

## **ARTICLE**

Open Access Journal

# Digital Rights to the City: Local Practices and Negotiations of Urban Space on Decidim

Aline Suter 10, Lars Kaiser 20, Martin Dušek 3,4, Florin Hasler 50, and Simone Tappert 10

- <sup>1</sup> School of Social Work, University of Applied Sciences and Arts Northwestern Switzerland, Switzerland
- <sup>2</sup> Urban Equipe, Switzerland
- $^{\rm 3}$  School of Art & Design, Lucerne University of Applied Sciences and Arts, Switzerland
- <sup>4</sup> Accenture, Switzerland
- <sup>5</sup> Opendata.ch, Switzerland

**Correspondence:** Aline Suter (aline.suter@fhnw.ch)

Submitted: 27 April 2023 Accepted: 8 September 2023 Published: 16 January 2024

Issue: This article is part of the issue "Citizen Participation, Digital Agency, and Urban Development" edited by Simone Tappert (University of Applied Sciences Northwestern Switzerland), Asma Mehan (Texas Tech University), Pekka Tuominen (University of Helsinki), and Zsuzsanna Varga (University of Glasgow), fully open access at https://doi.org/10.17645/up.i327

### **Abstract**

The organization, management, and production of urban space through digital information and communication technologies have become a central means for governing urban life. To overcome a lack of citizen-centered practices in today's smart cities, governments and municipalities institutionalize citizen-centered digital infrastructures such as Decidim, a digital infrastructure proposing non-corporate, decentralized, and collaborative forms of digital production to evoke participatory governance practices and ultimately social transformation (Barandiaran et al., 2018). Swiss city administrations have adapted the Decidim platform for participatory budgeting processes and city-wide participation platforms since 2019. This article explores the process of institutional adoption, focusing on how the use of Decidim impacts local practices and negotiations for governing urban space. The examination of the Decidim platform in the Swiss cities of Zurich and Lucerne will be framed by re-conceptualizing Lefebvre's right to the city in the age of digital transformation. The findings show that for a successful introduction of the Decidim platform based on principles of the right to the city (a) local needs for a new digital democratic instrument need to be pre-existent, (b) government employees must implement a scope of action which allows organized civil society and grassroots initiatives to appropriate the infrastructure for their own purposes, and (c) local practices of hybrid communication and organizing must be aligned with the structure of the platform. Nevertheless, digital participation tools such as Decidim cannot solve entrenched inequalities such as the financialization of land, the issue of disadvantaged neighborhoods, or the absence of voting rights for certain communities. Therefore, city administrations need to integrate hybrid participation strategies which prioritise collective power over distributive power as well as tackle urban inequalities through political means.



## **Keywords**

civic technology; Decidim; neighborhood governance; smart city; Switzerland; urban development

#### 1. Introduction

The mediation and contestation of urban space through the political, ideological, and social spheres is a central debate in critical urban studies (Brenner, 2009, p. 198). With digital transformation processes altering governance practices, it has become central to analyze the urban fabric through and with the digital sphere (Geuder & Alcântara, 2019, p. 118). Smart city concepts have become a standard for city administrations. Digital tools are introduced with the objective of enhancing information flow and data management both within and outside the municipality, as well as inducing a culture of shared governance through collaborative city-making (Tappert & Suter, 2021). To overcome the lack of citizen-centered practices in today's smart cities, new modes of governance are established based on technological concepts such as civic technology (Zhang et al., 2022). The institutionalization of the Decidim platform by city administrations around the world is one example of this development. Decidim envisions non-corporate, decentralized, and collaborative forms of digital production, is democratically designed, and aims to shift political power relations beyond the digital to create participatory governance practices and ultimately social transformation (Barandiaran et al., 2018, pp. 22–24, 37). The development of the platform was engendered by the 15-M citizen activists (Indignados Movement).

This article examines the use of the Decidim platform in the Swiss cities of Zurich and Lucerne based on the following research questions:

RQ1: How is the public-commons digital platform Decidim institutionalized in Switzerland?

RQ2: How does the platform shape local practices and negotiations for governing urban space?

RQ3: How does Decidim enable or impede a (digital) right to the city?

Since 2019, larger cities in Switzerland have experimented with or partially adapted Decidim as their city-wide participation platform. In Zurich and Lucerne, the city administrations have initiated this process by testing a participatory budgeting process on the digital infrastructure. Both cities have now integrated Decidim as a central tool for digital participation, used particularly in urban development and collaborative city-making projects. As current research on Decidim mainly focuses on the role of citizens and social movements, a research gap on the use of the Decidim infrastructure in cities and questions related to the institutionalization of Decidim by city administrations beyond Spain was identified (Borge Bravo et al., 2022; Islar & Irgil, 2018; Pradel-Miquel, 2021). Therefore, this article analyzes the institutional adoption of Decidim by city administrations in Switzerland and shows how this shapes local practices and negotiations for governing urban space based on three empirical case studies with varying foci: project implementation from a local bottom-up initiative to the institutionalization by the city administration (Zurich), grassroots practices on the platform and beyond (Zurich), and participatory approaches in a hybrid setting (Lucerne). As spatial effects and the production of urban space through the Decidim platform have not yet been a focus by scholars, we use Geuder and Alcântara's (2019) conceptualizations of digitalizing the right to the city, based



on Henri Lefebvre's work, and adapt it to citizen participation in the context of the Decidim platform. This theoretical lens is substantiated by first situating Decidim in a critical debate on citizen-centered smart cities, as well as contextualizing the digital infrastructure in terms of its guiding principles.

# 2. Citizen-Centered Smart Cities and the Digital Right to the City

The organization, management, and production of urban space through digital information and communication technologies have become a central means to govern urban life. While authors emphasize that "smart city" is a fuzzy term (e.g., Camero & Alba, 2019), it is generally described as the collection and use of digital data aiming to address current and future challenges of urbanization and to enhance service deliveries in the fields of governance, mobility, environment, and economy (Arroub et al., 2016). Critical scholars in digital geography and urban studies situate smart city concepts in neoliberal ideologies embedded in a techno-capital paradigm (e.g., Cardullo & Kitchin, 2019). Even though people are usually described as a key component of a smart city, a significant body of literature highlights a lack of citizen-centered practices in today's smart cities (Tran Thi Hoang et al., 2019).

Some scholars therefore propose adjusting governance practices in smart cities by actively engaging citizens in the production and administration of the digital city (e.g., Camero & Alba, 2019; Chantry, 2022; Helbing et al., 2021; Kitchin, 2015). Other research states that this shift has already been put into practice (e.g., Castelnovo, 2016; Correia et al., 2021; Tomor, 2020). Such smart governance strategies seek to reinforce cooperation with companies and local associations and engage citizens in participatory processes with the use of intelligently connected information and communication technologies. They position local authorities as service providers based on principles of transparency, participation, and collaboration.

Smart governance acts on the underlying idea of creating better-functioning democracies by moving beyond top-down practices (Camero & Alba, 2019, p. 86). However, a critical reading of such novel modes of governance indicates new or emphasised existing forms of power and control both by state authorities and large digital companies in the production of urban space (e.g., Sadowski, 2021). Vadiati (2022) argues that such smart citizen concepts remain "rooted in rational, functional and paternalistic discourses instead of in social rights, political citizenship and the common good" and constitute only a conditional resistance to techno-capitalist smart cities and digital inequalities (Nikki Han & Kim, 2021, pp. 3, 11). Therefore, critical scholars urge a radical shift away from the neoliberal and entrepreneurial smart city (Anastasiu, 2019; Galič & Schuilenburg, 2020; Vadiati, 2022).

Many scholars prompting such a shift refer to Lefebvre's right to the city as a theoretical lens to analyze the digital transformation of society and its implications in the production of urban space, and urge the transfer of decision-making processes away from the state into the hands of the "citadins" (Purcell, 2002, p. 102) This scholarly strand sees the digital sphere as an extension or continuation of urban space, creating a hybrid terrain in cities (Ash et al., 2018; Castells, 2015; Certomà, 2020). Here, the right to the city is conceptualized in the study of smart cities (Anastasiu, 2019; Breuer et al., 2019; Galič & Schuilenburg, 2020; Kitchin et al., 2019), citizenship and participation in the digital era (Alevizou, 2020; Breuer & Pierson, 2021; Islar & Irgil, 2018; Reeve, 2022), informational and digital power in today's cities (Currie et al., 2022; Shaw & Graham, 2017), and the digital sphere as the site of struggle and resistance (Garay et al., 2020; Geuder & Alcântara, 2019; Middha & McShane, 2022; Tayebi, 2013).



Geuder and Alcântara (2019) have outlined three central dimensions to Lefebvre's conceptualization of the urban to theoretically frame a digital right to the city. To acknowledge the interwoven implications between analogue and digital practices, and to research the spatial effects and the production of urban space by and with the Decidim platform, their considerations are used and adapted to citizen participation in the context of the Decidim platform. First, urban space is produced by conflicts, negotiation, interaction, and assembling. Here, the urban level unfolds and acts as:

An intermediary and mediating level situated between two others—on the one hand, the private level, the proximate order, everyday life, and dwelling; on the other hand, the global level, the distant order, the world market, the state, knowledge, institutions, and ideologies. (Schmid, 2012, p. 46)

Today, the digital must be considered as an integral part of the urban level (Geuder & Alcântara, 2019, p. 128). Due to new modes of governance and digital transformation of the everyday, spaces of encounter (Merrifield, 2011) are increasingly transferred to digital platforms such as Decidim. Simultaneously, social media or digital messenger applications have become essential for bottom-up initiatives and other forms of counter-hegemonic practices (e.g., Tayebi, 2013). Second, Lefebvre understands the city as a site of accumulation, of people, products, symbols, knowledge, techniques, money, and capital (Schmid, 2022, p. 214). Centrality is a key concept through which Lefebvre defines what he understands as the city: a form which allows synchronicities of events and perceptions, but also the possibility of encounter (Schmid, 2012, pp. 47-48). What Lefebvre meant by centrality in contemporary society is the possibility of processing knowledge and information. Sovereignty over data collection and processing leads to increasing control over the management of access to centrality. We argue that digital developments in the fields of civic technology aim to enhance the production and construction of centralities through their tools. Simultaneously, biases inscribed in digital tools can reinforce the exclusion of disadvantaged groups. Further, it raises questions of power relations in terms of hegemonic access to central digital spheres. Third, Lefebvre distinguishes between abstract space and differential space. In abstract spaces, which are produced by capitalism, exchange value is rated higher than local qualities and uses (Geuder & Alcântara, 2019, pp. 131-132). Instead, Lefebvre proposes the making of differential space which enables power in decision-making for all who construct and appropriate urban space. Led by auto-géstion (self-governance), the right to difference "arises from the simultaneous presence of very different worlds and values, ethnic, cultural, and social groups, activities, and knowledge" (Schmid, 2022, p. 374). In conclusion, digitalizing the right to the city can be defined as reclaiming urban technology by acts of commoning and de-commodification (digital sovereignty), leading to a systemic change led by self-management and participatory city-making. The three aspects in Lefebvre's reading of the urban-the right to encounter, the right to centrality, and the right to differential spaces—serve as the central dimensions when studying Decidim and governance practices of urban space through the platform in the three Swiss case studies.

## 3. The Vision of the Decidim Platform

The Decidim platform is a web-based "public-common's, free and open, digital infrastructure for participatory democracy" (Barandiaran et al., 2018, p. 8) and is programmed as a modular platform: Components such as proposals, meetings, blogs, comments, voting, or participatory texts can be combined and used to design entities in participatory spaces, such as processes (e.g., a participatory budget),



assemblies (e.g., website of a neighborhood association), conferences (e.g., the landing page of a city planning hackathon), initiatives, and voting/elections.

Decidim's vision shares great similarities with Lefebvre's utopia of differential spaces. The platform was collaboratively designed by activists following the 2011–2012 15-M movement in Spain (Borge Bravo et al., 2022, p. 1; Charnock et al., 2021, p. 589), challenging the current political and economic state, rising inequalities, and claiming radical democracy (Postill, 2017, pp. 16, 23). Thus, Decidim attempts to establish the values of a political movement in the design principles of an online platform aiming at improving and enhancing "the political and administrative impact of participatory democracy in the state" (Barandiaran et al., 2018, p. 11). Despite being born into an institutional context with its first use by Barcelona City Council, a central goal has always been "empowering social processes as a platform for massive social coordination for collective action independently of public administrations" (Barandiaran et al., 2018, p. 11). As such Decidim (as an infrastructure) finds itself between being a centralized and decentralized public platform (see Figure 1). Decidim's ruleset is outlined by the Decidim Social Contract (Decidim, n.d.-a) and is described as setting the underlying design principles for the platform (Barandiaran et al., 2018, pp. 50–53). Firstly, the contract defines what Decidim means by free software (meaning free as in freedom, not unpriced) and correspondingly, under which licenses the software may be used (Decidim, n.d.-a). Secondly,

# **GOVERNING INFRASTRUCTURES, GOODS & SERVICES** Copyleft 2016-18 by Xabier E. Barandiaran & Antonio Calleja, with GFDL & CreativeCommons By-SA 4.0 licenses: you are free to copy, modify and redistribute provided that this notice is preserved centralized Privatizations & (re)municipalizations state big corporations archic governing (lobbying) city Oligarchic and councils representative (and participatory) gover<mark>ni</mark>ng Regulations Decidim public private People participatory governing sharing economy commons distributed capitalism solidarity economy coopératives (Uber, AirBnB, etc.) decentralized

Figure 1. Governing infrastructures, goods, and services. Source: Barandiaran et al. (2018, p. 22).



the contract introduces the three concepts of transparency, traceability and integrity of content: in short, all content on the platform must be accessible, downloadable, and traceable (Barandiaran et al., 2018, p. 51). Additionally, all content should be treated equally, offering equal opportunities to all participants. Personal data (i.e., for verification purposes) needs to be handled confidentially. Lastly, the Social Contract enforces adopters of the software to interinstitutional collaboration to facilitate continuous improvement of the platform (Decidim, n.d.-a). Thereby, Decidim ensures the perpetuation of an infrastructure with a democratic vision in three dimensions:

The political (focused on the democratic model that Decidim promotes and its impact on public policies and organizations), the *technopolitical* (focused on how the platform is designed, the mechanisms it embodies, and the way in which it is itself democratically designed), and the *technical* (focused on the conditions of production, operation and success of the project: the digital factory, collaborative mechanisms, licenses, etc.). (Barandiaran et al., 2018, p. 11)

As of 2023, Decidim has spread worldwide and is being used and continuously developed by roughly 400 cities, countries, and NGOs (Decidim, n.d.-b). The transfer of the vision embedded in its Social Contract to local use cases is particularly challenging within smart governance practices; this will be the subsequent focus of this article.

## 4. Research Questions and Method

The examination of the Decidim platform in the Swiss cities Zurich and Lucerne is framed by Geuder and Alcântara's (2019) conceptualizations of digitalizing the right to the city in order to explore the institutional adoption of Decidim by city administrations and its impact on practices and negotiations for governing urban space at the local scale. Therefore, this article aims to analyze the three research questions presented in Section 1.

The article combines the findings of two qualitative research projects (case study Zurich: "Placemaking through Idealizations and the Role of Local Knowledge and Practices in the Age of Digitalization" funded by the Swiss National Science Foundation, 2021–2024; case study Lucerne: Dušek, 2021) that were conducted in the cities of Zurich and Lucerne in the years 2021 and 2022. Both studies focused on processes of interaction, negotiation, and decision-making among stakeholders in participatory urban development projects at the neighborhood scale, and particularly looked at the implementation of digital tools by different stakeholders and their impact on the outcome of such projects. The cities Zurich and Lucerne were chosen as they were the first two cities in the German-speaking part of Switzerland to implement the Decidim platform in order to strengthen public participation as part of their smart city strategies (Zurich: "Mitwirken an Zürichs Zukunft" and Lucerne: "Dialog Luzern"). The strategies also included conducting a trial run of participatory budgets: Quartieridee Wipkingen (neighborhood scale, Zurich), Stadtidee Zürich (city scale, Zurich) and Quartiereffekt (Lucerne).

The studies adopted a constructivist-hermeneutic approach for data collection and analysis, and the controlled strategy of theoretical sampling was used to develop the data corpus. First, document analysis was conducted in order to grasp (a) the smart city concepts, the strategies of public participation within these concepts and the role of Decidim as a digital tool to promote the goals defined in the smart city



concepts, and (b) its implementation through the lens of the participatory budget trial runs which constitute the three case studies presented in this article. A broad definition of documents was applied, ranging from administrative documents (such as political motions, concepts, and spatial planning documents) to documents published by or circulated amongst the different stakeholders participating in the participatory budget trial runs. Second, qualitative interviews were conducted with a total of 15 interviewees in Zurich (municipality, planning team, intermediary actors, and neighborhood initiative) and a total of 17 interviewees in Lucerne (municipality, intermediary actors, and neighborhood associations). Third, to enable an in-depth understanding of local practices and negotiations, participatory observations were carried out (informal participatory events such as dialogue events, discussion forums, and workshops with the stakeholders and the wider public). The data was analyzed thematically and inductively, based on the principles of grounded theory (Strauss & Corbin, 1990). This involved close reading of the data material (interview transcripts, documents, field notes), noting central concepts, key emerging themes, patterns, and variations in order to move from descriptive to explanatory accounts following the coding scheme of the grounded theory methodology and its iterative approach. For the purpose of this article, the findings of the two research projects were compared at the final stage of the data analysis.

## 5. The Digitalization of Citizen Participation in Urban Development in Switzerland

In Switzerland, citizen participation in urban development processes is legally prescribed in Art. 4 of the Federal Act on Spatial Planning ("Provision on information and participation") and authorities responsible for planning are required to inform the public and to ensure participation. While the Federal Office for Spatial Development in Switzerland operates as a coordination platform for spatial planning, traffic, and transport issues, due to the federalist structure of the country, the cantons, cities, and municipalities play a key role in implementation (Federal Office for Spatial Development, 2012). Since the communicative turn in the 1990s, the planning culture in Switzerland has gradually shifted towards an understanding of participation going beyond the legally guaranteed participation of the population (e.g., in municipal referendums, hearings, and public planning requirements) or the direct democratic procedures (especially referendums) that are solely accessible for citizens of Swiss nationality. Today, every planning project that is in the interest of the public involves an informal planning process in addition to the actual formal planning process (e.g., citizen panels, workshops, activating surveys, and world cafés; Neuhaus et al., 2015). Such informal planning processes are of particular importance in order to enable the participation of urban residents who are not Swiss citizens and, thereby, excluded from direct democratic voting procedures.

Swiss cities are increasingly adopting digital tools to ensure public participation and cooperation. The digitalization of citizen participation is linked to the broader aim of creating smart cities through governance strategies that promote citizen participation by urban residents independently of their nationality, broaden citizen participation through a hybrid approach, and reinforce cooperative structures. This digitalization process is politically promoted and structured through the following strategies and guidelines: (a) Digital Switzerland Strategy (2020, 2023, federal level); (b) E-Government Strategy Switzerland (2007, 2015, 2020–2023, federal level); (c) Smart City Concepts (canton, city, municipal level).

The Digital Switzerland Strategy was first implemented in the year 2020 and sets guidelines for digital transformation in Switzerland. It aims to ensure sustainable and responsible digital transformation for the benefit of the Swiss population and requires the Confederation to support the cantons, cities, and



municipalities in the implementation of smart city initiatives. The E-Government Strategy promotes the digital transformation of public administration and lays the structural ground for the coordination of all e-government activities at municipal, city, canton, and federal levels. Within the framework of the E-Government Strategy Switzerland, the Confederation enables and finances digital participation initiatives (e.g., participatory budgeting projects Quartieridee Wipkingen Zurich and the Decidim association). Thus, the strategy is directly connected with the implementation of smart city strategies in Swiss cities. According to the Smart City Survey 2022 (Sütterlin et al., 2023), 28% of Swiss cities have already implemented smart city initiatives and strategies, and 36% are currently in the process of implementation. In the area of "smart people" a total of 45 projects were listed with the majority focusing on digital participation such as participation platforms, online surveys, and online workshops.

The cities of Zurich and Lucerne have both developed a smart city strategy which aims at promoting digital communication and public participation in urban development projects (Zurich Smart City Strategy 2018, Lucerne's Digitalstrategie und Smart City Luzern). As a part of this process, digital participatory platforms were implemented by the city authorities using the open-source software Decidim (Mitwirken an Zürichs Zukunft, Dialog Luzern), and the participatory budget was introduced as a subproject on a trial basis (Stadtidee Zurich at city scale, Quartiereffekt Lucerne at district scale). The case of Decidim and the participatory budget in the cities of Zurich and Lucerne will be presented in-depth in the following sections.

# 6. Local Practices and Negotiations of Urban Space on Decidim

### 6.1. Joining Bottom-Up Initiatives and Institutional Adaptations: Quartieridee Wipkingen

From 2020 to 2021, the Quartieridee was implemented as the trial run of a participatory budget in a Zurich neighborhood (Wipkingen). Unlike similar processes observed around the world, the test run was conducted by the two associations—Nextzürich, a civil initiative focusing on redesigning city development, and Urban Equipe, an organization aiming to strengthen democratic aspects of urban life—instead of by municipal authorities, which supported the test run financially and strategically (Urban Equipe, 2022). In 2020, the trial run started with a budget of 40,000 Swiss francs for ideas submitted via a Decidim platform branded specifically for the process. The ideas submitted dealt with improving public spaces, strengthening urban networks or improving the ecological state of the urban sphere. In total, 99 ideas were submitted, of which eight received the requested budget for the implementation phase. Unlike in other participatory budgeting processes (e.g., Madrid, Reykjavik, or Paris), the individuals/groups who submitted an idea were responsible for its realization, as the pilot character did not allow for the creation of a legal framework as a municipal political instrument (Urban Equipe, 2022).

Quartieridee Wipkingen can be seen as an example of the kind of process for which Decidim was designed. Firstly, Nextzürich and Urban Equipe identified a gap between the micro needs of the individual and the macro responsibilities of elected representatives in urban life and sensed an opportunity to reduce this gap (Nextzürich & Urban Equipe, 2018) with the introduction of new democratic instruments focusing on strengthening public participation and creating visibility for hyperlocal needs from both a top-down and a bottom-up perspective. Therefore, the associations focused on developing a concept for a participatory budgeting system in Zurich, aiming to supplement Switzerland's already existing semi-direct democratic political instruments. During the same period, Zurich's legislature commissioned the City of Zurich to pilot



methods to strengthen participation in neighborhoods and adjust the Smart City Strategy through the new strategic goal Civic Tech, later implemented by the Zurich Smart City Strategy (City of Zurich, 2018). The final step towards implementation was then undertaken by a locally rooted actor, the neighborhood association of Wipkingen, which offered to collaborate with Urban Equipe and Nextzürich for a trial run. Secondly, the need for the platform arose from the need for an infrastructure to facilitate the proposed instrument and not as a means in itself, i.e., as an imposed way to apply the platform. The main focus of the implementation of the participatory budget was placed on strengthening social networks and civil society within Wipkingen, which was achieved through 18 physical events throughout the process (Urban Equipe, 2022). The Decidim platform was used as an infrastructure for online communication and for the key features of any participatory budget, i.e., the submission of ideas, the discussion, and the voting process.

However, the process design chosen also created challenges: Firstly, the process builds greatly upon small-scale networking. This requires vast resources both financially and in the form of voluntary work. This is only sustainable in the long term if the process is clearly understood by the public and followed by large-scale self-organization. Secondly, while enabling a short-term implementation of the trial run with the non-governmental project lead of Urban Equipe and Nextzürich, problems arose during the implementation of the projects with allocated budgets due to approvals required by the municipality (i.e., for events), which did not have a legal framework for expediting and facilitating ideas chosen by the public in Wipkingen.

## 6.2. Grassroots Practices on the Decidim Platform and Beyond: Stadtidee Zürich

As a follow-up to the first participatory budget experience in Wipkingen, the participatory budget was upscaled to the city level in 2021 with an overall budget of 540,000 Swiss francs and named "Stadtidee." For two months, all interested citizens residing in Switzerland were able to digitally submit a project idea in the predefined subject areas of "Climate and Environment" and/or "Children and Youth" to apply for a budget of between 1,000 and 9,999 Swiss francs. The city's urban development department led the digital participatory budgeting process for Zurich, supported by Urban Equipe. Based on previous experience, the project team used a similar setup on the Decidim platform. The website was used for the entire process, from project proposals and voting to the implementation of the projects.

One of the ideas submitted is of particular relevance in the context of (digital) rights to the city: The "Linkes Seeufer für Alle" (LSFA) is a coalition of neighborhood residents, cultural workers, and citizens of Zurich, advocating for a public and democratic debate on the future development of a land plot currently owned and used by Kibag AG, a concrete and gravel processing company, located on the shores of Lake Zurich. LSFA submitted a proposal for a neighborhood event on the participatory budgeting platform Stadtidee together with other local organizations and applied for 4,500 Swiss francs. The aim of this neighborhood festival was to "put the interests of the local community back at the center of the...debate" (LSFA, 2023). The proposal needs to be contextualized within a larger discourse on housing for profit and public space in this area. Based on a special building regulation passed by the city council in 2008, this private company is permitted to build residential buildings on the land after 2030, which they aim to do. As the surrounding neighborhood had had similar experiences with another upmarket real-estate project, the publicized profit-oriented plans of Kibag AG led to both public outrage and political action. On the basis of a motion by two politicians in the municipal council in 2019, the city planning office carried out a test planning process for the aforementioned area in 2021–2022, in which local interest groups were invited to participate in the



formal planning procedure. LSFA participated in the test planning process together with other advocacy groups, including, e.g., the local community center, representatives of the Rote Fabrik (alternative cultural center), the local neighborhood association, and a youth representative (Amt für Städtebau, 2022). Due to the formal setting of the test planning process, local actors had limited room for manoeuvre in participation and no decision-making power. To strengthen their position and demands for the space, the collective made intensive use of diverse hybrid practices; the participatory budgeting of the City of Zurich was one of them.

The Decidim platform served as a networking tool and enlarged the pool of organizers for the event. The call for voting on their proposal over social media and other networks was successful, and the neighborhood festival took place in May 2022. Over two days, local organizations were present in various booths and the organizers, together with the neighborhood association, collected signatures for a political petition to rezone the area into a non-residential industrial zone. LSFA used the Decidim platform as an enabler to legally occupy contested urban space, claim their right to it, and circulate their demands in the manner of a bottom-up initiative. This formalization of traditionally informal or incremental practices (Miraftab, 2011) becomes visible in a statement by the organizers: "The festival is legal, popular, and fascinating, but the gesture is also that of an occupation: The appropriation of a space stimulates the imagination of what else could be done with it" (LSFA, 2023) Currently (August 2023), the development plans for the land owned by Kibag AG are still active. However, the neighborhood festival, together with other activities by LSFA, has initiated a public discussion on the legitimate ownership of the land as well as profit-oriented urban development. The results of the test planning process by the city planning office support this in prioritizing local interests for non-residential, non-commercial, free spaces, creating places of encounter, and promoting self-organization. The future development is at present uncertain and will depend on political negotiations and decisions.

## 6.3. Activating Participation: Quartiereffekt LuzernNord

LuzernNord, a development focus of the canton of Lucerne, has a high proportion of migrants and socio-economically marginalized areas. Upgrading the Seetalplatz area carries the risk of gentrification, higher rents, and displacement of locals. In March 2021, the area's management initiated the participatory budget "Quartiereffekt" through the digital platform Dialog Luzern, using Decidim. The participatory budget was organized top-down by the area management with the involvement of local institutions and associations to engage the residents. Public communication was limited to flyers, brochures, and posters distributed to well-connected key actors at the kick-off event. A Telegram group chat was also used to mobilize residents to vote for their ideas. A total of 18 ideas were submitted, and four winners were selected, receiving a total of 21,000 Swiss francs.

This case study examines the engagement of residents with a migrant background in participatory budgeting and highlights the factors that contribute to their low participation rates. Although Quartiereffekt has improved local networks, public relations, and the familiarity of public administrations with swift, experimental planning processes, limitations related to participation, pre-existing socio-economic inequalities, and a digital divide were identified.

The participation barrier for individuals with limited knowledge of the German language was high, as communication materials, including flyers, brochures, posters, and the website, were only available in



German. Moreover, the digital interface for entering ideas was identified as a hurdle for some residents. Older residents, particularly those over 50, stated their preference for analogue channels for entering ideas. "Why isn't there a normal, printed form? As if dealing with the German language wasn't already challenging," a member of the Islamic Cultural Association commented during an interview. Two other primary reasons given for not participating were not feeling engaged and low levels of confidence in having an influence on the development of public space through a participatory budget. Residents who were already involved in different associations were more willing to participate but complained of a lack of resources due to their existing commitments, such as family, voluntary work, and multiple jobs, leaving little time to organize and enter an idea through the platform.

The example of LuzernNord shows it would be wrong to claim that major social problems have been addressed with the help of participatory budgeting using Decidim. The danger of gentrification of the surrounding neighborhoods, which arises from the redevelopment of the former industrial area, is not mitigated. Residents' concerns that rents will rise remain. The residents who decisively shape the appearance of the public space are still the same well-connected Swiss citizens. And so Decidim, when used as in LuzernNord, reproduces prevailing power relations. Nonetheless, it was never Decidim's intention to carry out purely digital participation and tackle the big social issues exclusively on the platform. Rather, analogue processes should be supported through the digital platform. In spite of the aforementioned shortcomings, Decidim can be a practical tool for location marketing, strengthening local networks and rethinking administrative processes. Looking at other examples where participatory approaches have been used to address urgent social problems, one might conclude that Decidim can even serve the purpose of enabling less established sectors of the population to help shape their neighborhood. In order for Quartiereffekt to have a more fundamental impact and enable more diverse participation, other conditions would need to exist in local society. This includes the political will to rethink power relations and to allocate funds to lower the barriers for less privileged people, for example, with larger budgets for public communication and communication tools translated into different languages.

### 7. Discussion

The three case studies have individually highlighted different aspects of a participatory budgeting process on the Decidim platform. Together, they illustrate larger themes around a (digital) right to the city and demonstrate the ways in which the institutionalization of the platform shapes spaces of encounter, centrality, and difference. In both cities, Decidim served as a platform to discuss and negotiate urban space by civil society and local actors. The extent to which the digital process acted as a catalyst to claim rights to the city varied greatly.

We argue that the Social Contract of Decidim has the potential to create differential spaces in the digital sphere. However, the local use cases reveal only selective islands of differential spaces. The substructure, visible in the institutionalization of the platform, is maintained by pre-existing top-down practices. The platform creates spaces of encounter when aspects such as accessibility, familiarity, and hyperlocal needs are met. This has been illustrated by the case of Wipkingen, where Decidim was not imposed top-down. However, in the cases of the Stadtidee and Quartiereffekt LuzernNord, the digital tool was implemented by city administrations. This can even lead to a shift in digital tools, as shown in Lucerne, where the residents created an alternative communication channel over Telegram.



The two case studies in Zurich highlight shifting power dynamics and centrality in hyperlocal realities enabled by the participatory budgeting process on Decidim. In the case of Wipkingen, the project management was rooted in civil society and therefore facilitated a fragmented hegemony over hybrid urban spaces. This aspect becomes more pronounced in the example of the Stadtidee: The neighborhood festival has partly impacted a formal planning process by creating a base to reclaim local rights by appropriating a contested area. In Lucerne, access to centrality was occupied by formal actors such as the area manager, strengthening the digital divide and leading to non-participation. This shows that while a right to centrality is inscribed into the programming of Decidim, it is the local and institutional implementation of the platform that determines (in)accessibility.

The cases studied have shown that underlying urban issues such as financialization of land, disadvantaged neighborhoods, and housing for profit were partially addressed on Decidim to foster public support. The platform has even been appropriated, improved, and used by organized civil society as a counter-power (Castells, 2015). Furthermore, the institutionalization of Decidim enhances aspects around transparency, the organization of information, and the collection of citizen proposals (Borge Bravo et al., 2022, p. 9). To ensure a right to the city, digital participation processes would need to enable aspects around social justice, common good, and self-management. Therefore, the full potential of the platform is not (yet) exploited in Switzerland. To achieve this, city administrations would need to fully integrate (hyper)local needs (e.g., with intermediary actors) into the institutional use of Decidim, as well as enable space for self-organization.

### 8. Conclusions

Managing urban space with information and communication technologies has become a central means of governance in today's cities. An idealized vision of a more democratic, transparent, and just world underlies these developments. This vision has inspired tool developers in the fields of civic technology and beyond to program according to principles of decentralization, collaboration, and the commons (Zhang et al., 2022). The institutionalization of such tools by governments and municipalities is considered a standard trend in participatory governance practices (Borge Bravo et al., 2022). This article has studied Decidim as an example of citizen-centered infrastructure undergoing such institutionalization processes in the context of Switzerland. A lack of research beyond Spain has emphasised the relevance of this study, which focuses in particular on local practices and negotiations of urban space. A re-conceptualization of Lefebvre's right to the city in the age of digital transformations has been highly useful as a theoretical lens as it (a) centers both bottom-up and top-down practices for governing urban space, (b) the vision of civic technology shares great similarities with the right to the city concept, and (c) the Decidim infrastructure is aligned with Lefebvre's formation of ideas on differential space.

The case studies have shown that for a successful introduction of the platform based on the principles of a right to the city, certain prerequisites need to be in place: (a) Local needs for a new digital democratic instrument are pre-existent, (b) government employees implement a scope of action which allows organized civil society and grassroots initiatives to appropriate the infrastructure for their own purposes, and (c) local practices of hybrid communication and organizing are aligned with the structure of the platform. A central point of critique refers to the local administration having power over the Decidim infrastructure, reducing moments of the self-management advocated by Lefebvre to a minimum. The right to centrality is administered by formal government structures and substantiates pre-existing hegemonic power relations in



the governance of urban space. There is a risk that governments consider the Decidim infrastructure as an automatic enabler of collaborative city-making, without adjusting the dominant distribution of power and agency. Empowering public participation can only be realized when distributive power (the power over) is transferred to collective power (the power to), as elaborated by Koch (2013).

As the empirical case studies have shown, digital participation tools such as Decidim cannot resolve entrenched inequalities such as financialization of land, disadvantaged neighborhoods, or the absence of voting rights for certain communities. Therefore, it seems crucial that users' expectations of the examined platform need to be adjusted accordingly. This means that city administrations both need to integrate hybrid participation strategies which center collective power over distributive power, as well as tackling urban inequalities through political means.

The integration of the Decidim infrastructure in participatory city-making is an emergent phenomenon in Switzerland. The cases examined have used either the platform or the participatory budgeting process on Decidim in an experimental setting. Therefore, it will be necessary to carry out similar explorations when participatory governance practices become more established.

#### **Acknowledgments**

The Quartieridee was made possible by the huge amount of voluntary work invested by civil society in Wipkingen, as well as the Migros Pionierfonds, Digitale Verwaltung Schweiz, the Schweizerische Gemeinnützige Gesellschaft, and Smart City Zürich. The authors would like to thank everyone who participated in the research project and allowed us to gain relevant insights into the field, as well as the anonymous reviewers for their well-considered and helpful comments. This article is based upon work from COST Action DOPMADE, CA18204, supported by COST (European Cooperation in Science and Technology).

#### **Funding**

This article is part of a research project funded by the Swiss National Science Foundation.

#### **Conflict of Interests**

The authors declare no conflict of interests.

#### References

Alevizou, G. (2020). Civic media and technologies of belonging: Where digital citizenship and "the right to the city" converge. *International Journal of Media & Cultural Politics*, 16(3), 269–290.

Amt für Städtebau. (2022). Testplanung Seeufer Wollishofen. Abschlussbericht. https://www.stadt-zuerich.ch/hbd/de/index/staedtebau/planung/entwicklungsgebiete/seeufer-wollishofen.html#schlussbericht

Anastasiu, I. (2019). Unpacking the smart city through the lens of the right to the city: A taxonomy as a way forward in participatory city-making. In M. de Lange & M. de Waal (Eds.), *The hackable city: Digital media and collaborative city-making in the network society* (pp. 239–260). Springer.

Arroub, A., Zahi, B., Sabir, E., & Sadik, M. (2016, October 26–29). A literature review on smart cities: Paradigms, opportunities and open problems [Paper presentation]. 2016 International Conference on Wireless Networks and Mobile Communications, Fez, Morocco.

Ash, J., Kitchin, R., & Leszczynski, A. (2018). Digital turn, digital geographies? *Progress in Human Geography*, 42(1), 25-43.



- Barandiaran, X., Calleja-López, A., & Monterde, A. (2018). *Decidim: Political and technopolitical networks* for participatory democracy. Decidim. http://ajbcn-meta-decidim.s3.amazonaws.com/uploads/decidim/attachment/file/2005/White\_Paper.pdf
- Borge Bravo, R., Balcells, J., & Padró-Solanet, A. (2022). Democratic disruption or continuity? Analysis of the Decidim platform in Catalan municipalities. *American Behavioral Scientist*, *67*(7), 926–939. https://doi.org/10.1177/00027642221092798
- Brenner, N. (2009). What is critical urban theory? City, 13 (2/3), 198-207.
- Breuer, J., & Pierson, J. (2021). The right to the city and data protection for developing citizen-centric digital cities. *Information, Communication & Society*, 24(6), 797–812.
- Breuer, J., Walravens, N., Van der Graf, S., & Mariën, I. (2019). The right to the (smart) city, participation and open data. In S. M. Figueiredo, S. Krishnamurthy, & T. Schroeder (Eds.), *Architecture and the smart city* (pp. 126–138). Routledge.
- Camero, A., & Alba, E. (2019). Smart city and information technology: A review. Cities, 93, 84-94.
- Cardullo, P., & Kitchin, R. (2019). Being a "citizen" in the smart city: Up and down the scaffold of smart citizen participation in Dublin, Ireland. *GeoJournal*, 84(1), 1–13.
- Castells, M. (2015). Networks of outrage and hope: Social movements in the internet age (2nd ed.). Polity.
- Castelnovo, W. (2016). Co-production makes cities smarter: Citizens' participation in smart city initiatives. In M. Fugini, E. Bracci, & M. Sicilia (Eds.), *Co-production in the public sector: Experiences and challenges* (pp. 97–117). Springer.
- Certomà, C. (2020). Digital social innovation and urban space: A critical geography agenda. *Urban Planning*, 5(4), 8–19.
- Chantry, W. (2022). "Built from the internet up": Assessing citizen participation in smart city planning through the case study of Quayside, Toronto. *GeoJournal*, 88(2), 1619–1637.
- Charnock, G., March, H., & Ribera-Fumaz, R. (2021). From smart to rebel city? Worlding, provincialising and the Barcelona model. *Urban Studies*, *58*(3), 581–600.
- City of Zurich. (2018). *Smart City Zürich*. https://www.stadt-zuerich.ch/portal/de/index/politik\_u\_recht/stadtrat/weitere-politikfelder/smartcity.html
- Correia, D., Feio, J., Teixeira, L., & Lourenço Marques, J. (2021). The inclusion of citizens in smart cities policymaking: The potential role of development studies' participatory methodologies. In N. A. Streitz & S. Konomi (Eds.), *Distributed, ambient and pervasive interactions* (pp. 29–40). Springer.
- Currie, M., Knox, J., & McGregor, C. (2022). Introduction: Data justice and the right to the city. In M. Currie, J. Knox, & C. McGregor (Eds.), *Data justice and the right to the city* (pp. 1–21). Edinburgh University Press.
- Decidim. (n.d.-a). *Decidim's social contract*. https://docs.decidim.org/en/develop/understand/social-contract Decidim. (n.d.-b). *Decidim in use: These cities, regions and organizations are already using Decidim*. https://decidim.org/usedby
- Dušek, M. (2021). Foster better conversations between city developers and residents. A study at the intersection of participatory urban development and conversation design, using the example of LuzernNord [Master's thesis]. Lucerne University of Applied Sciences and Arts. https://www.martindusek.ch/ma-thesis
- Federal Office for Spatial Development. (2012). Sustainable development in Switzerland—A guide. https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/nachhaltige-entwicklung-in-der-schweiz-ein-wegweiser.html
- Galič, M., & Schuilenburg, M. (2020). Reclaiming the smart city: Toward a new right to the city. In J. C. Augusto (Ed.), *Handbook of smart cities* (pp. 1–18). Springer.
- Garay, L., Morales, S., & Wilson, J. (2020). Tweeting the right to the city: Digital protest and resistance surrounding the Airbnb effect. *Scandinavian Journal of Hospitality and Tourism*, 20(3), 246–267.



- Geuder, J., & Alcântara, L. (2019). (Urban) space, media and protests: Digitalizing the right to the city? In J. Bauer & R. Fischer (Eds.), *Perspectives on Henri Lefebvre: Theory, practices and (re)readings* (pp. 118–146). De Gruyter.
- Helbing, D., Fanitabasi, F., Giannotti, F., Hänggli, R., Hausladen, C. I., van den Hoven, J., & Pournaras, E. (2021). Ethics of smart cities: Towards value-sensitive design and co-evolving city life. *Sustainability*, 13(20), Article 11162.
- Islar, M., & Irgil, E. (2018). Grassroots practices of citizenship and politicization in the urban: The case of right to the city initiatives in Barcelona. *Citizenship Studies*, 22(5), 491–506.
- Kitchin, R. (2015). Making sense of smart cities: Addressing present shortcomings. *Cambridge Journal of Regions*, *Economy and Society*, 8(1), 131–136.
- Kitchin, R., Cardullo, P., & Di Feliciantonio, C. (2019). "Citizenship, justice, and the right to the smart city." In P. Cardullo, C. Di Feliciantonio, & R. Kitchin (Eds.), *The right to the smart city* (pp. 1–24). Emerald Publishing.
- Koch, P. (2013). Bringing power back in: Collective and distributive forms of power in public participation. *Urban Studies*, 50(14), 2976–2992.
- Linkes Seeufer für Alle. (2023). *Linkes Seeufer für Alle-Nachbarschaftsevent*. Stadt Zürich. https://mitwirken.stadt-zuerich.ch/processes/stadtidee/f/313/results/188
- Merrifield, A. (2011). The right to the city and beyond. City, 15(3/4), 473-481.
- Middha, B., & McShane, I. (2022). E-gentrification: Digital community engagement, urban change and digital rights to the city. In S. Hovik, G. A. Giannoumis, K. Reichborn-Kjennerud, J. M. Ruano, I. McShane, & S. Legard (Eds.), Citizen participation in the information society: Comparing participatory channels in urban development (pp. 141–165). Springer.
- Miraftab, F. (2011). Beyond formal politics of planning. *International Journal of Urban and Regional Research*, 35(4), 860–862.
- Neuhaus, F., Stark, H. J., & Drilling, M. (2015). Atlas ePartizipation: Demokratische Stadtentwicklung. FHNW.
- Nextzürich, & Urban Equipe. (2018). Quartieridee—Hüt im chopf, morn im Quartier: Ein Gedankenexperiment für Participatory Budgeting in Zürich. https://nextzuerich.ch/wp-content/uploads/2018/12/Quartieridee\_participatory-budgeting-in-Zürich\_-Diskussionsgrundlage-V1-von-Nextzürich.pdf
- Nikki Han, M. J., & Kim, M. J. (2021). A critical review of the smart city in relation to citizen adoption towards sustainable smart living. *Habitat International*, 108, Article 102312. https://doi.org/10.1016/j.habitatint. 2021.102312
- Postill, J. (2017). Field theory, media change and the new citizen movements: Spain's "real democracy" turn as a series of fields and spaces. *RECERCA. Revista de Pensament i Anàlisi*, 21, 15–36.
- Pradel-Miquel, M. (2021). Analysing the role of citizens in urban regeneration: Bottom-linked initiatives in Barcelona. *Urban Research & Practice*, 14(3), 307–324.
- Purcell, M. (2002). Excavating Lefebvre: The right to the city and its urban politics of the inhabitant. *GeoJournal*, 58, 99–108.
- Reeve, A. (2022). Reading Lefebvre's *Right to the City* in the age of the internet. In S. Flynn (Ed.), *Equality in the city: Imaginaries of the smart future* (pp. 58–78). The University of Chicago Press.
- Sadowski, J. (2021). Who owns the future city? Phases of technological urbanism and shifts in sovereignty. *Urban Studies*, 58(8), 1732–1744.
- Schmid, C. (2012). Henri Lefebvre, the right to the city, and the new metropolitan mainstream. In N. Brenner, P. Marcuse, & M. Mayer (Eds.), Cities for people, not for profit: Critical urban theory and the right to the city (pp. 42–62). Routledge.
- Schmid, C. (2022). Henri Lefebvre and the theory of the production of space. Verso.



Shaw, J., & Graham, M. (2017). An informational right to the city? Code, content, control, and the urbanization of information. *Antipode*, 49(4), 907–927.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* SAGE. Sütterlin, B., Oberkalmsteiner, J., Giger, J., Kappeler, M., & Carabias, V. (2023). *Swiss Smart City Survey.* https://smartcity-survey.ch

Tappert, S., & Suter, A. (2021, October 11–13). *Digital placemaking—New opportunities, considerations and challenges for social work practice* [Virtual poster presentation]. IFSW European Conference on Social Work 2021. https://www.ifsw.org/event/ifsw-european-conference-on-social-work-2021

Tayebi, A. (2013). Planning activism: Using social media to claim marginalized citizens' right to the city. *Cities*, 32, 88–93.

Tomor, Z. (2020). Citizens in the smart city. *International Journal of Public Administration in the Digital Age*, 7(1), 1–16.

Tran Thi Hoang, G., Dupont, L., & Camargo, M. (2019). Application of decision-making methods in smart city projects: A systematic literature review. *Smart Cities*, 2(3), 433–452.

Urban Equipe. (2022, September 30). "Quartieridee Wipkingen"—Arbeitsbericht Oder: Wie organisierten wir ein partizipatives Quartierbudget? *Urban Equipe Blog.* https://www.urban-equipe.ch/blog/quartieridee\_1

Vadiati, N. (2022). Alternatives to smart cities: A call for consideration of grassroots digital urbanism. *Digital Geography and Society*, *3*, Article 100030.

Zhang, W., Lim, G., Perrault, S., & Wang, C. (2022). A review of research on civic technology: Definitions, theories, history and insights. ArXiv. https://arxiv.org/ftp/arxiv/papers/2204/2204.11461.pdf

#### **About the Authors**



Aline Suter holds an MA degree in Critical Urban Studies (University of Basel) and is a research associate at the Institute of Social Planning, Organisational Change and Urban Development (School of Social Work, University of Applied Sciences Northwestern Switzerland). In her research, she focuses on urban development with a key interest in citizen participation, digitalization, financialization of land and housing, urban processes in the Global South, and community organizing.



Lars Kaiser is an urbanist from Zurich, Switzerland. After his studies in spatial development and infrastructure systems at ETH Zurich, he has become part of the association Urban Equipe. His work focuses on strengthening the voices in civil society and advancing participatory formats in political and urban processes. His projects aim to combine the strengths of the physical and digital spheres.



Martin Dušek has investigated how participatory urban development can be made more inclusive during his Master in Service Design at the Lucerne University of Applied Sciences and Arts. After four years of teaching at the Department of Design of the Zurich University of the Arts, he currently works as a service and interaction designer at Accenture Switzerland. In both his work for industrial clients and his academic research, he focuses on putting people at the center and understanding transformations holistically, which includes organizational, business, and non-human interests.





Florin Hasler is the director of Opendata.ch, a non-profit committed to using data for the common good. In addition to advocacy, public sector consulting, and hackathons, his organization runs the Prototype Fund, a support programme for civic and public interest tech.



Simone Tappert is an urban anthropologist and senior researcher at the School of Social Work, University of Applied Sciences Northwestern Switzerland. Her research, teaching, and consultancy activities focus on urban development, social sustainability, citizen participation, community work, and digitalization in European cities. She is MC member of the COST Action CA18204 Dynamics of Placemaking and leads the SNSF research project "Placemaking through idealizations and the role of local knowledge and practices in the age of digitalization."