, or community-driven contributions, are devalued or ignored? How are the platform companies, like any participation professional, balancing their obligations to their paying clients and their commercial interests with their purported commitment to democratic values? And when using off-the-shelf products, no matter their flexibility or how well their design is informed by engagement best practices and positive democratic values, what constraints are placed on a more context-sensitive process?

### Deliberative Antipatterns

A final area of scholarship I will connect to digital participatory planning in order to generate questions about DDEP use are the critiques of communicative planning that have animated planning theory debate over the last two decades. As outlined earlier, much of the theory and practice surrounding digital

participation presupposes the deliberative conception of democracy and the corresponding principles of communicative planning theory. And this deliberative framework extends to how participatory planning scholars and practitioners have engaged with new digital consultative tools and how the platforms themselves are designed. In broader planning theory, however, the tensions and contradictions of the predominant communicative conception of participation have long been debated (Brownill & Inch, 2019). Important critiques of deliberative democracy, emanating from conflict-oriented conceptions of democracy and “postpolitical” critiques of consensus, underpin what is referred to as an agonistic planning approach. These two frameworks, communicative and agonistic, and the dialectic between the two, form the pillars of our contemporary theoretical conceptualizations of participatory planning. However, many examinations of digital technologies for participatory process have not been structured onto this dual foundation and have side-stepped the important debates happening across this spectrum. By incorporating wider planning theory debates (described briefly here) into our analysis and use of DDEPs, I raise new questions about the implications of the platformization of local participation.

Shortly after deliberative frameworks began to gain purchase in democratic theory, important debates and critiques emerged (Dryzek, 2000; Kohn, 2000; Mouffe, 1999; Sanders, 1997; Young, 2002). Echoing and inspired by these debates, communicative planning faced early and vociferous criticism (Flyvbjerg & Richardson, 2002; Huxley, 2000; Mäntysalo, 2002; Tewdwr-Jones & Allmendinger, 1998) that has pushed, expanded, and modulated planning theory in important ways (Allmendinger, 2002). These critics explore how there is a concurrent and paradoxical empowerment and disempowerment of citizens during deliberative

participation processes, wherein citizens are given a “voice,” but their involvement serves to legitimate the process and the outcome—an outcome which may only reflect existing power asymmetries (Koch, 2013). This participation theatre can give the false impression of empowerment while simply enabling the more efficient advancement of predetermined projects (Aylett, 2010). The deliberative requirement for everyone to “act democratically” can be used to stifle dissent (Tewdwr-Jones & Allmendinger, 1998, p. 1984) while the choreography of participatory events can become a kind of blanket justification for whatever decision is made, insulating the process from truly democratic debate (Lederman, 2019). The drive to eliminate conflict and dissensus in service of rational consensus that legitimates powerful interests can lead to a so-called “postpolitical” condition, defined by Swyngedouw (2018) as a “process by which consensual governance of contentious public affairs through the mobilization of techno-managerial dispositives sutures or colonizes the space of the political” (p. xv). This displacement of the political and an overemphasis on consensus results in “impotent participation” (Swyngedouw, 2018, p. 23).

Researchers such as Inch (2012), Lederman (2019), and Ruming (2018) have used this postpolitical framing to diagnose deficient participatory processes in planning case studies. This diagnosis of a postpolitical condition leads many to advocate a more agonistic planning remedy (Allmendinger & Haughton, 2012; Bäcklund & Mäntysalo, 2010; Grange, 2014; McAuliffe & Rogers, 2018; Pløger, 2004; Purcell, 2009; Silver et al., 2010). Agonistic theorists argue that rather than striving to erase power and ignore exclusion, our conception of democracy should “bring them to the fore, to make them visible so that they can enter the terrain of contestation” (Mouffe, 2000, p. 34). The prominence of this debate within planning scholarship has driven



a significant amount of scholarly output over the past decade or more, establishing communicative and agonistic theories as two pillars of contemporary planning research (Aylett, 2010; Bäcklund & Mäntysalo, 2010; Beveridge & Koch, 2017; Bond, 2011; Kühn, 2021; Legacy, 2017; McClymont, 2019; Özdemir, 2019; Özdemir & Tasan-Kok, 2019; Silver et al., 2010; Van Wymeersch et al., 2019; Yamamoto, 2017).

Despite their centrality to broader participatory planning theory, digital participatory planning research does not often acknowledge the communicative-agonistic debates. By leaving aside an entire body of critical democratic theory, we risk replicating an “antipattern” in both our theorizing about digital engagement and in the design of platforms. Coined originally as a term in software design, an antipattern points to a common solution to a recurring problem that appears appropriate and effective but ends up creating more problems than it was originally intended to address (Koenig, 1998). The antipattern I am warning of here is that digital engagement literature in planning risks replicating and accelerating long recognized limitations in deliberative democratic theory and its corollary of communicative planning research and practice. That antipattern focuses primarily “on institutional/cultural barriers preventing true participation and on the search for approaches and technologies to overcome these barriers,” while ignoring the position that holds “participation as a consensus-building activity that systematically depoliticizes the participatory process by suppressing conflicts and agonistic resistance” (Monno & Khakee, 2012, p. 86).

We should undoubtedly evaluate DDEPs against their stated intentions to advance deliberative democracy. But digital participatory planning theorists and practitioners need to be aware of the limitations we are introducing when our conception of democracy becomes wholly synonymous with

deliberation and communicative planning. As Kohn (2000) warned over 20 years ago, “placing deliberation at the center of political theory has certain effects which must be interrogated” (p. 426). Similarly, we must interrogate the effects of placing deliberative planning at the centre of digital participatory theory and participatory platform design.

Like with critiques of communicative planning, digital planning theorists and planning practitioners need to probe the power dynamics in the process of the imposition of these new tools, paying mind to Mirafteb’s (2009) warning of “dominance through inclusion.” In this way, DDEPs can be evaluated as a potential example of postpolitical structure. On their surface, and from my own experience in practice, these platforms certainly appear at risk of contributing to the creation of “tightly designed and managed spaces where questions that unsettle particular forms of power-over and hegemony are foreclosed” and “reducing democracy to a set of curated and superficially participatory events; ‘dumbing down’ policy for simple consumption by citizen consumers” (Legacy et al., 2018, p. 355). The various tools available as part of a local government DDEP can give the veneer of openness, transparency, and participatory opportunity, but risk replicating the careful stagecraft that is part of the broader “fantasies of consensus” (Inch, 2012, p. 532) that characterize planning process. Furthermore, in these highly structured spaces of dialogue, where can residents ask more fundamental questions about their hopes for their cities? And, as Barney et al. (2016) ask, what are the “other forms of participation that might be obscured by excessive promises of digital utopias” (p. viii)?

Another more subtle way DDEPs could contribute to a postpolitical climate is that, from my own observations, these tools often see limited involvement from citizens. While there are several

instances of the use of DDEPs that garner lots of participation measured in clicks, the volume and the depth of participation is often quite limited. This in itself should be of concern as planners and politicians can point to the very existence of such easy and convenient ways for citizens to participate as an opportunity to “engage” that was just not taken up by the citizenry. When every project is inviting you to “have your say,” planning’s much-maligned practice of DAD (Decide, Announce, Defend) is being replaced by what Metzger (2017) terms “the more insidious and manipulative UNCLE (Unlimited Neverending Consultation Leading to Exhaustion)” (p. 188).

Overall, there is a danger that digital participatory governance may be yet another and potentially more powerful way for state actors to simultaneously claim to empower citizens while using a participatory mechanism to bring order to a process or bracket out dissent. In the same way postpolitical theorists are engaged in important critiques of communicative planning, we should be asking additional fundamental questions about digital democratic spaces. Not only questions about whether these tools deliver on their promises of a more equitable and citizen-led process, but to what extent are they, in their application, more about managing conflict, part of a broader set of “tightly designed participatory planning processes” (Legacy, 2017, p. 427)?

Agonistic and post political critiques help us elevate the concerns that government-sponsored digital engagement can be deployed through DDEPs to bring order to digital inputs and extend formalized processes of inclusion, encompassing (vastly) more citizens in sanctioned spaces of participation, potentially contributing to the procedural dimension of planning as social control (Yiftachel, 1998). Just as postpolitical critics do with traditional participatory planning, we need to question the platformization of participation itself, rather than treating the

participatory act as both the end goal and the measure of success (Radil & Anderson, 2019). Our understanding of the impacts of digital participatory planning will benefit from more of these types of critiques built on more empirical examinations of specific platforms in use in specific planning contexts.

## Conclusion

Internationally, the accelerating digitalization of planning overall is receiving dedicated attention (Batty & Yang, 2022). With this paper, I offer a contribution to this dialogue by highlighting and defining an increasingly important but understudied digital participation tool in need of closer examination. Through a nation-wide review of the platformization of participation in Canada, I have established the widespread adoption of commercially developed Dedicated Digital Engagement Platforms for participatory governance at the local level. Overwhelmingly, municipalities that have adopted DDEPs are utilizing one platform provider. This new empirical evidence offers a snapshot of how contemporary digital public participation is conducted by many local and regional governments across the country. However, the primary limitation of this empirical investigation is that this study provides only that surface-level snapshot of municipal government DDEP use. And that snapshot excludes communities under 5,000 population, leaving DDEP usage for the smallest communities uncharted. Subsequent research will need to probe the use of these platforms in greater detail and in context. As I have established here, the very nature and widespread usage of DDEPs warrants this sort of critical examination by planning researchers, alongside a heightened level of scrutiny from practitioners.

While DDEPs as I have specifically defined and catalogued them here—consolidated one-window



**Table 4.** Practical Questions for Practicing Planners

**Platformization**

- How does the design, features, rules, and limitations of a DDEP shape the format, depth, and extent of participation?
- How might the hidden workings of the platform (its code and algorithms) affect what people can say or do in the engagement process?
- Are the standard tools for democratic participation provided by DDEPs a good fit for a community’s specific needs, or do they miss the mark? Is there a sufficient level of modification possible?
- Considering that DDEPs are often implemented in a top-down manner by governments, how might this impact what projects are chosen for community consultation and how people can participate?
- What are the ethical considerations regarding data privacy and the role of proprietary algorithms in moderating democratic debates? What are the ethical obligations of planners to understand and disclose algorithmic automations of platforms?

**Professionalization**

- How do platform business interests and the logic of standardization impact the authenticity and effectiveness of participatory processes?
- How are platform companies balancing their obligations to their clients, commercial interests, and democratic values?
- In what ways do commercial tools like DDEPs limit or dictate the scope and nature of public participation?
- How does the funneling of online participation to DDEPs affect who and what gets listened to? What are the implications for other, potentially more grassroots, or community-driven forms of participation?

**Critical Participatory Theory**

- How do digital engagement methods address or obscure existing power asymmetries and citizen empowerment?
- In what ways might DDEPs be limiting genuine democratic debate or fostering a consensus that masks deeper conflicts?
- How might the use of DDEPs encourage real debate and not simply stage-manage conflict or moderate it out of the process?
- Beyond the apparent ease and convenience of digital participation, how can we evaluate the true depth and inclusiveness of engagement through DDEPs?
- How do DDEPs either contribute to or challenge a top-down and technocratic mode of planning?

platforms for a community’s entire digital engagement efforts—have received limited empirical attention in planning literature, there is an emergent digital turn in participatory planning theory that has been working to keep pace with the rise of OPTs generally, with empirical studies characterizing their use and some conceptual work grappling with their implications. This nascent digital turn is often focused on software functionality and case studies of in-practice use, with any theoretical framing largely hitched to the well-established communicative turn that continues to drive much of planning theory and practice today. I am advocating for a widening of the digital turn in participatory planning literature, going beyond the focus on platform functionality or an evaluation of digital engagement from a communicative planning perspective. Otherwise, we risk replicating and perhaps accelerating the known

limitations of the predominant conceptions of participatory planning through our digital engagement efforts.

To structure future phases of research, I offer ways to scaffold our analysis of digital participation more fully onto the productive debates that have been animating internet and democracy scholarship and participatory planning theory over the past decade. As a starting point for the kind of theory-informed empirical inquiry needed to better trace the outlines of the platforms that are increasingly mediating participation in local decision making, I am bringing awareness to how the forces of professionalization, platformization, and digital postpolitics may be combining to reshape the landscape of participatory planning in Canada. These other areas of scholarship generate a series of important questions for researchers that I have raised

throughout this discussion. Linkages to other areas of scholarly debate and the questions they generate can also equip practicing planners with a more critical lens for assessing the appropriateness of new digital tools for participation, for better managing their implementation, and for better understanding their potential democratic impacts (summarized in [Table 4](#)). At a time when digitally mediated participation in planning decision-making is becoming more central and as the internet is indelibly altering democratic societies at large, we need to provision planning practitioners and theorists with as many tools as we have available to critically engage with digital technologies.

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## Notes on Contributor

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## References

- Afzalan, N., & Muller, B. (2014). The Role of Social Media in Green Infrastructure Planning: A Case Study of Neighborhood Participation in Park Siting. *Journal of Urban Technology*, 21(3), 67-83.
- Afzalan, N., & Muller, B. (2018). Online Participatory Technologies: Opportunities and Challenges for Enriching Participatory Planning. *Journal of the American Planning Association*, 84(2), 162-177.
- Afzalan, N., Sanchez, T. W., & Evans-Cowley, J. (2017). Creating smarter cities: Considerations for selecting online participatory tools. *Cities*, 67, 21-30.
- Allmendinger, P. (2002). Towards a Post-Positivist Typology of Planning Theory. *Planning Theory*, 1(1), 77-99.
- Allmendinger, P., & Haughton, G. (2012). Post-political spatial planning in England: a crisis of consensus? *Transactions of the Institute of British Geographers*, 37(1), 89-103.
- Andersson Schwarz, J. (2017). Platform logic: An interdisciplinary approach to the platform-based economy. *Policy & Internet*, 9(4), 374-394.
- Artibise, Y. (n.d.). The Promise of Online Consultations. Retrieved October 24, 2022, from <https://blog.placespeak.com/promise-online-consultations/>
- Åström, J., & Grönlund, Å. (2012). Online consultations in local government: What works, when, and why. In S. Coleman & P. M. Shane (Eds.), *Connecting democracy: Online consultation and the flow of political communication* (pp. 75-96). MIT Press.
- Aylett, A. (2010). Participatory Planning, Justice, and Climate Change in Durban, South Africa. *Environment & Planning A*, 42(1), 99-115.
- Bäcklund, P., & Mäntysalo, R. (2010). Agonism and institutional ambiguity: Ideas on democracy and the role of participation in the development of planning theory and practice - the case of Finland. *Planning Theory*, 9(4), 333-350.
- Barney, D., Coleman, G., Ross, C., Sterne, J., & Tembeck, T. (2016). *The Participatory Condition in the Digital Age*. U of Minnesota Press.
- Barns, S. (2020). *Platform Urbanism: Negotiating Platform Ecosystems in Connected Cities*. Palgrave Macmillan, Singapore.
- Barry, J., & Legacy, C. (2023). Between virtue and profession: Theorising the rise of professionalised public participation practitioners. *Planning Theory*, 22(1), 85-105.
- Batty, M., & Yang, W. (2022). *A Digital Future for Planning: Spatial Planning Reimagined*. Digital for Planning Task Force: London, UK.
- Beveridge, R., & Koch, P. (2017). The post-political trap? Reflections on politics, agency and the city. *Urban Studies*, 54(1), 31-43.
- Bherer, L., Gauthier, M., & Simard, L. (2017). *The Professionalization of Public Participation*. Routledge.
- Bohman, J. (1998). Survey article: The coming of age of deliberative democracy. *The Journal of Political Philosophy*, 6(4), 400-425.
- Bond, S. (2011). Negotiating a 'democratic ethos': moving beyond the agonistic - communicative divide. *Planning Theory*, 10(2), 161-186.
- Botsman, R. (2018, February 11). Dawn of the techlash. *The Guardian*. <https://www.theguardian.com/commentisfree/2018/feb/11/dawn-of-the-techlash>
- Brabham, D. C., & Guth, K. L. (2017). The Deliberative Politics of the Consultative Layer: Participation Hopes and Communication as Design Values of Civic Tech Founders. *The Journal of Communication*, 67(4), 445-475.
- Brownill, S., & Inch, A. (2019). Framing People and Planning: 50 Years of Debate. *Built Environment*, 45(1), 7-25.
- Butteriss, C., Connors, N., & Hussey, S. (2020). Making Deliberative Dialogue Work Online. Bang the Table. <https://www.bangthetable.com/wp-content/uploads/2020/03/DIGITAL-Deliberative-Dialogue-Guide.pdf>
- Carr, J. (2012). Public Input/Elite Privilege: The Use of Participatory Planning to Reinforce Urban Geographies of Power in Seattle. *Urban Geography*, 33(3), 420-441.



- Cho, S., Mossberger, K., Swindell, D., & Selby, J. D. (2021). Experimenting with Public Engagement Platforms in Local Government. *Urban Affairs Review*, 57(3), 763-793.
- Crozier, M., & Hussey, S. (2022, August 15). Improving trust through digital deliberative dialogue. *Innovationaus.com*. <https://www.innovationaus.com/improving-trust-through-digital-deliberative-dialogue/>
- Curato, N., Hammond, M., & Min, J. B. (2018). *Power in Deliberative Democracy: Norms, Forums, Systems*. Springer International Publishing.
- Dryzek, J. S. (2000). *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. Oxford University Press.
- Einstein, K. L., Glick, D., Godinez Puig, L., & Palmer, M. (2022). Still Muted: The Limited Participatory Democracy of Zoom Public Meetings. *Urban Affairs Review*, 10780874211070494.
- Elstub, S., Thompson, R., Escobar, O., Hollinghurst, J., Grimes, D., Aitken, M., McKeon, A., Jones, K. H., Waud, A., & Sethi, N. (2021). The Resilience of Pandemic Digital Deliberation: An Analysis of Online Synchronous Forums. *Javnost - The Public*, 28(3), 237-255.
- Ertio, T.-P. (2015). Participatory Apps for Urban Planning—Space for Improvement. *Planning Practice & Research*, 30(3), 303-321.
- Evans-Cowley, J., & Hollander, J. (2010). The New Generation of Public Participation: Internet-based Participation Tools. *Planning Practice & Research*, 25(3), 397-408.
- Falco, E., & Kleinhaus, R. (2018). Digital Participatory Platforms for Co-Production in Urban Development: A Systematic Review. *International Journal of E-Planning Research (IJEPR)*, 7(3), 52-79.
- Flyvbjerg, B., & Richardson, T. (2002). Planning and Foucault: In Search of the Dark Side of Planning Theory. In *Planning Futures: New Directions for Planning Theory*. Routledge.
- Fredericks, J., & Foth, M. (2013). Augmenting public participation: enhancing planning outcomes through the use of social media and web 2.0. *Australian Planner*, 50(3), 244-256.
- Gastil, J. (2021). A theoretical model of how digital platforms for public consultation can leverage deliberation to boost democratic legitimacy. *Journal of Deliberative Democracy*, 17(1), 78-89.
- Ghose, R., & Johnson, P. A. (2020). Introduction to the special section: Smart citizens creating smart cities: Locating citizen participation in the smart city. *The Canadian Geographer / Le Géographe Canadien*, 64(3), 340-343.
- Gillespie, T. (2010). The politics of 'platforms.' *New Media & Society*, 12(3), 347-364.
- Gilman, H. R. (2017). Civic Tech For Urban Collaborative Governance. *PS, Political Science & Politics*, 50(3), 744-750.
- Gilman, H. R., & Peixoto, T. C. (2019). Digital Participation. In S. Elstub & O. Escobar (Eds.), *Handbook of Democratic Innovation and Governance* (pp. 105-118). Edward Elgar Publishing.
- Glaas, E., Hjerpe, M., Karlson, M., & Neset, T.-S. (2020). Visualization for Citizen Participation: User Perceptions on a Mainstreamed Online Participatory Tool and Its Usefulness for Climate Change Planning. *Sustainability: Science Practice and Policy*, 12(2), 705.
- Gower, A., Hotker, M., & Grodach, C. (2023). Digital Participation Models as Public Engagement Tools in Planning: A Concept Exploration. *Planning Theory & Practice*, 24(5), 663-678.
- Grange, K. (2014). In Search of Radical Democracy: The Ideological Character of Current Political Advocacies for Culture Change in *Planning, Environment & Planning A*, 46(11), 2670-2685.
- Granicus. (n.d.-a). EngagementHQ. Retrieved January 29, 2024, from <https://granicus.com/solution/govdelivery/engagementhq/>
- Granicus. (n.d.-b). Why Social Media Can't be Used for Meaningful Community Engagement. Retrieved August 4, 2023, from <https://granicus.com/resource/webinar-social-media-meaningful-community-engagement/>
- Granicus. (2021, August 3). EngagementHQ - Online Community Engagement Tools. <https://granicus.com/blog/engagementhq-online-community-engagement-tools/>
- Gün, A., Demir, Y., & Pak, B. (2020). Urban design empowerment through ICT-based platforms in Europe. *International Journal of Urban Sciences*, 24(2), 189-215.
- Habermas, J. (1984). *The Theory of Communicative Action: Volume 2: Lifeworld and System: A Critique of Functionalist Reason*. Beacon Press.
- Healey, P. (1992). Planning through Debate: The Communicative Turn in Planning Theory. *The Town Planning Review*, 63(2), 143-162.
- Hendriks, C. M., & Carson, L. (2008). Can the market help the forum? Negotiating the commercialization of deliberative democracy. *Policy Sciences*, 41(4), 293-313.
- Hindman, M. (2018). *The Internet Trap: How the Digital Economy Builds Monopolies and Undermines Democracy*. Princeton University Press.
- Hjerpe, M., Glaas, E., & Storbjörk, S. (2018). Scrutinizing Virtual Citizen Involvement in Planning: Ten Applications of an Online Participatory Tool. *Politics and Governance*, 6(3), 159-169.
- Hofmann, M., Münster, S., & Noennig, J. R. (2019). A Theoretical Framework for the Evaluation of Massive Digital Participation Systems in Urban Planning. *Journal of Geovisualization and Spatial Analysis*, 4(1), 3.
- Huxley, M. (2000). The Limits to Communicative Planning. *Journal of Planning Education and Research*, 19(4), 369-377.
- Inch, A. (2012). Creating 'a Generation of NIMBYs'? Interpreting the Role of the State in Managing the Politics of Urban Development. *Environment and Planning C: Government and Policy*, 30(3), 520-535.
- Johnson, P., Robinson, P., & Philpot, S. (2020). Type, tweet, tap, and pass: How smart city technology is creating a transactional citizen. *Government Information Quarterly*, 37(1), 101414.
- Kennedy, R., Sokhey, A. E., Abernathy, C., Esterling, K. M., Lazer, D. M. J., Lee, A., Minozzi, W., & Neblo, M. A. (2021). Demographics and (Equal?) Voice: Assessing Participation in Online Deliberative Sessions. *Political Studies*, 69(1), 66-88.



- Kleinmans, R., Van Ham, M., & Evans-Cowley, J. (2015). Using Social Media and Mobile Technologies to Foster Engagement and Self-Organization in Participatory Urban Planning and Neighbourhood Governance. *Planning Practice & Research*, 30(3), 237-247.
- Koch, P. (2013). Bringing Power Back In: Collective and Distributive Forms of Power in Public Participation. *Urban Studies*, 50(14), 2976-2992.
- Koenig, A. (1998). Patterns and antipatterns. In L. Rising (Ed.), *The patterns handbook : techniques, strategies, and applications* (pp. 383-389).
- Kohn, M. (2000). Language, Power, and Persuasion: Toward a Critique of Deliberative Democracy. *Constellations*, 7(3), 408-429.
- Kühn, M. (2021). Agonistic planning theory revisited: The planner's role in dealing with conflict. *Planning Theory*, 20(2), 143-156.
- Le Blanc, D. (2020). E-participation: a quick overview of recent qualitative trends (DESA Working Paper No. 163). United Nations Department of Economic and Social Affairs.
- Lederman, J. (2019). The People's Plan? Participation and Post-Politics in Flint's Master Planning Process. *Critical Sociology*, 45(1), 85-101.
- Lee, C. W. (2015). *Do-It-Yourself Democracy: The Rise of the Public Engagement Industry*. Oxford University Press.
- Lee, C. W., & Romano, Z. (2013). Democracy's New Discipline: Public Deliberation as Organizational Strategy. *Organization Studies*, 34(5-6), 733-753.
- Legacy, C. (2017). Is there a crisis of participatory planning? *Planning Theory*, 16(4), 425-442.
- Legacy, C. (2023). Communicative planning and the transformative potential of citizen-led participation. In M. Gunder, K. Grange, & T. Winkler (Eds.), *Handbook on Planning and Power* (pp. 134-148). Edward Elgar Publishing.
- Legacy, C., Barry, J., Novacevski, M., & Boyco, M. (2023). "Shared Language" Or "Straitjacket"? The Hidden Costs of Legitimising Participation Through Standardised Frameworks. *Planning Theory & Practice*, 1-17.
- Legacy, C., Rogers, D., Cook, N., & Ruming, K. (2018). Beyond the post-political: is public participation in Australian cities at a turning point? *Geographical Research*, 56(4), 353-357.
- Levenda, A. M., Keough, N., Rock, M., & Miller, B. (2020). Rethinking public participation in the smart city. *The Canadian Geographer / Le Géographe Canadien*, 64(3), 344-358.
- Lin, Y. (2022). Social media for collaborative planning: A typology of support functions and challenges. *Cities*, 125. <https://doi.org/10.1016/j.cities.2022.103641>
- Lin, Y., & Benneker, K. (2022). Assessing collaborative planning and the added value of planning support apps in The Netherlands. *Environment and Planning B: Urban Analytics and City Science*, 49(2), 391-410.
- Lobo-Pulo, A. (2020). Deliberative Engagement: How governments can enable citizens to lead decision-making. *The Hive*. <https://the-hive.com.au/blog/deliberative-engagement-how-governments-can-enable-citizens-lead-decision-making>
- Mackenzie, A. (2019). From API to AI: platforms and their opacities. *Information, Communication and Society*, 22(13), 1989-2006.
- Mäntysalo, R. (2002). Dilemmas in Critical Planning Theory. *The Town Planning Review*, 73(4), 417-436.
- Mattila, H., & Nummi, P. (2022). The Challenge of the Digital Public Sphere: Finnish Experiences of the Role of Social Media in Participatory Planning. *Planning Theory and Practice*, 23(3), 406-422.
- Mazeaud, A., & Nonjon, M. (2020). The participatory turn in local policies: A product of the market. *Governance*, 33(2), 407-424.
- McAuliffe, C., & Rogers, D. (2018). Tracing resident antagonisms in urban development: agonistic pluralism and participatory planning. *Geographical Research*, 56(2), 219-229.
- McClymont, K. (2019). Articulating virtue: Planning ethics within and beyond post politics. *Planning Theory*, 18(3), 282-299.
- Metzger, J. (2017). Postpolitics and Planning. In M. Gunder, A. Madanipour, & V. Watson (Eds.), *The Routledge Handbook of Planning Theory* (pp. 180-193). Routledge.
- Milz, D., & Gervich, C. D. (2021). Participation and the pandemic: how planners are keeping democracy alive, online. *The Town Planning Review*, 92(3), 335-341.
- Mirafteb, F. (2009). Insurgent Planning: Situating Radical Planning in the Global South. *Planning Theory*, 8(1), 32-50.
- Monno, V., & Khakee, A. (2012). Tokenism or Political Activism? Some Reflections on Participatory Planning. *International Planning Studies*, 17(1), 85-101.
- Mouffe, C. (1999). Deliberative Democracy or Agonistic Pluralism? *Social Research*, 66(3), 745-758.
- Mouffe, C. (2000). *The Democratic Paradox*. Verso.
- Nakamura, L. (2019, November). The internet is a trash fire. Here's how to fix it. [https://www.ted.com/talks/lisa\\_nakamura\\_the\\_internet\\_is\\_a\\_trash\\_fire\\_here\\_s\\_how\\_to\\_fix\\_it](https://www.ted.com/talks/lisa_nakamura_the_internet_is_a_trash_fire_here_s_how_to_fix_it)
- Özdemir, E. (2019). The role of the expert knowledge in politicizing urban planning processes: A case from Istanbul. *Planning Theory*, 18(2), 237-259.
- Özdemir, E., & Tasan-Kok, T. (2019). Planners' role in accommodating citizen disagreement: The case of Dutch urban planning. *Urban Studies*, 56(4), 741-759.
- Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). *Platform Revolution: How Networked Markets Are Transforming the Economy and How to Make Them Work for You*. W. W. Norton & Company.
- Patel, M., Sotsky, J., Gourley, S., & Houghton, D. (2013). *The emergence of civic tech: Investments in a growing field*. Knight Foundation.
- Phillips, W. (2020, February 3). The Internet Is a Toxic Hellscape—but We Can Fix It. *Wired*. <https://www.wired.com/story/the-internet-is-a-toxic-hellscape-but-we-can-fix-it/>
- Pierson, J. (2021). Digital platforms as entangled infrastructures: Addressing public values and trust in messaging apps. *European Journal of Disorders of Communication: The Journal of the College of Speech and Language Therapists*, London, 36(4), 349-361.



- Ploeger, J. (2004). Strife: Urban Planning and Agonism. *Planning Theory*, 3(1), 71-92.
- Poell, T., Nieborg, D., & Van Dijck, J. (2019). Platformisation. *Internet Policy Review*, 8(4), 1-13.
- Potts, R. (2020). Is a New 'Planning 3.0' Paradigm Emerging? Exploring the Relationship between Digital Technologies and Planning Theory and Practice. *Planning Theory & Practice*, 21(2), 272-289.
- PublicInput. (n.d.). Community Engagement Software For Cities. Retrieved August 4, 2023, from <https://publicinput.com/wp/solutions/community-engagement-software-city-government/>
- Purcell, M. (2009). Resisting Neoliberalization: Communicative Planning or Counter-Hegemonic Movements? *Planning Theory*, 8(2), 140-165.
- Radil, S. M., & Anderson, M. B. (2019). Rethinking PGIS: Participatory or (post)political GIS? *Progress in Human Geography*, 43(2), 195-213.
- Rheingold, H. (1993). *The Virtual Community: Homesteading On The Electronic Frontier*. Basic Books.
- Robinson, P. (2022). Automation in municipal public consultation processes. In A. Brandusescu & J. Reia (Eds.), *Artificial Intelligence in the City: Building Civic Engagement and Public Trust* (pp. 19-20).
- Robinson, P., & DeRuyter, M. (2016). I 'like' you, you make my heart twitter, but... reflections for urban planners from an early assessment of social media deployment by Canadian local governments. In R. Thomas (Ed.), *Planning Canada: A case study approach* (pp. 260-268). Oxford University Press Don Mills, ON.
- Robinson, P., & Johnson, P. (2021). Pandemic-Driven Technology Adoption: Public Decision Makers Need to Tread Cautiously. *International Journal of E-Planning Research (IJEPR)*, 10(2), 59-65.
- Robinson, P., & Johnson, P. (2023). The Platformization of Public Participation: Considerations for Urban Planners Navigating New Engagement Tools. *Intelligence for Future Cities*, 71-87.
- Ruming, K. (2018). Post-political planning and community opposition: asserting and challenging consensus in planning urban regeneration in Newcastle, New South Wales. *Geographical Research*, 56(2), 181-195.
- Sadowski, J. (2020). *Too Smart: How Digital Capitalism is Extracting Data, Controlling Our Lives, and Taking Over the World*. MIT Press.
- Sanders, L. M. (1997). Against Deliberation. *Political Theory*, 25(3), 347-376.
- Schulz, D., & Newig, J. (2015). Assessing Online Consultation in Participatory Governance: Conceptual framework and a case study of a national sustainability-related consultation platform in Germany. *Environmental Policy and Governance*, 25(1), 55-69.
- Sieber, R. E., Robinson, P., Johnson, P., & Corbett, J. M. (2016). Doing Public Participation on the Geospatial Web. *Annals of the Association of American Geographers*. Association of American Geographers, 106(5), 1030-1046.
- Silver, H., Scott, A., & Kazepov, Y. (2010). Participation in Urban Contention and Deliberation. *International Journal of Urban and Regional Research*, 34(3), 453-477.
- Smith, G. (2009). *Democratic Innovations: Designing Institutions for Citizen Participation*. Cambridge University Press.
- Social Pinpoint. (n.d.). Forums - A safe space for in-depth, collaborative discussions. Social Pinpoint. Retrieved October 24, 2022, from <https://www.socialpinpoint.com/product-forums/>
- Stempeck, M., Sifry, M., & Simpson, E. (2016, April 27). Towards a taxonomy of civic technology. Microsoft On The Issues. <https://blogs.microsoft.com/on-the-issues/2016/04/27/towards-taxonomy-civic-technology/>
- Swyngedouw, E. (2018). *Promises of the Political: Insurgent Cities in a Post-Political Environment*. MIT Press.
- Talisse, R. (2017). New trouble for deliberative democracy. *Les Ateliers Del'ethique / The Ethics Forum*, 12(1), 107-123.
- Tewdwr-Jones, M., & Allmendinger, P. (1998). Deconstructing Communicative Rationality: A Critique of Habermasian Collaborative Planning. *Environment & Planning A*, 30(11), 1975-1989.
- Tucker, J. A., Theocharis, Y., Roberts, M. E., & Barberá, P. (2017). From Liberation to Turmoil: Social Media And Democracy. *Journal of Democracy*, 28(4), 46-59.
- Vaidhyanathan, S. (2018). *Antisocial media: How Facebook disconnects us and undermines democracy*. Oxford University Press.
- van der Does, R., & Bos, D. (2021). What can make online government platforms inclusive and deliberative? A reflection on online participatory budgeting in Duinoord, The Hague. *Journal of Deliberative Democracy*, 17(1), 48-55.
- van Dijck, J., Poell, T., & de Waal, M. (2018). *The Platform Society: Public Values in a Connective World*. Oxford University Press, Incorporated.
- Van Wymeersch, E., Oosterlynck, S., & Vanoutrive, T. (2019). The political ambivalences of participatory planning initiatives. *Planning Theory*, 18(3), 359-381.
- Wilson, A., & Tewdwr-Jones, M. (2022). *Digital Participatory Planning: Citizen Engagement, Democracy, and Design*. Routledge.
- Wilson, B., & Chakraborty, A. (2019). Planning Smart(er) Cities: The Promise of Civic Technology. *Journal of Urban Technology*, 26(4), 29-51.
- Yamamoto, A. D. (2017). Why agonistic planning? Questioning Chantal Mouffe's thesis of the ontological primacy of the political. *Planning Theory*, 16(4), 384-403.
- Yiftachel, O. (1998). Planning and Social Control: Exploring the Dark Side. *Journal of Planning Literature*, 12(4), 395-406.
- Young, I. M. (2002). *Inclusion and Democracy*. Oxford University Press.
- Zhang, W., Davies, T., & Przybylska, A. (2021). Online Deliberation and #CivicTech: A Symposium. *Journal of Deliberative Democracy*, 17(1), 76-77.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.