

TOWARDS INCLUSIVE DIGITAL DEMOCRACY: A CONCEPTUAL FRAMEWORK FOR DIGITAL CITIZEN PARTICIPATION

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ABSTRACT

E-Participation, a subfield of Digital Government, has fallen short of initial expectations. Despite its potential to enhance democratic processes, it has struggled with inclusivity, particularly with respect to gender, class, and race. This paper proposes the concept of Digital Citizen Participation, which is contrasted with e-Participation research. It is argued that participatory processes can be improved by integrating diverse research disciplines, adopting user-centered design approaches that prioritize the citizen as a user, and incorporating technological innovations such as immersive systems. Thereby, the Digital Citizen Participation framework aims to provide theoretical guidance for public participation in the digital age.

KEYWORDS

Digital Citizen Participation, e-Participation, Digital Democracy, Digital Government, Platform Design

1. INTRODUCTION

In 2021, Meta Platforms presented their vision of the Metaverse, sparking a polarized debate about the future of the digital world. Some see the Metaverse as a promising new environment, while others view it as a potential threat to our already polarized world (Barbaro et al., 2022; Tengtrakool, 2021; Verdi, 2022).¹ However, if the Metaverse becomes the next big thing, who will assure that it is a democratic and deliberative space? Those questions echo the expectations and concerns surrounding the internet at the beginning of the 2000s (Gimmler, 2001), when online social networks (ONS) were seen as promising deliberative spaces that could assist populations in organizing democratic protests and resistance (Wolfsfeld et al., 2013). Unfortunately, these expectations have been diminished in recent years and reached a new low with the acquisition of Twitter through Elon Musk. The transaction highlights the dangers and fragility of allowing private platform operators to control public discourse. Twitter, once seen as a progressive alternative, has experienced a surge in hate speech, disinformation, and misinformation (Frenkel and Conger, 2022; Lavelle, 2022). This underscores the urgent need to continue the search for truly deliberative digital spaces.

E-Participation, as part of e-Government studies, has failed to meet the expectations set for them in their early stages. In 2008 Scholl pointed out how e-Government and its subordinated e-Services were perceived in its initial stages as a novelty in itself. A novelty that was overloaded with expectations that were already back then “seemingly losing its magic“ (Scholl, 2008). In the beginning of the 2020s, the relevance of participatory Government services became – due to the pandemic – evident (United Nations, 2020). Nevertheless, the pandemic also showed manifold challenges. Offering digital and independent services for meaningful interactions between citizens and the state seems to be one of the great challenges of this decade. Nevertheless, the e-Participation frameworks does not seem to fit adequately to the challenges of this time: Big Tech has changed the expectations towards platforms and usability dramatically. Through using digital innovations in hard - and software design, including network-effects and gamification, they attract millions of user and

¹ This paper consist on two chapters from a dissertation on the topic of Digital Citizen Participation and how immersive systems might be used for participatory urban planning (Fegert, 2022). Submitting the paper to the e-Society conference 2023 should assist to discuss the concept in a broader setting with the respective scientific community.

successfully keep them on their platform. Their platform mechanism also manage to work across various social groups and milieus. A reality that does not seem to be the same case for e-Participation, where the participants tend to be a rather exclusive group of people. Kim and Lee (2019) found that gender differences exists in the use of e-Participation. Furthermore, motivating factors for public participation through digital means, as identified by Rottinghaus and Escher (2020) and Novo Vázquez and Vincente (2019), include previous political involvement and personal interest or concern of the involved citizens and therefore conclude that the platforms are not being inclusive towards the broader public.

This paper, therefore argues to put the citizen, as the user of digital participation platforms, in the focus of research instead of looking at questions of public engagement from the perspective of governmental units. Thus, it is argued to introduce Digital Citizen Participation (DCP) as a new concept to match the increasingly growing field of Digital Democracy research. This new concept addresses the limitations of e-Participation by incorporating interdisciplinarity, technological innovativeness, interoperability, and an inclusive participatory approach. Furthermore, the DCP framework will prioritize the utilization of cutting-edge technologies, including immersive technologies, public displays, and mobile platform solutions, to enhance public participation in the digital age.

2. THEORETICAL BACKGROUND

E-Participation is defined as the use of information and communication technologies (ICT) to extend and transform participation in democratic and consultative processes. Its goal is to support active citizenship through technology developments that increase access to and availability of participation in order to promote a fair and efficient society and government. E-Participation is a sub-branch of Digital Government research, also known as e-Government. E-Democracy or Digital Democracy, as defined by Van Dijk and Hacker (2000), is a collection of attempts to practice democracy without the limitations of time, space, and other physical conditions, using ICT as an addition to traditional political practices rather than a replacement. The theory of the public sphere by Jürgen Habermas is often used as the theoretical foundation for e-Participation research in Information Systems. Sanford and Rose (2007) argue that e-Participation should improve communication and decision-making between politicians, civil servants, citizens, and other stakeholders. Macintosh (2004) identifies three levels of participation in e-Participation: e-Enabling, e-Engaging, and e-Empowering. E-Enabling is the accessibility and understandability of information, e-Engaging is a top-down approach where citizens are consulted on policy issues, and e-Empowering is a bottom-up approach where citizens can influence policy-making through their contributions and become producers of policy rather than just consumers. Van Dijk (2012) created a classification system for forms of e-Participation that is still relevant for most e-participation platforms available. This classification differentiates between “government-centric” and “citizen-centric approaches” (Van Dijk and Hacker, 2000). In summary, e-Participation research made an important contribution to defining the field of research, to highlighting various online participation modes, and to pointing out both the opportunities and the initial pitfalls and disillusionments.

3. THE DIGITAL CITIZEN PARTICIPATION TRIANGLE

Since the creation of the first online participation platforms, new technological innovations emerged and entered the mass-market. Interconnectivity (often through various devices) became in many societies the status quo. Access to the digital technologies is not anymore the limiting factor when it comes to digital participation. Internet and hardware access became not only mainstream, but in certain societies a necessity for social inclusion. Therefore, today the main limiting factor to make use of state-of-the-art technologies are resources and knowledge. The main initiators (governmental agencies) still seem to lack competences when it comes to designing and developing artifacts. To overcome those limiting factors, the concept of DCP should give guidance on designing public participation for the digital age. Today, there are plenty of technological possibilities – although their applicability still needs to be researched and proven. In the following, three key features of Digital Citizen Participation should be defined. These include interdisciplinarity in research and development, technological innovativeness and interoperability, as well as incorporating, an inclusive democratic approach.

3.1 Interdisciplinarity as a Means to Counter Dominant Platform Mechanisms

The normative ideal of deliberative democracies, as it is presented by Habermas, aims at transforming the needs of citizens from an individual level towards an orientation for the common good (Young, 2004). However, an objective assessment of the common needs can only happen if the inclusion of a diversity of perspectives is ensured since only the different perspectives reflect the pluralistic societies in which we live (Young, 2004). Sanford and Rose (2007) already suggested research disciplines, which should play a role in broadening the perspective on e-Participation. Following the authors, communicational science, computer science, information systems, political philosophy, political science, public administration and sociology are research disciplines, that should be involved in research on political participation using ICT. In contrast to Sanford and Rose, this paper argues, that those disciplines should be involved in the process platform design itself. For non-tokenistic and successful forms of political participation in the digital age, it is necessary to include different disciplines into designing platforms. Thereby a platform logic can be established, that does not purely follow full profit market mechanisms.

Platforms such as Facebook, Uber and Airbnb pursue the goal of winning against the competition in their industry. They strive for dominance, as this increases the attractiveness of their networks. Therefore, they are dependent on reaching a certain dominance if they want to operate their platforms sustainably (Srniczek, 2016) In recent times, calls for regulation of platform providers grew more vocal. For example, Scott Galloway, a professor of business administration, called for large Internet companies to be broken up and suggested that the U.S. Department of Justice should take appropriate measures (Galloway, 2018). But how could this point be reached? In his book "Platform Capitalism" Srniczek (2016) points out that the commercialization tendencies of platform providers would not have been possible without the collapse of the dot-com bubble in the early 2000s. Its collapse forced internet companies to shed their investor earnings. While Google still used user data to improve its search function in its early years, the company began to use the data for targeted advertising after the collapse of the dotcom bubble (Srniczek, 2016).

Therefore, it seems clear that the current factors that measure the success and value of platforms need to be revisited when it comes to designing platforms for societal participation of the public in political affairs. In the following, an exemplary framework for the involvement of different disciplines in platform design for DCP is suggested (Figure 1). Thereby, it is argued, that the mentioned disciplines can become with their methods, in DCP, part of the design process itself. This could help to counter dominant platform mechanisms. If participation processes are to be implemented (more) successfully, then the translation work between disciplines is crucial and should be implemented in platform design for DCP.

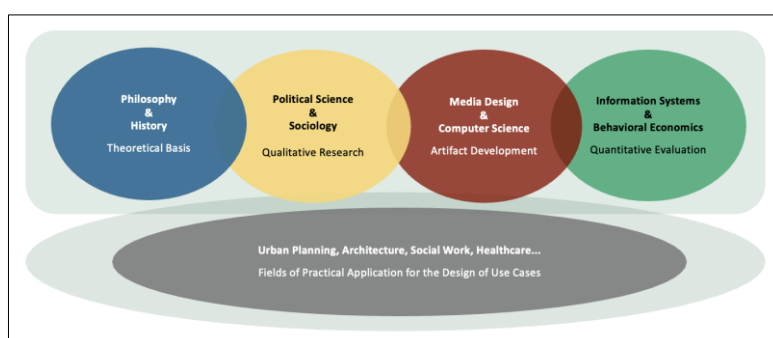


Figure 1. Interdisciplinarity in Digital Citizen Participation

Including the **philosophic and historic** context into platform design does not seem to be an obvious choice. Nevertheless, what is the benefit of including this perspective when starting designing DCP? What is to be considered an ideal form of discourse and public is something suggested and debated in (political) philosophy and history of thought. Habermas theory of the deliberative public still is the theoretical foundation for scientific work on public participation. Every work must either incorporate or differentiate itself from this theoretical basis. Including those core thoughts of how a deliberative form of participation can be reached in a digital setting, is something already acknowledged in early literature on e-Participation (Sanford and Rose, 2007).

Furthermore, it should be argued to put platform design in a historic context to become aware of the origins of some phenomena in the present. A genealogical approach takes a contemporary question as the starting point of analysis and thus makes historical processes and orders of knowledge visible for a critique of the present (Kerchner, 2006). To give an example: Foucault's first volume on "Security, Territory, Population" (Foucault, 2006) deals, in regard to the 18th century, with security mechanisms and the relationship between law and norm, as well as how techniques of empiricism and probability theory took hold. The origins of empiricism are of interest for an examination of current digital platforms, as their algorithms are based on data collection and probability calculations in order to implement, for example, recommender systems. Statistics and empirical data appear as a new instrument of power for the state in the eighteenth-century (Kerchner, 2006). If we want to be aware of the instruments of power of today's economy and the internet corporations as a cornerstone of this economy, we cannot avoid being aware of the origin of these mechanisms. The mechanisms of power can be consciously taken up or intentionally avoided in platform design, but being aware of them, seems necessary.

A core part of DCP is the incorporation of **sociological** methods and methods from **political science**. Especially qualitative methods used and developed in these disciplines can help to develop realistic and true-to-life platform designs. When it comes to designing platforms that should not only be adopted by a specific demographic or sociological milieu, the detection of exclusion mechanisms is key. Therefore, using qualitative methods from those disciplines is especially advantageous. Trust in government and different understandings of the role of government and state have an impact on the willingness to participate (Lee and Schachter, 2019). Evidently, those conditions vary from place to place and are also differential within a state. For this reason, it is important to explore those different starting conditions to design digital participation accordingly. Moreover, for understanding different participation paths and formats, the knowledge of political specifics on a local and federal level is crucial. Understanding political systems and structures on a local and communal level, consequently, appears necessary for the design of DCP. Political science and related disciplines such as public policy and governance have a profound understanding of those political realities and therefore can and should contribute by staking out the framing conditions.

The most obvious disciplines involved with the design of DCP are those who are practically involved with constructing the artifact. The expertise of **media design and informatics** are necessary for the development of advanced and attractive platforms. Structuring the process of artifact design is well researched in information systems. Using methods like Design Science Research based on Peffers (2007) or Kuechler and Vaishnavis framework (2008) which are helpful to structure the design, development and evaluation of a software project. Other methods like participatory software design, a method explored since the 1990s, also puts the user in the center of the development process (Bossen et al., 2016; Mueller et al., 2018; Sanders et al., 2010). Various current system programming approaches seem necessary in informatics for developing DCP projects. A precondition for developing those artifacts is expertise in one or several of the following development fields: backend-, frontend-, full-stack-web and mobile device-development, as well as data science. To conduct and coordinate smooth software engineering processes, today agile forms of software development, which can be found in frameworks like Scrum and Kanban, seem adequate for the development of DCP. Especially the following basics of agile development are fitting to software developments which should cater the needs of a broader population: customer satisfaction, prioritizing software operability and simplicity over complexity (Hazzan and Dubinsky, 2014). When it comes to more complex developments (e.g. adapting voting mechanisms) platforms are built by those who have a clear understanding of roles and access control. This knowledge is crucial for writing fitting code. For this reason, it seems necessary to include information systems and informatics in developing DCP. Design experts, such as graphic and media designers, should assure that the information provided within the DCP platform are presented in a thoughtful and pleasant way. Norman describes in his book "The Design of Every Day Things" (2013) the importance of considerate design choices. Including design experts can help, when it comes for example to forms, typography and color schemes to create user friendly platforms. Therefore, their expertise is crucial for successful platform design.

In their book "The Power of Experiments – Decision Making in Data Driven World" Luca and Bazerman (2020) show how mainstream behavioral economics became as a way for platform providers to test, evaluate and improve their platforms. The authors demonstrate that systemic experimentation is something which e-Commerce businesses can conduct even more easily compared to classical businesses, since their businesses rely on the systemic processing of data. In contrast, however, the authors also provide insights on how traditional institutions, such as government agencies, use experimentation to achieve successful policy making. As an example they present experiments conducted by British government agencies under Tony Blair and David Cameron with the aim of nudging citizens into paying taxes. To name one success: through randomized

controlled trials they rewrote and -designed letters asking the citizens to pay their taxes and thereby assured significantly higher tax revenues (Luca and Bazerman, 2020).

Finally, it is necessary to involve those disciplines that have the real-world expertise for use cases. This could be found among others in social work, healthcare, but are in many cases of public participation **urban** or respectively **spatial planning** as well as **architecture**. The latter named disciplines can support designing DCP by adding their knowledge on participatory urban planning as well as construction projects. Including those disciplines means to tackle current questions of urbanism together with the affected citizens. Furthermore, including architecture as a discipline might contribute to design architectural competitions in a way that they are mindful about a possible digital participation process. Thereby, architects can use digital formats that guarantee interoperability between their architectural designs and possible digital participation platforms.

For DCP, it should be argued, that it seems important to engineer platforms that are easy to use and well accepted by the users. Those firms, who design digital participation platforms, tend to not have the resources to research and test the effectiveness of their products. Accordingly, the initiators of digital participation processes might have to become more active in asking for research on the effectiveness of their participatory programs. In experiments it could be researched and established which mechanisms work to keep a broad demographic interested in participating, as e.g. mechanisms of gamification might help to foster interactions on participation platforms. Since governmental agencies are, especially in larger urban contexts, often overwhelmed with the task to create meaningful interactions with their citizens, having perspectives from **psychology, behavioral economics and information systems**, included in the design of DCP seems essential. If communicated properly to the software developers involved, it could enhance the general user experience of the artifact. Nevertheless, experimental methods have to be used carefully and consensual. Therefore, involving an ethics committee can be of assistance to become aware of certain ethical challenges that might arise. Instead of running experiments without knowledge and proper consent of the participants, like some tech companies do, there are other options to test platforms in realistic settings. Besides field experiments, behavioral economic labs pose a valid alternative for conducting ambitious and ethically responsible experiments.

Using data based on experiments can be very powerful for improving platform design. Nevertheless, this power could be – in the hand of state agencies, as shown with the historic example of the eighteenth century – misused by states to control their citizens. Thus, it can be concluded, that using experiments in DCP should be generally about designing software artifacts that empower citizens by making them as useable as possible.

This paragraph can be understood as a plea for the translation work between a number of different disciplines. It is argued that connecting different theories and methods from philosophy, history, sociology, political science, information systems, informatics and behavioral economics and psychology can help to create meaningful DCP artifacts that truly are in the citizens interest. Through this incorporation of a pluralistic perspectives on platform design, the transformation of individual needs and requirements towards the common good could be realized.

3.2 Technological Innovations and Interoperability

In the following, the discrepancy in platform design innovations that exist between current e-Participation and other digital platforms, should be highlighted. The pleasant world of Android and iOS apps, as well as e-Commerce platforms, made customers used to seamless and user-centered platform design. When it comes to games or commerce the adoption of technological innovations, like immersive systems, is in full swing. Already in 2016, a former branch of Google, Niantic, launched the app Pokémon Go which combined location based GPS technology with AR (Paavilainen et al., 2017). Ikea created with their app Places, for both mobile phone operating systems, a popular app for the visualization of the Ikea furniture catalogue in the homes of their customers using AR. A meta-study on the effectiveness of virtual shopping environments, has already established that the use of the immersive Ikea app increased the customers general interest in products and a purchase (Alves and Luís Reis, 2020). With its rebranding respectively its restructuring from Facebook into Meta, the platform giant also announced to put the company's efforts into immersive systems (Roose, 2021). Apple in contrast broadened the spectrum of its hardware from notebook and desktop computers to portable music players to phones, tablets and watches, which are all connected (Jacobsen, 2017). Google pioneered

from early on with collaborative cloud services like Google Docs, Forms etc. and thereby shifted the industry towards comparable cloud solutions.

Compared to this world of technological innovations, what can be found in e-Participation today seems relatively dull. With the new concept of DCP it is reasoned, that the integration of state-of-the-art technologies and hardware needs to become part of designing digital participation platforms. As the results on the acceptance of immersive systems (Fegert, 2022; Fegert et al., 2020) show, there is great interest and curiosity when it comes to using different technologies for public participation.

Another necessity for enabling DCP seems to be system **interoperability**. This wish for high interoperability appears to stand in contrast to the claim for innovative artifacts, but it is the other way around: Interoperability means to be mindful about different access towards technology and to bridge existing gaps between systems and frameworks and thereby making platforms as usable and accessible as possible. Key in including broad parts of the population in participation processes is assuring the ability to use the platform from different operating systems, browsers and hardware. Especially in the search for common standards in e-Government, interoperability has been discussed, mostly for unique states like Brazil (Alves Oliveira and Eler, 2017), South Africa (Manda, 2017) and Uganda (Kanagwa et al., 2018). As a general takeaway of those studies it can be concluded that there is a need for some standardization, which is mindful of different access to soft- and hardware. To guarantee social cohesion, also in DCP the standards need to be as basic as possible to be attentive towards those users who have older soft- and hardware or only use a certain kind of hardware like mobile devices. What should be argued for is a differentiation between classical e-Participation platforms, and something that could be considered to be the next generation of digital participation platforms in DCP. Thiel et al. (2018) already explored some technological innovation and trends such as using smartphones, GPS, wearables, public displays, immersive systems and crowdsourcing. Furthermore, the authors discussed gamification in e-Participation (Thiel, 2016; Thiel et al., 2018) as a promising concept to assure the interest of the population in public participation. That kind of innovative inclusion of up to date technologies is meant, when arguing for more play- and joyful use of technologies and their incorporation into public participation processes.

The German platform “Stimmen auf Knopfdruck” (2021), developed for a participation process in the city of Berlin, made use of an already existing and widely used technology – voice messages. Citizens could leave their comments additionally to classical written content through a recording. Although a study on the effectiveness of this technology is missing, the idea of opening up the dialogue to new forms of interactions seems promising, especially, when it comes to the inclusiveness of participation processes and the question who feels entitled to participate. Another interesting example is the platform Senf.Koeln (2021) developed by UPLab, which placed QR Codes in the city of Cologne and showed an interactive map on a mobile device only webpage to allow the use on the spot of interest. Those specifics alone turned what is shown as a standard upside down: the participation process was accessed through mobile devices, making it more accessible at the site. It can certainly be a barrier to re-envision an urban planning debate at home. Offering opportunities for on-site debates therefore seems overdue. This paragraph argued for more interoperability and including technological innovations into participation processes.

3.3 Incorporating an Inclusivity in the Development Process

According to Habermas, the “political public sphere [...] can fulfill its function of perceiving and addressing problems of society as a whole [...] only to the extent that it is formed from the communication contexts of those potentially affected. It is carried by an audience recruited from the entirety of citizens” (Habermas, 1992, p. 441). The politically relevant challenges are thus based on processes of public negotiation. According to Habermas, they have their origin in the “biographical experiences” (Habermas, 1992, p. 441) the citizens who come together to form such an audience. Therefore, equal access to the public sphere seems to be of central importance for deliberation (Schmidt, 2019). However, studies on e-Participation processes in Germany show that men participate more often than women and that the degree of participation depends, among other things, on the level of education (Rottinghaus and Escher, 2020; Send et al., 2014). This assessment is not at all satisfactory, considering that public participation is supposed to enable an equal discourse between all citizens and decision-making processes for them. As already mentioned and discussed when arguing for using approaches (theories and methods) from sociology and political science, the last pillar of DCP, suggested in this paper, is the inclusion of inclusive democratic approaches.

Online participation undoubtedly created new opportunities to quantitatively involve more citizens, but it seems unclear whether this also leads to more inclusive participation (Schlozman et al., 2018). Qualitative research methods from social science are often used to investigate the inclusivity of deliberative participation platforms (Frisch, 2007; Kies, 2010; Weinhardt et al., 2015). There are obvious mechanisms of exclusion, that come to mind, like the use of language. In German, through the generic masculine version of the third person, the gender neutrality is not given as a default. Weinhardt et al. (2015) therefore rightly pointed out that the use of gender neutral language can promote inclusion. Other language-based aspects need to become center of attention. While, especially in journalism, web accessibility, is already in the focus of research (Giannoumis and Nordli, 2020; Karhunen, 2017), a debate about accessibility of digital participation platforms is urgently needed. How can it be achieved to be mindful about language barriers and how can they be overcome? How can plain language be used to be sensible towards citizens with special needs? Already in 2015, Weinhardt et al. suggested to use translation tools to include parts of the population that do not feel confident about their language skills when it comes to written debate-based e-Participation forums. Also, the platform design itself can be more or less inclusive. Certain color schemes can exclude citizens who are not able to differentiate between certain colors. Here it is reasoned, that the inclusion of a diverse set of citizens into the design of DCP platforms can prevent mechanism of exclusion. A concrete method of inclusion is presented within arguing for qualitative social science methods.

Why does this seem relevant? What is missing when it comes to platform design in Digital Government services is that user-centric design should mean to keep the broader population in mind – in this case all involved stakeholders of the participation processes. There seems to be some kind of misunderstanding, as it appears unclear if the current mostly forum-based e-Participation platforms succeed in catering the needs of the broader population. Some kind of hesitancy in e-Participation concerning technological innovations seems obvious. Although, in 2021 mobile devices are globally clearly the preferred form of internet access and interaction and the one with the higher market share compared to desktops (Enge, 2021; Petrov, 2019), e-Participation platforms continue to be mostly browser based with interfaces that are predominantly made for notebook and desktop computers. Including the realities of general hardware usage into the platform design itself can help to overcome some of those non-inclusive tendencies described by researchers. The fact that the population prefers the casualness of using their mobile devices, should be utilized for public participation. In this case too, research on journalism and technology can help understanding how to create inclusivity (and thereby general relevance) through platform design. Mobile applications showed great potential for local journalism as well as challenges in the example of local news sites in Portugal. Accessibility remains an issue not easily resolved (Santos Gonçalves et al., 2021). Therefore, evaluating platform design and including a pluralistic set of voices into the design process seems highly relevant if digital participation processes claim to be democratic and representative.

Furthermore, new technological possibilities open up new forms of approaching citizens. Advanced data analytics can be used to get in contact with the relevant stakeholder groups in a participation process or can help to target unrepresented or underrepresented groups. Obviously, the practice of advanced data analytics and targeting is debatable. Due to the fact that mostly right-wing extremist took and take advantage of those technological practices (King, 2019; Ramos and Torres, 2020; Wylie, 2019), those who would like to foster democratic practices with their platforms also must become aware of those technics and using data analytics for guaranteeing representativity.

4. CONCLUSION

In this paper's introduction, the need to explore platform alternatives for the Digital Democracy was highlighted. At such an economically and politically difficult moment, platform operators who do not fulfill their legal duties and obligations (e.g. content moderation regarding hate speech) are a serious threat to democracy. Also due to this vulnerable situation, it appears worthwhile to develop platform alternatives for citizens and their concerns. This paper's contribution lies in the exploration of the conceptual framework of DCP. Thereby, a framework for researching innovative and interdisciplinary forms of Digital Democracy is mapped out and a differentiation between classical e-Participation platforms and DCP platforms created. DCP aims at proving a framework that argues for the necessity of interdisciplinary research approaches, when designing digital public participation formats. It maps out a design framework which includes a variety of academic disciplines and their research methods (philosophy, history, political science, sociology, media

design, computer science, information systems and behavioral economics, as well as fields of practical application like urban planning and architecture). Furthermore, the DCP framework pleads for the incorporation of technological innovations (like immersive systems) and guaranteeing interoperability. However, this is only with the aim of reducing access barriers and enabling more inclusive participation. Finally, since e-Participation flourishes even in authoritarian regimes (Åström et al., 2012), DCP makes a strong case for incorporating an inclusive democratic approach in the platform design itself. Thus, with DCP, this paper made the argument to adapt the idea of e-Participation in favor of a modern understanding of digital participation platforms and thereby paving the way for a second wave of digital participation.

As already pointed out by Thiel et al. (2018), there are other promising technological innovations (e.g. smart watches and public displays), which could further be researched and explored for the context of public participation. The latter is currently investigated in a citizen science research project, where researchers also experiment with chatbots for citizen involvement (Greif-Winzrieth and Gau, 2021). The results of this project might be worth considering in future investigations. Especially in the field of human-computer interaction, the attention to inclusivity needs to be a cornerstone of information systems research. Hevner et al. (2004) argued that “[t]he goal of behavioral science research is truth. The goal of design science research is utility” (Hevner et al., 2004, p. 80). If utility is the aspiration of this popular information systems research method, a focus on the inclusiveness of digital participation platforms and processes has to become a major part of further design science research, especially in the field of digital democracy.

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