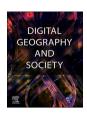
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Civic Crowdfunding as Urban Digital Platform in Milan and Amsterdam: Don't take pictures on a rainy day!

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ABSTRACT

Cities are a conducive context for the emergence of digital platforms and at the same time cities are reshaped by the digital spaces that are created by these platforms. The key features that set Urban Digital Platforms (UDPs) apart from other digital platforms are the allocation of public goods and services at an urban scale (via P2P transaction), and their orientation towards civic and grassroots initiatives in area's which the local state agencies have a significant role in steering urban development patterns. This article explores the spaces and realms of interactions and engagements which 'urban digital platform(s) (UDPs) have created in two prominent European cities, Milan and Amsterdam. By focusing on civic crowdfunding initiatives, it shows that digital platforms not only unleash societal initiatives but also have the potential to fundamentally change (urban) political processes, as their gatekeeping principles provide a powerful frame by which projects are selected. This paper sheds light on how platform urbanism and the new lens of digital geography are critical in investigating 'alternative platforms' as civic crowdfunding and their mutual co-constitution between technology, sociality, and spatiality.

1. Introduction

Urban scholars are increasingly interested in the burgeoning field of research broadly defined as 'platform urbanism'. The need to capture nuanced and new important developments that our cities are facing in relation to the diffusion of digital platforms (Barns, 2019) has accrued traction in academia, activist groups and political discussions. The cooccurrences of urban living(s) and reliance on digital platforms to navigate everyday living in these settings is not coincidental (Artioli, 2018). The influence goes both ways: cities are a conducive context for the emergence of digital platforms and at the same time cities are reshaped by the digital spaces that are opened by these platforms (Sadowsky, 2020). The importance of digital platforms is not primarily about computing and algorithms in the narrow sense (Marres, 2017). Digital platforms are also about the commodification of information, which varies by providers, types of transactions and orientations of the platforms (Frenken & Schor, 2019) and changing (local) politics (Ansell & Miura, 2020; Certomà, Frey, & Corsini, 2020; Hodson, Kasmire, Andrew, Stehlin, & Ward, 2020).

It results are crucial to current urban politics dynamics, in particular, discourses and practices to understand new spatialities generated by the

implementation of digital platforms in the urban realm. This article explores the co-constitution between space, technology, and people, using civic crowdfunding as an emblematic example of 'urban digital platforms' (hereafter UDPs), in two prominent European cities Milan and Amsterdam. In this article, it is assessed that those digital platforms might not only reshape socio-economic processes but also have the potential to fundamentally change (urban) political processes. By doing so, it is asked: Who are the actors involved and how do they engage in the provision of goods and services? Where are the projects located? How do gatekeeping and internal mechanisms of decision-taking affect the two cities? The main focus of the article is to detect how these types of platforms function, in terms of gatekeeping, decision-making concerning the re-configuration of allocation of resources within the urban space, as well as the role of the urban government vs the component of self-organisation within civic crowdfunding platforms.

The empirical findings are obtained from fieldwork conducted from 2015 to 2020 in the two cities, Milan and Amsterdam. The deployed methods are mainly qualitative, such as official documents analysis and semi-structured interviews with involved actors. A total of thirty interviews, including personal communication, were conducted with policy-makers, local authorities, technical providers, project managers,

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citizens, and entrepreneurs, to investigate the internal mechanism (i.e. How and Who: decision/making and gatekeeping by actors in the allocation of resources). To observe closely the degree of media literacy required on the selected platforms, digital ethnography (Caliandro, 2018) has been used as a supportive technique. This helped to interpret how practices of posting and describing projects, tagging localities, promotion of events, the interaction between users, images deployed within municipal websites (cf. Figs. 1 and 3), unfold on civic crowdfunding platforms, and other social media platforms. To show what is posted and how those platforms work between different stakeholders. GIS mapping (cf. Figs. 2 and 4) (Where: location of the projects) was used to identify the spatial patterns associated with crowdfunding in both cities, to validate where these projects are located in relation to existing urban configurations.

The paper is structured as follows. The second section discusses civic crowdfunding and the analytical dimensions which distinguish the concept of platform urbanism from UDPs. The third addresses the new research field of platform urbanism and its politics, within the theoretical framework of digital geography in which the paper is positioned, with a sub-section on obstacles such as media literacy and participation bias. The fourth and the fifth present how civic crowdfunding has been promoted in the two cities, with particular attention to internal mechanisms, media literacy, and its external relation to existing urban spatialities. The sixth section discusses the empirical findings to conclude with broader implications of this study for future research agendas in the urban studies domain and beyond.

2. Civic crowdfunding as Urban Digital Platform (UDP)

Civic crowdfunding is a form of crowdfunding in which citizens cofund projects often providing public goods and community services (Stiver, Barroca, Minocha, Richards, & Roberts, 2015). These initiatives are often in collaboration and support by different government agencies and specific departments within whose purview the deliverance of the particular public good in question falls. Goods and services vary from new street markets and revamped playgrounds to initiatives to plant trees along derelict railway lines (Gullino, Cristina, Haedi, & Carolina Pacchi, 2018). Ranging from physical structures to amenities and local services, the potential of the impact on the regeneration of urban space (s) at the intersections of civic crowdfunding and urban digital platforms remains largely unexplored across disciplinary scholarship. From these times onwards, we identify these as UDPs. It can be argued that Uber and Airbnb are also considered UDPs because they operate in urban. However, we insist due to the fact they are global in their architecture, designed to be extractive in which the city and users are resources to be mined. Moreover, Airbnb and alike are exploitative in the density, size, and diversity of the urban fabric. Lastly, the algorithm is the data-driven form of governance and result in the computational production of space.

Conversely, the key feature that set UDPs apart from other digital platforms is that they are of and for the city and its inhabitants. For example, civic crowdfunding platforms benefit from the urban as a front to (re-)organise citizen-based, mutual-aid initiatives, and solidarity actions. UDPs are different in the allocation of common goods and services at an urban scale (via P2P transaction), and oriented towards civic and grassroots initiatives in which the local state agencies have a significant role in steering urban development patterns (Chiappini, 2020). Further enhancing the analytical frameworks of 'UDPs', in this article, we, first, conceive the *urban* both as a physical and political space, that provides the context for a specific set of socio-spatialised practices. Secondly, the digital is the interface between the logic of computational algorithms and human behaviour (i.e. citizens' responses to particular issues and causes). These manifestations of UPDs have the potential to fundamentally recalibrate the modalities of interactions between the different actors engaged and impact the decision-making executive powers or/and discourses on the physical space of the city in question (Törnberg & Uitermark, 2020). Third, the platform itself becomes an archive of the particular intersections of the logics of computational algorithms and citizen participation in the forms and kinds of urban spaces, irrespective of its success, that UDPs open up and the challenges ahead. Lastly, the platforms are depositories of citizen data which is both a challenge and an opportunity to be critically addressed. The UDPs data depository is open to the danger of constituent groups to be strategically identified and targeted to frame particular political discourses influencing urban politics.

Examples of UDPs are welfare platforms like Commonfare (Chiappini, forthcoming), as well as different initiatives launched during the first wave of Covid-19 for solidarity, mutualism and grassroots actions (Mos, 2020). The collaborative platforms, in which the citizens play a

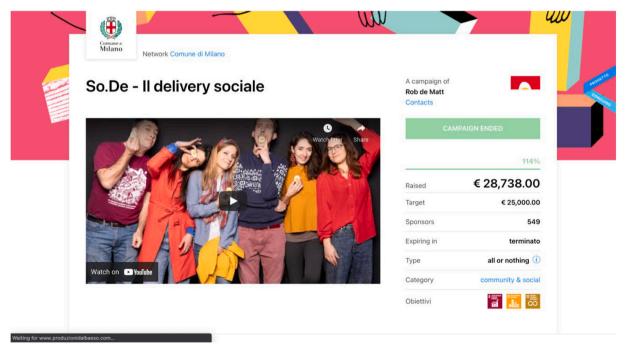


Fig 1. So.De il Delivery Sociale. Source: Authors.

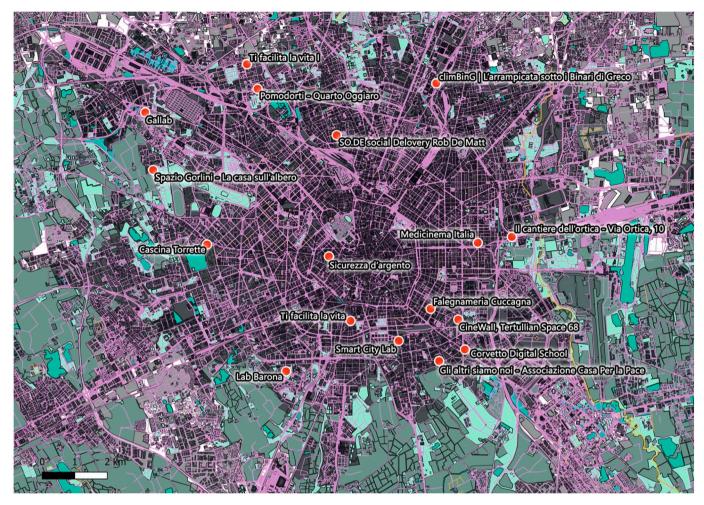
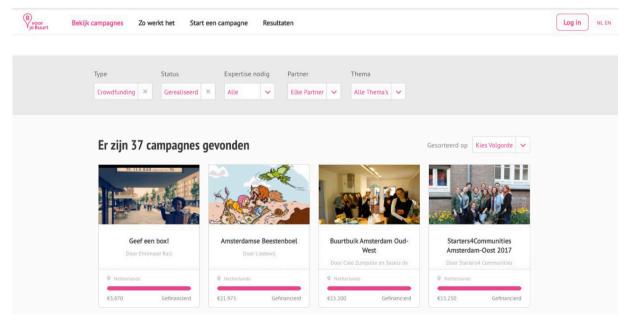


Fig. 2. Civic crowdfunding projects in Milan (2016-2020). Source: authors.



 $\textbf{Fig. 3. } \textit{Voor je Buurt. } \textbf{Source:} \ \text{authors.}$

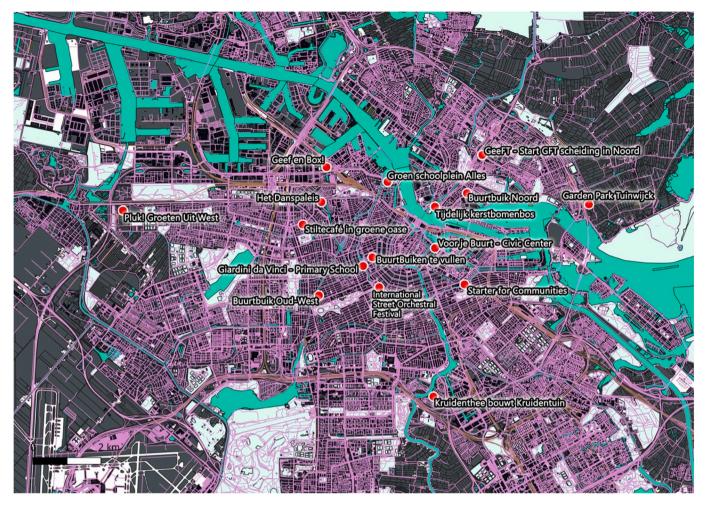


Fig. 4. Civic crowdfunding projects in Amsterdam (2016-2020). Source: authors.

critical role in the way of raising funds and popularity, are containers and propellers for regeneration of diverse urban spaces, which compels and complements welfare practices, from child-care to makerspaces and coworking (Chiappini & Törnberg, 2018). The emergence of the UDPs is embedded in the extractive and exploitative global digital economies (Amoore & Raley, 2017). The UDPs aim at creative, simultaneous and parallel use to harness locally embedded democratic practices. In the same vein, local non-corporate platforms exist, where governments and civil society participate in forms of cooperation to implement neighbourhood and support local-based initiatives (Rose, 2021)

By focussing on UDPs that operate in two European cities, Milan and Amsterdam, the article explores the modalities of UDPs practices. This is about the motives of and rules tha govern these platforms, The motives behind the appropriation of these collaborative platforms by actors are reviewed, in terms of the efforts geared towards urban rejuvenation and development. Rules must be understood asboth explicit and tacit, and to be embedded in the local social, cultural spaces and spatialities. Both in Milan and Amsterdam, UPDs have already become a part of political debates over the regulatory framework, planning reforms and part of smart city agendas. However, the article considers the current state of affairs mainly indicative of the potential that these platforms have to impact the dynamics of collaborative practices of urban regeneration/revival, with a focus on both the immediate and long-term collectives, mandates, between the citizens, technology providers and the government agencies.

3. The politics of platform urbanism

In recent years, digital platforms have become an important facet of contemporary forms of urbanism. In a nutshell, digital platforms might entail economic exchanges (i.e. transactions between peers, P2P), define new urban governance arrangements (Barns, 2018), as well as a more networked collaboration between different stakeholders (Sadowsky, 2020). Some urban scholars tend to neglect the pervasive nature and negative effects of digital platforms, proclaiming cities like Amsterdam and Milan as 'Sharing Cities' (Agyeman & McLaren, 2017). Nevertheless, the pervasiveness of the profit-driven digital platforms unfolds at the core of everyday life activities and urban governance (Richardson, 2020; van Dijck, Poell, & de Waal, 2018) and thereby, the relationship between urban platforms, politics, space and society is impossible to ignore.

However, the story of the UDPs cannot be reduced to only a narrative about computational, big data and algorithms regimes. The American sociologist, architectural and design theorist Bratton (2016: 18), drawing on his interdisciplinary focus on physical and digital spaces, and the implications of the intertwining of these two spatialities, claims that the "contemporary Cloud platforms are displacing, if not replacing, traditional core functions of states, and demonstrating, for both good and ill, new spatial and temporal models of politics and publics". In this view, digital platforms introduce a new form of societal coordination between actors, specifically between market-state-communities. According to Bratton, the outcome of this interaction affects the use and transformation of cities and their politics as is evidenced by UDPs towards the rejuvenation and regeneration of the cities.

The rise of the UDPs, particularly during the Covid-19 crisis, reveals that these platforms have and will further assume significant roles in the local governance and will change decision-making on the use of the urban spaces which will create new dilemmas (Chiappini, 2020). In the current academic debate, these dilemmas mainly focus on issues of data ownership and privacy, data safety and its accountability. It is assumed thatpowerful interest groups, through their ownership an manipulation of data will impact political, financial and policy decisions (Coletta, Heaphy, & Kitchin, 2018). A prevailing analogy is that of the city as an operating system, in which its hardware, the built environment, and the software, societal negotiations, are tied together by an information processing system via the UDPs.

It has been noted that UDPs, partially, displace decision-making from the governmental realm to the societal realm (Lynch, 2020). Within the decision-making process, governments are further challenged by the fact that the public sector is lacking behind the private sector concerning its knowledge of digital technologies and the resources devoted to the digital infrastructure. How the public sector funding is cut down by making precisely the argument that it lacks the technological, technical know-how is to privilege the privatisation of key state functions (Graham & Dutton, 2014), in which governments are forced to rely on certain types of digital technologies and become dependent on the companies that provide these technologies (Gillespie, 2010). However, Mazzucato (2018) also points out that governments can be innovative and promote initiatives on a lower budget, to address complex urban policy problems, such as accountability, participation, spatial polarisation and social exclusion at the local authority levels (Hollow, 2013). Cities have deployed these tools as an alternative way of redistributing goods and services that the market and the state are no longer able to provide, directly engaging citizens in the production of space (Datta & Odendall, 2019).

3.1. Media literacy and participation bias

Previous work (Chiappini, 2020) proposed a conceptualisation of the UDP, which narrows down the scope and the object of study to grasp the diversity between digital platforms. In general terms, crowdfunding is conceived as "a collective effort by people who network and pool their money together, usually via the Internet, to invest in and support efforts initiated by other people or organizations" (Ordanini, Miceli, Pizzetti, and Parsu Parasuraman, 2011: 444). Civic crowdfunding is the funding of projects which, directly or indirectly, benefit from government funds, assets, or sponsorship, and may include the development of public assets (Davies, 2015: 17) such as public parks, sidewalk maintenance, and wireless Internet. This has noticeably a direct impact on existing urban geography and governance arrangements within cities. The potential that the UDPs offer, seamlessly fits with the idea "that citizens are themselves responsible for the quality of the urban environment... [which] today [is] institutionalised through all kinds of regulatory frames" (Savini, 2017: 9). The strategic manners in which government agencies, across Europe, are employing engaging with the UDPs to solicit citizens' contributions suggest that the state agencies are keen on reducing their role in everyday governance as also their limited resources in public enterprises.

A last critical aspect, also common in smart city projects oriented to citizens initiatives, is the type of participation and the bias in accessing them, in terms of digital skills of users. It has a direct consequence for services and goods allocated via projects visible both on the platform and in the urban space. Mattern (2014) showed that smart city projects in which ideas are discussed and partnerships often exclude a large group, because of a participation bias towards 'young well-educated professionals'. Their needs are often not reflective of the wider community interests. Other important findings by Perng, Kitchin, Donncha, and Darach. (2018) suggest that hackathons and other smart urbanism initiatives are organised by companies working in partnership with city administrations, the participants are often technically literate who work

in the tech sector.

4. Governmental strategy in Milan

In 2015, civic crowdfunding experimentations became trendy amongst several municipalities in Italy (Pacchi & Pais, 2017). Government agencies started to assume a significant role as facilitators and curators of campaigns to support local projects, particularly in the sectors they found their networks of deliverance and assessments limited. Milan has been one of the first cities in adopting civic crowdfunding as a policy tool. The councillors for economic and social policies of the Democratic Party launched *Crowdfunding Civico*¹. The political motives behind the call for civic crowdfunding were in line with the *Milano Smart City* agenda, aimed at "building and communicating the Smart Milan Approach with all related stakeholders and encouraging the adoption of a smart city governance model to foster social economy in the city."².

The first edition of *Crowdfunding Civico* was announced with a public tender worth 30,000 euros for the selection of the technical provider for the cloud platform, won by Eppela, a corporate Italian web company. The municipality identified thematic areas and criteria for the selection of projects that later on would have to be co-financed by citizens. The thematic areas outlined were: making the city more accessible, with special attention to the most fragile and marginalised segments of the population; technological innovation to support urban connectivity; innovative information systems for mobility, culture and quality of life; innovation in care services and life-work balance; sharing territorial resources among its residents (Pacchi & Pais, 2017).

Both organisations and citizens were invited via an open call on the Municipal website to propose their initiatives. In response to the call, the municipality received 54 proposals out of which 18 projects were selected by a group of experts consisting of a project developer of the platform from Eppela and civil servants. The committee acted as a gatekeeper and decided on the projects that would be promoted on the Crowdfunding Civico website, reviewing and making the final decision about which projects should be hosted on the platform. Initiatives that were successful during the online campaign, namely which reached the target level by six months of online campaigning were then eligible to be co-funded by the municipality. The maximum funds to be provided by the local government was capped at 400,000 euros. The civic crowdfunding projects were hosted and made public on the platform provided by Eppela. The citizens' contributions generated a total of euros 330,000 (1308 user donations on the platform, which was matched with euros 323,413 as a contribution by the municipality)³. The estimated potential impact on the local economy was assessed to be euros 653,413⁴. The managing director of Eppela, lauded his collaboration with the Milanese municipality:

"Thanks to the commitment of the City of Milan, among the most innovative Italian cities, civic crowdfunding is no longer a matter of the future but an indispensable tool for urban coexistence. Our experiment has opened a new way to bring citizens and local communities closer together to the public administration for the implementation of projects which were premised on the ideas related to the cultural and social regeneration of urban areas or the

¹ Milanese Municipality: https://www.crowdfundingbuzz.

bando-per-co-ffnanziare-campagne-di-crowdfunding-civico/; accessed 24 May 2021.

² Milanese Municipality smart city guideline: http://www.milanosmartcity.org/

³ Milan Municipal website: https://www.comune.milano it/-/crowdfunding-civico.-grazie-al-comune-e-ai-milanesi-19-progetti-diventano-realta-utili-per-i-quartieri

⁴ Eppela website: https://www.eppela.com/it

technological innovations related to mobility and social services." (Interview, conducted and translation by the authors, November 2017)

Riding the wave of success of civic crowdfunding, during the first wave of Covid-19 in May 2020, the local government has decided to launch a second edition. The initiative was announced in January 2020, just before the pandemic broke out, and another technical provider, *Produzioni dal Basso* (Bottom-Up Production), was selected instead of Eppela. One of the reasons, it was speculated, was that Bottom-Up Production's is located in Milan. One of its interviewed project developers framed it as follows:

"We have offered to the municipality to promote citizen participation and the fundraising parts, offering tutoring and mentorship services to the projects throughout the steps leading to the implementation of the ideas also offline in our office in Milan. The new projects to be included in the crowdfunding platform will be promoted in 2021." (Interview conducted and translation by the authors,October 2020)

One of the winning projects in the first edition and participant in the second one focuses on developing sustainable delivery mechanisms as an alternative to the gig-economy platform like Uber Eats and Deliveroo. The project is initiated by the restaurant *Rob de Matt*, which is located in the neighbourhood of Dergano, North of Milan. The restaurant aims at establishing a proof-of-concept of the revitalisation of the vulnerable and peripheral neighbourhoods in Milan, Dergano being one of the neighbourhoods which is representative of such peripheralization. It aims to do so by instituting delivery mechanisms and networks which are then optimised to deliver other goods, medicines and essential services, along with food which is the main focus. The founder of the initiative (*So.De il Delivery Sociale*) who is also the owner of the restaurant, however, raised some concerns regarding the procedure of the campaign:

"It is not easy to participate, you should know the rules of the game. We are now in the second edition, after winning the first one. Citizens play a marginal role in funding; everything is decided by the municipality and the network around the new technical providers. Although technical support is offered for the campaign, most of the work has been done before the project will be visible on the platform." (Interview conducted and translation by the authors, November 2020)

A major concern raised by the founder is that geographical location of the project correlates with a degree of media literacy required to partake in the campaign and therefore plays a significant role in the citizen contributions that make UDPs a success or not. Many projects that are promoted and supported through the UDPs focus on citizen participation, urban regeneration, sustainability, engaging the fragile and marginalised sections of the society, socially and spatially, and to give their concerns a voice. Examples as the restaurant Rob de Matt, focus on the sustainable delivery mechanisms with focus on improving existing community centre, kitchen for communal use, free provision of tap water; support for vulnerable women, and unemployed; mutual support, providing after school care for children; urban gardening in a vacant parking lot (Pomodorti); transformation of a mafia residence into an apartment block (Facciamo Festa alla Mafia); temporary event and art exhibition against discrimination and racism made by primary schools; cultural incubator, musicians and visual artists can use the space to practice and develop their projects (Il Cantiere dell'Ortica).

The digital ethnography conducted helps to observe the main features of the platform, as well as practices of posting, localities, uses of hashtags. Fig. 1 above shows that the platform is presented as a digital dashboard, the backend is Wordpress in which a content creator can access the range of widgets and plugins needed to publish a webpage. The webpage covers new projects, the already financed ones, the ones

with a close deadline and the winning ones. On the level of each project, a money bar is shown that illustrates the progress of crowdfunding and the percentage of the already gathered amount. There is also a timeline that counts down the days to the deadline. The platform's format implied a range of requirements to those who could post a project. For instance, it is required to post multi-media content, it only allows for a brief description of the aim and the mission of each project, a selection of keywords and hash-tags.

Digital ethnography conducted during the online campaigns provided figures on the average donation per project, projects collected on an average of more than 500 euros per donation. Given the average household contribution, it is likely that civic crowdfunding has an intrinsic participation bias, the donors were often the same non-profit organisation that launched the initiative, or by entrepreneurs and philanthropists, citizens and individual households were marginal in funding campaigns. For example, the cultural incubator *Cantiere dell'Ortica* obtained 6,000 euros from another non-profit organisation which amounted to more than a quarter of the money raised for the project. The contributions, across the spectrum of profit and non-profit organisations and individuals, to projects with a focus on social care, urban regeneration, among others, is suggestive of a process of filling the gap which a retreating local government in Milan has created, mainly in the area of social care.

The map (Fig. 2) above shows, the two editions of civic crowdfunding have promoted diverse projects scattered in the city, in particular, several Internet-based initiatives focus on the city as a whole (e.g. So Lunch, CN Smart Hub, EcoLab, Child Explorer). Looking closer at where the projects are situated, the majority of them are located in gentrifying neighbourhoods (e.g. Rob de Matt, Facciamo Festa alla Mafia), as well as within middle-class and upper-middle-class districts (e.g. Smart City Lab, Ti Facilita la Vita). Only a few are situated in what could be called a deprived neighbourhood, in the outskirts of the city (e.g. Pomodorti, Gallab). The degree of openness of the platform can also be considered in terms of access to physical urban space, namely 'openingup and including more actors, as well as increasing the distribution of goods and services in areas that are not usually considered. For instance, those areas are not considered attractive for an announcement of accommodation on Airbnb. However, the limited number of projects within marginal areas show that the degree of openness and access to the platform does not take for granted a more inclusive urban development.

5. Social entrepreneurship rationale in Amsterdam

Since 2012, several local authorities in the Netherlands have been testing civic crowdfunding as a policy instrument (Chigova and Van der Waldt, 2021). Amongst them, the Municipality of Amsterdam is a strong supporter of bottom-up initiatives supported by digital technologies:

"We have come from a time of many hierarchical systems. The government and the organisations around it are very top-down organised and I see that people around me need to determine more about their living environment. Platforms allow citizens to participate and foster bottom-up actions. (CTO Innovation team, Municipality of Amsterdam, interview by authors, January 2019.)

In 2016, a total of euros 1.3 million was raised for 260 projects, from some 20,000 individual donations. The two national crowdfunding platforms which played a critical role and raised more than 90% of the funding via civic crowdfunding funding are, *Voor je Buurt* and 1%Club⁵. The Amsterdam think-tank *Kennisland* founded *Voor je Buurt* as a pilot project in cooperation with Network Democracy and other partners. The website was launched in 2013 and built up successfully within

⁵ Crowdfundingcijfers[crowdfunding statistics]., 2020. Available online: Crowdfundingcijfers.nl/crowdfunding-in-nederland-2019/2020 (accessed on March 2021).

Kennisland in which transparency and engagement of residents are claimed to be leading values for the organisation. In 2015 *Voor je Buurt* became an independent organisation. Over the past years, *Voor je Buurt* has been gaining popularity amongst urban governments, which inscribed civic crowdfunding as part the Amsterdam Smart City agenda and as a tool to solve urban problems⁶.

From the beginning, the premise of the initiative has been to foster public-private partnerships, involving actors such as the municipalities in the Amsterdam Metropolitan Area, and both private companies and not-for-profit organisations. The private companies which partner with the Amsterdam Smart City initiatives are the firms for which the urban environment poses specific technological challenges and/or opportunities, such as a telecom company, the postal service, the grid company and multinational (urban and infrastructure) design and consultancy companies. The not-for-profit sector is represented by universities, associations, and grassroots organisations. As many other Smart City initiatives across the world, the Amsterdam Smart City is presented as a project to privilege the citizens' concerns and create innovative platforms to involve the public at large. However, it is evident that the 'Amsterdam Smart City' project is also an advertisement for the world to showcase Amsterdam as a technology-savvy place.

The Voor je Buurt is a non-profit platform and officially certified as a charity⁷. It receives regular subsidies, from national and local governmental and non-governmental funding agencies. The platform charges a service fee of 5 percent of the sum raised by projects that have reached their target. They encourage social projects that make a 'positive social contribution' and that is 'not primarily focused on personal gain', however at the same time the platform does not forbid profit-making projects (Bakker & de Graaf, 2017). As the only gate-keeper, Voor je Buurt not only evaluates the social contribution of projects but also assesses the estimated impact of the projects that will be successful in raising money if hosted on their platform. In addition to offering a cloud platform, the organisation provides technical and practical support and advice to make the online campaign successful. Furthermore, the organisation acts as an intermediary between grassroots initiatives and institutional funders, both governmental and charitable mandates. Although Voor je Buurt is a national organisation, as the name already suggests, the level of intervention is primarily urban and neighbourhood scales. As one of the project developers states in an interview:

"We offer local support to citizens who want to develop an idea in their neighbourhood. There is a volunteering principle behind campaigns [...] The campaigns are both offline and online. We offer training, technical support, and money from the campaign, to make their ideas successful and to recruit other volunteers in the area [...] There are projects oriented to business or charity like cancer organisations." (*Voor je Buurt*, project manager, interview by author, November 2020)

Voor je Buurt, showcases, using simple metrics on a digital dashboard, the success and failures across the civic crowdfunding projects they have hosted. In its role as a gatekeeper, the platform assesses the impact of the proposed projects, and the metrics on success and failure factors are likely to be used to decide whether a campaign makes it to the website. The success rate of the projects on the platform is significant up to 80 percent, their statistics gives an impression that it is quite easy to apply and to obtain financial resources. However, an applicant, who was (un)successful in bidding for their project on the platform, suggested otherwise and highlighted the shady selective nature of the process:

"It [civic-crowdfunding] is an insignificant collective effort. I mean, if you look at the small number of users on the platform and who gets the money are not citizens, but organisations that are active in the non-profit. Starter4Communities is one of the most successful campaigns. Citizens are called to support a project that is already successful in a certain way." (Interview anonymous - Amsterdam Civic crowdfunding project; translated and conducted by the authors, May 2018).

In providing criteria regarding what makes civic crowdfunding projects successful, *Voor je Buurt* is setting, mechanisms and features that determine which projects will be promoted on the platform. In an interview with an employee at Starter4Communities, which is one of the prominent actors in campaigning, it was emphasised that there is a conspicuous workload of running a campaign both offline and online, which requires the formation of a team of people. Furthermore, the existence of a community, such as a sports club or school, that can be addressed is somewhat paradoxically mentioned as a pre-condition for a successful project, while community building is an important goal at the same time. The website also sheds light on the skills and resources that are needed. Besides, the capacity to post-digital material and technical skills are considered a prerequisite for the success of the proposed project to be hosted on the platform.

Moreover, the online activities need to be accompanied by offline promotions (see also Stiver et al., 2015), such as making press releases and organising events. Concerning the characteristics of the projects that are deemed promising, tacitly, the project should, first and foremost, be premised on a positive and promising narrative "Crowdfunding works best with a positive message instead of a pathetic story" and "Don't take pictures on a rainy day!" For instance, raising funds for maintenance or operational costs of electricity are not considered appealing for the platform.

After the observation of dynamics about posting and interacting between users, figure 2 above denotes that the description of the projects, captions, related images should be catchy in the thumb-nail as any other product on a platform. Concerning the funding, it becomes clear that in almost all cases the crowd is not anonymous. First, the personal network of those who start a project constitutes an important target group. Second, most campaigns on the platform are not solely dependent on small donations from the crowd but involve a larger public sector or private sponsor. Crowdfunding is also framed as a practice to convince larger (philanthropic) donors, local and national fund providers for social and solidarity initiatives. Around half of the projects involve larger donors and only two are exclusively based on small donations.

Some relevant projects to exemplify those types of interventions are *De Groene van Amsterdam,* temporary event 'green marathon' sport, and *Pluk! Groenten van West* a greenhouse and kitchen garden, where there is an exchange between citizens and local farmers without intermediaries. Other projects are more oriented to social support and community building such as *Geef een box!* a box with winter clothes for refugees' children and asylum seekers and a temporary event, with commercial partners like Kloffie company and T-Company which sponsored the event. Another project is *Buurtbuik Oud-West** ⁸ as volunteering activities to reduce food waste. The most active on the platforms are the above organisations, located in all Amsterdam neighbourhoods except within the canal belt in the city centre, and Starter4Communites*, neighbourhood initiatives which provide the development of professional skills to start bottom-up initiatives and emerging social enterprises (with ShareNL as a main sponsor/partner).

Furthermore, the map (Fig. 4) above shows that the majority of the projects are not allocated in the historical city centre (canal belt), but in the late 19th/early 20th-century ring around it. Within Amsterdam, the

⁶ Amsterdam Smart City Network (2017). Available at: https://amsterdamsmartcity.com/network/amsterdamsmart-city (accessed on June 2018).

 $^{^7}$ See the website: $\underline{\text{https://voorjebuurt.nl/nl/pages/verhaal}}$ (accessed 21 June 2018).

 $^{^{8}\,}$ The symbol (*) indicates projects supported and co-ffnanced by local and national funds, VSB and DOEN funds.

majority of the projects is located in those areas that have been or are gentrifying. The mapping results do not show a significant degree of openness towards areas of the city that need intervention in terms of redistribution of goods and services, rather an expected concentration in neighbourhoods that are already provided.

6. Discussion

In this paper, the new lens proposed by digital geography scholarship helps to observe civic crowdfunding as a form of mutual co-constitution between technology, society, and space (Ash, Kitchin, & Leszczynski, 2019). The contribution helps to understand mechanisms of allocating resources. These cases show that the presence of non-professional volunteers (users and campaign initiators) has been crucial in the campaigns promoted on the platforms. However, the data generated on these platforms are still owned by the technical providers of the two platforms in the respective cities and are not accessible to the initiators of the campaign or local authorities.

In Milan the civic crowdfunding platform has been promoted directly as a governmental strategy which is in accordance with the idea that civic crowdfunding in urban policies as a tool for complementing the distribution of social goods and in the city. In Amsterdam, the primary rationale behind civic crowdfunding is to promote social entrepreneurship and community building activities. Although the role of the state agencies in the two cities, as detailed in earlier sections, varies in terms of visibility and active promotion of civic crowdfunding platforms, and financial support, it can be assessed that the political motives are closely related to the Smart City Agendas and quite similar in their intentions, such as reviving public participation; replacing public funds with private funds; business interests in ICT and data production from citizens as volunteers (Trivellato, 2017). In Table 1 below, figures are shown to indicate when the two platforms have started operating in the two cities and editions, how many projects have been funded within the specified time-frame, and the role of local governments.

The cases allow for some reflections on the working of civic crowd-funding platforms as forms of urban collective decision-making. The main findings are listed below, and they will be expanded one by one in the discussion: a) While the role of government differs in Milan and Amsterdam, in both the decision-making is relatively untransparent. b) Civic crowdfunding contributes to the (further) constitution of networks and practices that cross traditional spheres of society and in doing so blur the boundaries between non-profit and for-profit. c) The combination of online and offline activities is essential in the understanding of the function of these platforms. d) There is a tension between the rhetoric about civic crowdfunding as a tool to pull public resources via many small donations and the practice, in almost all cases, the money raised is only partly from small number donors, whereas a large number of small donors would be a better indicator of public support, raising issue about participation biases.

(a) The cases provide no indications that data transparency is a particularly well-considered subject. Maybe due to naivety or to avoid

Table 1
Civic crowdfunding in Milan and Amsterdam. Source: authors.

	Editions	#Projects successfully funded (2016-2020) ^a	Role of local governments
Civic Crowdfunding (Milan)	Two editions: 2016-2018 2020-2022	21	Initiator and Curator
Voor je Buurt (Amsterdam)	First edition in 2012 Still ongoing	19	Marginal – <i>una</i> tantum intervention

^a It corresponds to the time-frame in which digital ethnography has been conducted and to the projects that have been included in the analysis.

higher costs, the Milanese government chose to ignore the issue all together. In Amsterdam, Voor je Buurt provides some information, but as a non-governmental foundation it is not subject to strict rules about transparency such as a 'Freedom of Information act for governments'. In both cases the gatekeeping function - who decides about which proposals are allowed a chance to be promoted and raise money - could be described as a black box. In both cases, there is no indication that the data collected through the platforms are used as a production factor in other, commercial, enterprises. In Milan, the main gatekeeper remains the municipality and the technical provider of the platform (Eppela in the first edition, and Produzioni dal Basso in the second one). Affected by a lack of municipal financial resources, the objectives within the Milanese Smart City agenda were to generate small but tangible outcomes with innovative ways of financing projects of public interests (Gullino et al., 2018). In Amsterdam, the only gatekeeper is the platform Voor je Buurt which has developed criteria for the pre-selection of projects. Although these criteria allow for a very broad range of projects, they also create a discretionary space for experts within the management of the platform. MoThere is no indication that the data collected through the platforms are used as a production factor in other, commercial,

(b) The intention of both civic crowdfunding platforms is clearly to deliver public goods – which would not be provided by the market and traditionally has been the domain of government, but as a result of its mechanisms, the boundaries with the provision of private goods and services become blurred. For both cases, proposed initiatives do not exclude profit-making or the provision of private goods and services at market rates. As is evident in the case of *Voor je Buurt*, which also hosts profit-making projects, where commercial activities and social objectives are combined. One of the winning projects in Milan, *Facciamo Festa alla Mafia*, results in the promotion of a real estate company that took the lead in the restructuring and upgrading of vacant property in the south of Milan previously owned by members of criminal organisations, and subsequently selling apartments on the private market.

(c & d) From the view of civic crowdfunding as a process, in both cases the idea that civic crowdfunding through public participation is a mode of gauging public support for a project is prevalent. This particularly comes to the fore in the fact that governments (and charities) see successful civic crowdfunding as a reason for providing funds. In addition, in both cases, civic crowdfunding is, to a certain extent implicitly, considered to be more than the expression of a preference through a donation. Being part of a campaign should lead to a more profound engagement with the project, for example through active, in-kind, participation or a sense of ownership of the project. However, the crowd is not anonymous. In particular, the Amsterdam case shows that successful crowdfunding is assumed to be based on activating an existing community. Driven by the desire to revive local democracy, while at the same time the key role of gatekeepers run the risk of undermining democratic decision-making.

Thus, civic crowdfunding platforms seem to fit in to the trend highlighted by digital geographies' approaches in which access to digitally mediated services and goods are unequally distributed and unevenly affects the city (Ash et al., 2015). In both cities, the trend is for the government agencies to perform the role of enablers by supporting the development of civic crowdfunding initiatives. By providing an infrastructure on which external parties can build tools, governments optimise the potential for innovation, participation and experimentation across the spectrum of actors involved and accommodating the corresponding motivations. As the state provides basic arrangements, it enables the private and civic sector to flourish. In both cities, local authorities suggest an underlying policy rationale that is increasingly common: when governments deliver the digital infrastructure, the rest will resolve itself. The spatial analysis of the projects in Amsterdam and Milan seem to indicate that social inequality is not resolved and more likely reinforced by the new practices.

7. Conclusion: Don't take pictures on a rainy day!

To complement recent work on platform urbanism, this paper offers a narrative and mapping exercises of projects and practices that shed light on critical aspects of the notion of platform urbanism within urban politics. It does not foreclose a constructive role of platform urbanism in urban politics, but it is also critical about the legitimisation of these civic crowdfunding platforms as 'full blown' alternative to political decision making in future cities. It is meant to encourage a debate on potential counter-politics and resistance to the extractive and dominant corporate digital platforms. In the same vein of a "glitchy vignette" (Leszczynski, 2020), proposed as a minor theory of platform urbanism, civic crowdfunding led to reconfigurations of power between private-public and civil society, which might be helpful to interpret the future developments of cities.

However, there are limitations in terms of who can access to the platforms and propose initiatives that will be successful. The literature suggests that issues related to media literacy (Pais & Bonini, 2017) of users, digital skills and participation bias (Pais & Provasi, 2020) are crucial aspects to be considered. The skills needed to organise the online aspects of a civic-crowdfunding campaign, seem to border on the capabilities of a small-scale marketing consultancy firm. They at least require specific digital skills, in posting pictures and captions, as well as the ability to make short video clips (i.e. Medicinema, the video was made by the famous Italian director by Giuseppe Tornatore). The technology and the medium require projects to be 'attractive' and wellsuited to the platform. The subtitle of the paper, "Don't take pictures on a rainy day!" advised by Voor je Buurt, is meant to increase the chance that a project is financially supported on the civic crowdfunding platform. It is a 'platform-genic' trait, as a house announcement on Airbnb, with great pics, accurate description, and its rate of engagement. This strategic advice confirms that technology combined with decisionmaking principles is forcefully framing problems of collective action positively, using eye-catching images and brief captions supported by hashtags. This applies also to the communication about civiccrowdfunding projects and the length of the campaign (usually months less than a year). As result, it is important to make an impression in a short space of time. Originality and a positive message seem to be a conditio sine qua non. This is a disadvantage for projects that aim to provide ordinary, but possible crucial, urban goods and services, that stir social conflict or that need to be well-explained to become convincing (cf. Stiver et al., 2015).

The medium also favours visual presentations that are translated in initiatives situated in the urban space; this implies that projects that have something to, literally, show for – something to be built, situated in a concrete place, involving real people – have an advantage over projects that represent more abstract or real innovative goods and services. Furthermore, the projects in both cities also show that online campaigns are complemented by offline activities, which demand a lot of time and skills from those who organise the project. This is at odds with the belief that smart applications would make urban decision-making more efficient.

Finally, it is observed that in both cities the platforms seem to reenforce existing urban dynamics. The fact that civic crowdfunding is often based on activating a specific urban community and requires the skills that are only present in part of the population, makes it more likely that they emerge and succeed in certain neighbourhoods with a young, well-educated population and not in deprived urban areas. In our cases, civic crowdfunding is not about a process in which technology, through data collection and algorithms, 'takes over' within the decision-making. It is about the way the medium – together with its gate-keepers, determine what can be promoted as goods and services and ultimately accessible in the urban space. In the light of the critical comments above, platform-based civic crowdfunding might play a good role as an additional way – instead of replacing traditional ways – of providing urban public goods and services. In situations where there is potential, it

contributes to unleashing societal energy, plays a strong role in connecting projects to relevant networks of actors and contributes to capacity building among social entrepreneurs.

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Declaration of Competing Interest

There are no competing interests to declare for this submission.

References

- Agyeman, J., & McLaren, D. (2017). Sharing cities. Environ. Sci. Policy Sustain. Dev., 59 (3), 22–27.
- Amoore, L., & Raley, R. (2017). Securing with algorithms: Knowledge, decision, sovereignty. *Secur. Dialogue*, 48(1), 3–10.
- Amsterdam Smart City Network. (2017). Available at: https://amsterdamsmartcity.com/network/amsterdam-smart-city. (Accessed 12 June 2018).
- Ansell, C., & Miura, S. (2020). Can the power of platforms be harnessed for governance? Public Adm., 98(1), 261–276. https://doi.org/10.1111/padm.12636
- Artioli, F. (2018). Digital platforms and cities: A literature review for urban research. Cities are back in town. Working Paper 01/2018. Sciences Po Urban School.
- Ash, J., Kitchin, R., & Leszczynski, A. (2015). Digital turn, digital geography?. In The programmable city. working paper, 17.
- Ash, J., Kitchin, R., & Leszczynski, A. (2019). Digital geographies. London: Sage.
- Bakker, E., & de Graaf, F. J. (2017). Civic Crowdfunding-monitor: eerste schets van civic crowdfunding in Nederland: een schatkist aan informatie over slagingspercentages, succesfactoren en donateurs. Available online: https://www.douwenkoren.nl/.
- Barns, S. (2018). Smart cities and urban data platforms: Designing interfaces for smart governance. City Cult. Soc., 12, 5–12.
- Barns, S. (2019). Negotiating the platform pivot: From participatory digital ecosystems to infrastructures of everyday life. *Geogr. Compass*, 13.9(2019), 124–164.
- Bratton, B. H. (2016). The stack: On software and sovereignty. MIT Press.
- Caliandro, A. (2018). Digital methods for ethnography: analytical concepts for ethnographers exploring social media environments. J. Contemp. Ethnogr., 47(5), 551–578
- Certomà, C., Frey, M., & Corsini, F. (2020). Hyperconnected, receptive and Do-It-Yourself city. An investigation into the European 'imaginary' of crowdsourcing for urban governance. *Technol. Soc.*, 61(May), Article 101229. https://doi.org/10.1016/j. techsoc.2020.101229
- Chiappini, L. (2020). The Urban Digital Platform: Instances from Milan and Amsterdam. Urban Plan., 5(4), 277–288. https://doi.org/10.17645/up.v5i4.3417
- Chiappini, L., & Törnberg, P. (2018). Deus ex machina: makerspaces in milan and their transformative potential. In J. K. Fisker, L. Chiappini, L. Pugalis, & A. Bruzzese (Eds.), *The production of alternative urban spaces* (pp. 73–92). Abingdon: Routledge. https://doi.org/10.4324/9781315103952-5.
- Chigova, L. E., & Van der Waldt, G. (2021). Crowdfunding as instrument for networkcity governance. Administratio Publica, 29(4), 55–77.
- Coletta, C., Heaphy, L., & Kitchin, R. (2018). From the accidental to articulated smart city: The creation and work of 'Smart Dublin'. European Urban and Regional Studies.. https://doi.org/10.1177/0969776418785214
- Crowdfundingcijfers [crowdfunding statistics]. (2020). Available online: https://www.crowdfundingcijfers.nl/crowdfunding-in-nederland-2019/2020 (accessed on March 2021).
- Datta, A., & Odendall, N. (2019). Smart cities and the banality of power. *Environment and Planning D: Society and Space.*, 37(3), 387–392.
- Davies, R. (2015). Three provocations for civic crowdfunding. Inf. Commun. Soc., 18(3), 342–355.
- van Dijck, J., Poell, T., & de Waal, M. (2018). The platform society: Public values in a connective world. Oxford: Oxford University Press USA OSO.
- Eppela website. https://www.eppela.com/it. (Accessed March 2020).
- Frenken, K., & Schor, J. (2019). Putting the sharing economy into perspective. In , 23. A research agenda for sustainable consumption governance (pp. 3–10).
- Gillespie, T. (2010). The politics of 'platforms'. New Media Soc., 12(3), 347–364. Graham, M., & Dutton, W. H. (2014). Society and the Internet. How Networks of Information
- Graham, M., & Dutton, W. H. (2014). Society and the Internet. How Networks of Informatic and Communication are Changing Our Lives. Oxford, New York: Oxford University Press.
 Gullino, S., Cristina, C., Haedi, S., & Carolina Pacchi, C. (2018). Citizen-led micro-
- regeneration. In J. K. Fisker, L. Chiappini, L. Pugalis, & A. Bruzzese (Eds.), *The Production of Alternative Urban Spaces: An International Dialogue* (pp. 210–226). London: Routledge.
- Hodson, M., Kasmire, J., Andrew, M. M., Stehlin, J., & Ward, K. (Eds.). (2020). Urban platforms and the future city: Transformations in infrastructure, governance, knowledge and everyday life. London: Routledge.
- Hollow, M. (2013). Crowdfunding and civic society in Europe: a profitable partnership? Open Citizenship, 4.1(2013), 68–73.
- Leszczynski, A. (2020). Glitchy Vignettes of Platform Urbanism. Environment and Planning D: Society and Space, 38(2), 189–208. https://doi.org/10.1177/0263775819878721

- Lynch, C. R. (2020). Unruly digital subjects: Social entanglements, identity, and the politics of technological expertise. Digital Geography and Society, 1, Article 100001.
- Marres, N. (2017). Digital sociology: The reinvention of social research. Hoboken, NJ: John Wiley & Sons.
- Mattern, S. (2014). Interfacing Urban Intelligence. Places Journal. https://doi.org/ 10.22269/140428
- Mazzucato, M. (2018). Mission-oriented innovation policies: challenges and opportunities. *Ind. Corp. Chang.*, 27(5), 803–815. https://doi.org/10.1093/icc/ dtv034
- Milanese Municipality Smart City Guideline. http://www.milanosmartcity.org/. (Accessed March 2020).
- Milanese Municipality Website. https://www.crowdfundingbuzz.it/il-comune-di-milan o-lancia-un-bando-per-co-finanziare-campagne-di-crowdfunding-civico/. (Accessed May 2021).
- Mos, Eva. 2020. Digital Platforms and The Re-Organization of Solidarity. Platform Labor. Retrieved from https://platformlabor.net/blog/digital-platforms-and-the-reorganization-of-solidarity.
- Pacchi, C., & Pais, I. (2017). IL crowdfunding civico tra reti, comunità e ruolo del governo locale Civic Crowdfunding between Networks, Community and Local Government. In R. Lodigiani (Ed.), Milano 2017. Una metropoli per innovare, crescere, sognare (pp. 117–134). Angeli: Fondazione Ambrosianeum. Milan.
- Pais, I., & Bonini, T. (2017). Hacking public service media funding: A scenario for rethinking the license fee as a form of civic crowdfunding. *Int. J. Media Manag.*, 19 (2), 123–143.
- Pais, I., & Provasi, G. (2020). Share vs platform economy. Sociologica, 14(3), 217–226. https://doi.org/10.6092/issn.1971-8853/11540

- Perng, S.-Y., Kitchin, R., Donncha, M., & Darach.. (2018). Hackathons, entrepreneurial life and the making of smart cities. *Geoforum*, 97, 189–197.
- Richardson, L. (2020). Coordinating the city: Platforms as flexible spatial arrangements. Urban Geogr., 41(3), 458–461.
- Rose, F. M. (2021). The unexpected persistence of non-corporate platforms: The role of local and network embeddedness. *Digital Geography and Society*, 2(1). https://doi. org/10.1016/j.diggeo.2021.100020
- Sadowski, J. (2020). Cyberspace and cityscapes: on the emergence of platform urbanism. Urban Geography, 41(3), 448–452. https://doi.org/10.1080/ 02723638.2020.1721055
- Savini, F. (2017). Planning, uncertainty and risk: The neoliberal logics of Amsterdam urbanism. Environment and Planning A: Economy and Space., 49(4), 857–875. https:// doi.org/10.1177/0308518X16684520
- Stiver, A., Barroca, L., Minocha, S., Richards, M., & Roberts, D. (2015). Civic crowdfunding research: Challenges, opportunities, and future agenda. *New Media Soc.*, 17(2), 249–271. https://doi.org/10.1177/1461444814558914
- Törnberg, P., & Uitermark, J. (2020). Complex control and the governmentality of digital platforms. *Frontiers in Sustainable Cities*, 2. https://doi.org/10.3389/frsc.2020.00006
 Trivellato, B. (2017). How can 'smart' also be socially sustainable? Insights from the case of Milan. *European Urban and Regional Studies*, 24(4), 337–351.

Further reading

Morell, M. F., Hidalgo, E. S., & Rodríguez, E. (2020). Goteo. org civic crowdfunding and match-funding data connecting Sustainable Development Goals. *Scientific Data*, 7, 1.