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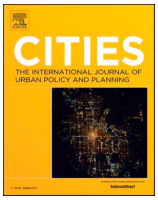

Microspheres of self-governance: Platform communities in times of need in Bogotá, Colombia

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ABSTRACT

This paper delves into the emergence of alternative governance models in Bogotá, Colombia, enabled by platform technology amid state inefficiencies magnified by poorly managed COVID-19 lockdowns. The argument on how these microspheres of alternative self-governance emerged draws on a digital ethnography study of ride-hailing platform drivers in Bogotá who operate within the city's informal economy due to the local lack of regulations. Predominantly representing marginalised populations and servicing lower-income neighbourhoods, these drivers enhance their informal organisation and growth through social media platforms by performing unregulated services such as food delivery during lockdowns. The paper unveils how these platform-mediated self-governance mechanisms challenge the city's institutional frameworks. Centring on the 'Drivers Club Bogotá' case, the paper advocates for policy reforms encouraging a 'partner state' model that promotes social innovation and citizen involvement in governance. Urban policymakers should harness insights from these informal governance models to better manage post-pandemic realities in Bogotá and other contexts. Ultimately, this paper highlights the transformative potential of platform technologies and emphasises the need for a deeper understanding of platform technologies in fostering social innovation, empowering citizens, and bettering urban governance, thereby promoting inclusive, resilient, and more equitable urban ecosystems.

1. Introduction

This paper delves into the phenomenon of alternative governance structures within marginalised groups in Bogotá, Colombia, particularly spotlighting how ride-hailing platform drivers within the informal sector adapted during the COVID-19 crisis. It centres on the self-regulatory practices of this paper's case study, Drivers Club Bogotá (DCB), which operated outside formal authorisation, leveraging digital platforms during the pandemic. The paper emphasises how technological advancements contribute to social innovation and reshape city governance in the global South.

Despite the criticisms of categorising regions as the 'Global South'—a term scrutinised for potentially perpetuating simplistic dichotomies and ignoring the internal diversities within these regions (Mignolo, 2009)—this paper acknowledges the utility of this classification in highlighting common challenges such as institutional frailty and failure. Studies show that, despite their cultural, historical, and political differences, countries within the 'Global South' often share fundamental socio-economic issues rooted in governance weaknesses (Houtzager & Acharya, 2011). Thus, this research on alternative governance models in Bogotá has substantial international relevance, especially for countries within the 'Global South'.

By examining the innovative solutions developed by marginalised communities in Colombia to combat and overcome governance failures, this paper sheds light on possible pathways that other regions with similar challenges could consider. These insights are particularly valuable for fostering resilience and promoting sustainable urban governance in contexts where formal institutions may falter or entirely fail. These lessons extend beyond the 'Global South' and also offer critical insights into the 'Global North', where institutional complacency and a lack of responsiveness to community-specific needs are increasingly evident (Anthony Jr, 2023; Calcutt, 2021; Shamsuddin, 2020). Cities in the 'Global North' could enhance their urban governance frameworks and policies, fostering more resilient and inclusive communities by adopting and adapting some of the grassroots strategies of self-regulation and community empowerment demonstrated in Bogotá.

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2. Governance and platform communities

In the realm of governance, "alternative" refers to organisational frameworks that diverge from the standard models of public or private entities (Larcker & Tayan, 2020; Mingst, 2013). This includes a spectrum from family-run firms and community groups to venture-backed startups, entities owned by private equity, and charitable organisations. These bodies tailor their governance mechanisms to tackle issues pertinent to their mission, ownership, and oversight (Larcker & Tayan, 2020). In this literature, "governance" broadly pertains to the establishment of orderly conduct and interrelations within communities (Kjaer, 2023). In many instances, official governmental bodies across both developed and developing areas fall short of expectations, leading to a perception of the state as ineffectual or predatory (Harris et al., 2020; Mazzuca, 2021b; Murtazashvili, 2020). This disillusionment paves the way for the rise of novel governance models, such as blockchain technology and revitalised traditional practices, aimed at fulfilling community needs and tackling various societal issues outside the traditional state mechanisms (Alston et al., 2022; Bustamante et al., 2022; Kaplan, 2009, 2023).

A decline of official governance in many Latin American countries, including Colombia, can be traced to the formation of "patrimonial states" where rent-seeking groups have captured institutions (Mazzuca, 2021a, 2021b). These groups, encompassing the military, party machines, criminal organisations, and even workers' unions, prioritise their interests over public welfare, leading to widespread corruption and institutional incapacity (Mazzuca, 2021b; Mercado, 2021). Consequently, the state's ability to provide essential public goods, such as security, justice, education, and transportation, is severely compromised (Mazzuca, 2021b). This pervasive institutional failure has prompted communities to seek alternative governance models, fostering a shift towards self-governance and community self-organisation.

Also, this shift towards self-governance is particularly evident in our case study of Bogotá, where communities have developed their own structures and norms that thrive independently of official governance. Studies on community self-organisation and self-governance reveal a clear preference for these alternative models over traditional public administration. "Self-governance" implies the community's ability to regulate itself without reliance on external authorities, often through informal networks and practices (Ismael, 2011; Killmister, 2017). "Microsphere" describes a small-scale, self-contained social environment where specific governance and interaction patterns prevail (Talbot, 2016).

Moreover, this paper focuses on micro-spheres of self-governance, where a microsphere is defined as a localised, small-scale environment or ecosystem where specific policies, strategies, or governance models are implemented and tested (Talbot, 2016). This concept is particularly relevant in the context of rural development and smart specialisation strategies; however, it is also relevant to urban contexts (Naldi et al., 2015). Research around New Public Management also highlights that both policy officials and citizens often favour self-governance and network governance because these models foster greater community involvement and mutual learning (Reagans, 2022). Similarly, evidence from Indonesian villages, show that self-governance can effectively address local issues and enhance community well-being (Wicaksono et al., 2022).

Recent research on the role of voluntary leadership in initiating and sustaining self-governance structures underscores the empowerment of local leaders and their ability to mobilise collective action (Andersson et al., 2020). This aligns with the situation in Bogotá, where community leaders have driven the preference for maintaining self-governance even when faced with potential regularisation options. The historical context of self-governance further supports this argument by showing that communities with a history of self-governance exhibit stronger norms of cooperation and higher civic engagement (Rustagi, 2022).

This literature collectively suggests that the preference for self-governance in Bogotá is not merely a response to governance failures but a deliberate choice that reflects the community's intrinsic informal structures, mindsets, and culture. This preference for a microsphere of governance over official structures highlights the empowerment of the DCB's drivers discussed later in the analysis section and can be extrapolated to other contexts in Latin America, where similar informal governance dynamics prevail.

A connection between informality and self-governance is also well-documented in the literature. Informal governance often arises as a flexible way to handle the gaps and shortcomings of formal systems and to allow people to self-govern in instances where those systems fail (Basile, 2023; Gómez-Cruz et al., 2024; Polese, 2023; Polese et al., 2019). These informal structures make use of local knowledge and social bonds to manage resources and solve problems effectively (Wicaksono et al., 2022). Nowadays, platforms play a crucial role in supporting self-governance and informal governance. They provide the tech infrastructure needed for communities to coordinate and communicate more efficiently (Schneider, 2022). Platforms help people self-organise allowing them to meet their needs and govern themselves without depending on formal government institutions (Schneider, 2024). This highlights how digital tools are increasingly important in aiding self-governance and transforming governance dynamics in various settings.

In this context, "platforms" refer to digital infrastructures that facilitate interactions between users, often within the framework of platform urbanism, which examines how these digital interfaces influence city life and governance (Srnicek, 2017a, 2017b). "Communities" are defined as groups of individuals bound by common interests or shared localities, engaging in collective actions for mutual benefit (Bell & Newby, 2021). Here, a "platform community" can therefore be defined as an interconnected network of users, producers, and stakeholders who engage with and contribute to a digital platform ecosystem. They participate in value co-creation, foster network effects, and drive the platform's growth and success through their interactions and activities (Demeter et al., 2022; Foster, 2024; Fu et al., 2021).

In the Global South, particularly in Latin America, the emergence of self-governance through platforms reflects a broader trend where communities innovate to overcome institutional deficiencies. These regions often face challenges such as political instability, economic disparities, and inadequate public services, making traditional governance less effective. Platform technologies offer an alternative by enabling decentralised and community-driven solutions that can adapt to local needs. In Bogotá, DCB illustrates how digital platforms can facilitate self-organisation and resilience in the face of governance failures. This phenomenon is not unique to Bogotá but is indicative of a wider movement across the Global South, where digital tools are increasingly leveraged to create more responsive and inclusive governance models. These platforms empower communities to address local issues directly, fostering a sense of agency and cooperation that traditional systems often fail to provide.

3. Platform-enabled self-governance in Latin America

The focal case study informing this paper is the *Drivers Club Bogotá* (DCB), a decentralised ride-hailing transport network in Bogotá, Colombia. The DCB emerged as a rebuttal to global ride-sharing corporations and as an informal response to the government's lack of official guidelines and policies regarding ride-hailing and ridesharing.

Thus, the backdrop of this study is Latin America's rich tradition of collective activism, self-organisation and other expressions of political engagement as countermeasures to the inefficiencies and inadequacies of state institutions (Kestler, 2023; Lopes de Souza, 2016), often leading to informality and systemic challenges. Alternative governance in Latin America often arises in response to the flawed progression of liberal democracy and market economies, which generally falter in the region and, more broadly, when applied outside the Western context (Boettke et al., 2015; De Soto & Diaz, 2002; Garretón, 2002; Roberts & Portes,

2006).

This pattern of institutional inadequacy and grassroots response is not confined to a single nation but is pervasive throughout Latin America. A prime example of this regional phenomenon can be observed in Colombia, where the contradictions of the socio-political landscape are particularly stark (Mejía Cubillos, 2016; Mejía & Parra-Montoya, 2022). The region's economies are greatly affected by the above-mentioned political and economic context leading to subversion against these failing states and markets, resulting in informal work and other forms of autonomy (Hammer, 2019; Polese et al., 2019).

Across Latin America, informality and self-governance emerge as interconnected responses to dysfunctional political and economic systems. Informal work encompasses various activities, from street vending and unregistered small businesses to unregulated labour in larger enterprises. This sector thrives in the gaps left by inadequate formal employment opportunities and serves as a critical survival strategy for many marginalised populations. It is characterised by a lack of formal labour protections and job security and often operates outside state regulations, leading to a precarious existence for those involved. The prevalence of informality reflects deeper systemic issues such as inefficient governance, pervasive corruption, and weak institutional frameworks. These same failures that give rise to informality also create conditions conducive to self-governance. As formal institutions fail to meet the needs of communities, individuals and groups often develop their own systems of organisation and rule-making (Leyva & Urrutia, 2023).

It's important to note that while informality can lead to self-governance, the reverse is not necessarily true. Self-governance arises from the need to fill the void left by ineffective formal governance structures, often in informal settings. However, not all informal arrangements result in self-governance. The two phenomena can coexist, as seen in many Latin American contexts, where informal economic activities operate alongside community-driven governance systems. Both are symptomatic of institutional failures, but self-governance represents a more structured response to these failures, building on the flexibility and adaptability inherent in informal arrangements. In the context of Bogotá, informal work is not just a means of survival but a significant aspect of the urban economy, deeply intertwined with the city's socio-political fabric.

Within this context, platform technologies enhanced its complexity by enabling a new form of community construction alongside the configuration of new political agency and disruption forms. These platform technologies also often facilitated lockdown breaches, which exponentially grew in the region during the pandemic (Camacho-Ramírez et al., 2022; Leal, 2022; Ruiz-Pérez & Barrera, 2020). However, gaps remain in understanding the specific role of platform technologies in enabling these breaches. Furthermore, there is a paucity of knowledge about how platform technologies are providing marginalised populations with the potential to confront the unjust and failed structures they are entangled in (Davis, 2020; Thierer, 2020; Ufere & Gaskin, 2021). This paper proposes to contribute to the discussion around these gaps.

3.1. The context of Bogotá, Colombia

Bogotá, the capital of Colombia, is a significant urban centre with over 10 million residents (DANE, 2019); here is where DCB operates. This vibrant city is Colombia's cultural, economic, and political hub. However, despite its economic dominance, Bogotá is marked by stark socio-spatial divisions, with wealthier populations residing in the northeastern and northwestern neighbourhoods, while lower-income groups performing informal economic activities, predominantly occupy the southern and peripheral areas (Pava Gómez & Escallón Gartner, 2020). This city's complex landscape is intensified by a unique policy dividing it into six social (and economic) strata, which influence public service charges and taxation, reinforcing both socioeconomic and psychosocial divisions (Uribe-Mallarino, 2008).

Transportation in Bogotá reflects these socioeconomic disparities. The city lacks a comprehensive mass transit system beyond the already-at-capacity Transmilenio BRT system (Rodríguez et al., 2017), leading to severe traffic congestion (TomTom, 2022). Residents of lower strata primarily rely on buses and informal public transport, whereas those in higher strata use private vehicles or the Bus Rapid Transit system. This imbalance in public mobility options is also compounded by the rise of ride-hailing platforms like Uber, Cabify, and others, which have reshaped the city's transportation ecosystem since their inception in 2013. These platforms operate in a legal grey area, facing opposition from taxi unions and challenges in regulation (Cuervo, 2022; Espada & Marino, 2021; Gómez-Lobo, 2019). The city's governance operates under a unitary republic structure. This setup gives Bogotá some level of autonomy, especially in managing policies related to transportation. However, the absence of effective regulation for platforms like ride-hailing services remains a contentious issue. This situation highlights the broader challenges the city faces in governance.

The dynamic between defective states and informal types of autonomy in Latin American cities was continued during the COVID-19 pandemic. The general mismanagement of the COVID-19 pandemic in the region, shown in the absurd extension of stay-at-home orders without any significant economic support, the poor state of medical systems and the political utilisation of sanitary orders and vaccines was, to some extent, to be expected. The latter given the institutional deficiencies previously mentioned (Leon, 2021; Noonan, 2022; Taylor, 2020). Furthermore, amid extended COVID-19 lockdowns and widespread institutional failures, together with the necessity of a population not supported economically to 'Stay at home', various forms of breaches of the COVID-19 lockdown rules emerged in Colombian cities.

The COVID-19 pandemic exacerbated existing disparities between the Global North and South, particularly in Latin American countries. Strategies like aid and stay-at-home orders were ineffective due to resource scarcity, basic amenity shortages, and lack of income replacements (McCann & Matenga, 2020). World Health Organization directives, such as stay-at-home orders and hygiene protocols, often clashed with the realities in Latin America, where overcrowded settlements and scarce clean water access hindered compliance (Garcia et al., 2020; Nascimento Neto & Procopiuck, 2022). The majority being self-employed or in precarious employment, the pandemic risked their livelihoods, making resilience and adaptability essential survival traits (Barrios et al., 2022; Morales, 2020; Purnomo et al., 2021).

3.2. Platforms, urban governance, and platform municipalism

Platforms have emerged as influential agents, shaping the character and function of cities. These platforms have become omnipresent and are defined as architectures that both facilitate and limit varying facets of agency – be it economic, social, affective, or political (Barns, 2019b; Brett, 2020; Gillespie, 2010). Platforms permeate a broad array of technological devices and produce an equally diverse range of user experiences (Avermaete, 2021; Barns, 2019a, 2019b, 2020; Barns et al., 2017). Due to this extensive role and reach, platforms have been proven to work better in urban environments, largely stimulated by agglomeration economies and the intrinsic relationality embedded in urban spaces (Artioli, 2018).

The localised and context-dependent nature of platforms and how they shape platform urbanism have re-structured the way urban actors relate to each other, offering participation and empowerment but also influencing urban materiality and governance (Hanakata & Bignami, 2021; van Doorn et al., 2021). Over time, the advent and growth of digital platforms have profoundly reshaped urban policy and governance, providing new tools for civic engagement, decision-making, and service delivery (Falco & Kleinhans, 2019; Söderström & Mermet, 2020). Furthermore, facilitating citizen-government collaboration, particularly in reshaping gentrified neighbourhoods (Leszczynski &

Kong, 2022).

Platforms have also facilitated data-driven approaches to urban management, enabling real-time analysis and responsiveness to city issues but also raising critical challenges around the digital divide, privacy, and the democratic control of digital infrastructures. They bring to the fore issues of capital accumulation, labour rights, and the digitalisation of urban life, provoking vibrant discourse and debate (Barns, 2020; Caprotti et al., 2022; Moertenboeck & Mooshammer, 2021; Sadowski, 2020; van der Graaf & Ballon, 2019).

Platforms have become triggers of a sweeping social, economic and political transformation that has questioned and reconfigured established governance structures (Avermaete, 2021; Barns, 2019b; Caprotti et al., 2022; Karvonen, 2020). Furthermore, platforms have also triggered the exploration and feasibility of cooperative models within the gig economy, including local community-driven cooperatives serving local markets, applicable to the case of DCB, as seen in gig and sharing economies (Frenken, van Waes, et al., 2020; Frenken, Vaskelainen, et al., 2020; Qadri, 2021).

Across the globe, policymakers and administrators are faced with the challenge of keeping up with the rapid evolution of these technologies and the institutions they afford, often leading to hurdles in formulating and implementing effective policies (Hemphill, 2020; Marchant, 2011). The urban governance landscape in Latin America and Colombia adds yet another layer of complexity to this discussion. In there, predatory coalitions and an endemic institutional mistrust act as considerable impediments to the creation and implementation of policies related to platform technologies (Espada & Marino, 2021; Goldin, 2020; Orozco Palacio, 2015; Querubin Rave & Cardona Ramirez, 2020; Reilly, 2020). Additionally, the institutional fragility and the prevalence of clientelist relationships pose further challenges, which fuel conflicts over platform usage and spur the emergence of new forms of heinous political articulation (Pinheiro-Machado et al., 2023; Pinheiro-Machado & Scalco, 2023; Pinheiro-Machado & Vargas-Maia, 2023). In such contexts as Bogotá, platforms have both served as a tool for political radicalisation and, most importantly, as an empowering tool that enables individuals to establish alternative decentralised modes of governance.

The formation of Drivers Club Bogotá (DCB), the case study discussed in this paper, exemplifies this empowerment through their use of social networks and social capital within the Colombian cultural context, which ultimately fosters subjective well-being and support among drivers. This phenomenon is also observed at different scales and with varied characteristics and levels of success, prevalent among platform workers globally (Qadri, 2021; Wills-Herrera et al., 2011) (Wolf & Figueroa, 2022) (Marasciulo & Hernández, 2022; Mutandiro, 2022). However, while there are other examples of this type of process, DCB has innovated beyond the conventional platform-worker dynamic by fostering a unique community-based and resistant approach. This approach not only involves the basic transactional aspects of platform work but also integrates a deeper layer of social engagement and mutual support among its members. This distinctive model emphasises the importance of community solidarity and collective action within the gig economy, setting a new precedent for platform workers' empowerment and well-being. The insights from this model can contribute significantly to a global understanding of urban worker empowerment in the digital age, potentially influencing urban policymaking and strategies worldwide. While rooted in the Colombian context, the DCB experience offers valuable lessons that transcend geographical boundaries, providing a blueprint for both workers and policymakers across diverse cultural and economic landscapes to adapt and implement in their own unique circumstances.

The subsequent sections of this paper will delve into the methodological approach employed in this research, presenting a detailed account of the research design and data collection methods. Following this, we will present the results of our investigation, highlighting key findings that illuminate the unique aspects of DCB's community-based model. Finally, the discussion and conclusion will synthesise these findings, exploring their implications for the broader urban policy landscape and suggesting avenues for future policy considerations.

4. Methodological approach

The research that informs this paper applied a qualitative digital ethnographic approach (Pink, 2016). A case study design was chosen because it allows for an in-depth exploration of a particular phenomenon within its real-life context (Schoch, 2020; Yin, 1994). The case study selected was the community of ride-hailing platform drivers Drivers Club Bogotá (DCB, 2023). This community was chosen due to its relevance as the largest independent ride-hailing drivers' community in Bogotá comprising over 6000 drivers. In this context, DCB also emerges as a relevant case study, as they were a highly responsive entity to pandemic challenges faced by ride-hailing platform drivers in general and their complex relationship with the local governance mechanisms, which demonstrate the potential for new forms of political articulation and participation in a platform-impacted city.

The use of digital ethnography as a method was done with a focus on critical and innovative digital methods, as suggested by Leszczynski (2018, 2019, 2020). Leszczynski emphasises the importance of addressing the epistemological challenges of digital methodologies, advocating for the use of triangulation and data-analytic approaches to enhance the meaning in qualitative digital research. This approach helps address criticisms of digital ethnography, focusing on the representativeness and validity of the research. Applying Leszczynski's concept of “walking ethnography” to the digital realm, screen-mediated online interviews were conducted with drivers from DCB. The latter allowed for observation as a research method whilst performing the interviews, enabling to watch the drivers' interactions with ride-hailing platforms and understand their strategies and perceptions, thus gaining insights into the internal dynamics of their organisation.

Additionally, there was an exploration of digital-visual artifacts as research objects, mainly images emerging from DCB's social media, to delve into the politics and hidden meanings conveyed through those images (Freedman & Siegesmund, 2023; Leszczynski, 2019; Rose, 2023). This approach revealed aspects of the drivers' experiences and relationships with platforms that were not easily articulated in interviews. The digital methods employed underscored the mundane yet significant engagements with technology in daily life, particularly in cities like Bogotá (Leszczynski, 2020). This was evident in the use of commonplace digital artifacts like smartphones, social media, and chat platforms.

The data that inform this paper were collected from May 2021 to August 2022 through 28 Synchronous and asynchronous online semi-structured interviews with 28 drivers using WhatsApp, Facebook Messenger, Zoom and Microsoft Teams. The participants were recruited based on their occupation as ride-hailing platform drivers, their membership in the community of DCB, and their willingness to participate in the research. All the participants lived in Bogotá in middle to low-income areas, and of the total, 17 identified as male and 11 as female. Pseudonyms are being used in this paper to protect the drivers' identities. Furthermore, this paper is also informed by digital images produced by the drivers and obtained through contact with them and through unobtrusive online observation of their online groups in Facebook (Salmons, 2021).

5. Results

Despite COVID-19 challenges, Bogotá's ride-hailing drivers displayed resilience and ingenuity. Forming a community, they created self-governance microspheres in response to government inadequacies and strict policies. Their adaptation and mutual support exemplify autonomous, alternative societal functioning. The following sections analyse their response to platform and government gaps, leading to resilience and self-governance consolidation.

5.1. Microsphere of self-governance 1: the genesis - responding to voids with platforms

DCB, originating from dissatisfaction with multinational and alternative ride-hailing platforms, has established itself as a decentralised, self-governed transportation network in Bogotá, Colombia. It merges age-old practices with digital strategies, using tools like Excel for a user database and WhatsApp for communications management, DCB combines traditional and digital methods to create a unique operational model, emphasising community and security over the limitations of existing platforms. Echoing the findings of Zamani et al. (2023) in their study of Tehran's urban governance, another massive city of the global south, the incorporation of digital platforms underscores the transformative power of technology in affording member participation, a key element also critical to the success of DCB's operations during the pandemic.

The genesis of DCB can be traced back to October 2017, in an 'activation office' of a multinational ride-hailing platform - a conduit designed for driver security clearance. DCB's inception was first a response to the drivers' discontent with their over-reliance on multinational ride-hailing platforms and their desire to establish mutual support networks in a context where ride-railing platforms have existed in a precarious legal environment since 2013 (Congreso de Colombia, 2021; Cuervo, 2022; Gómez-Lobo, 2019; Representantes, 2020). DCB predominantly transacts in cash to circumvent transaction fees, and prioritises localised, community-driven safety measures over the global platforms' reliance on GPS tracking. This model not only furnishes a grassroots transportation solution but also serves as an exemplary form of grassroots self-regulation, demonstrating the efficacy of community-led ventures in fulfilling local necessities beyond conventional frameworks.

In the beginning, the idea of the drivers of DCB was to build a community of support for their activities and to build companionship. Harnessing the power of popular digital platforms, they created WhatsApp groups and developed a peer-to-peer ride-hailing system, echoing the structures of the multinational platforms yet operating under their own governance.

We wanted to create a community of mutual help and security because driving on the platforms [referring to established ride-hailing platforms such as Uber and InDriver] has its complications … many times, it becomes difficult. The conditions of the platforms are sometimes not the best, so it occurred to us that we could do something different and, well, help each other ('David', founder of DCB).

> *The idea was to help us on night shifts because some colleagues prefer to drive at night since there is less traffic and there are better trips … It was also a way to have a conversation with someone, to go have a coffee and to say if a colleague sees something or needs something.*
>
> ('Mauricio', founder of DCB)

They turned to readily accessible technology such as WhatsApp and Facebook to create a network of support and collaboration, allowing for more drivers to join and participate and effectively constructing microspheres of self-governance. The community began to form and mimic the architecture of the multinational platforms' coordination systems. The drivers sought to challenge the established ride-hailing platform companies, feeling unsupported by these entities. As a response, they pivoted to offering peer-to-peer ride-hailing services grounded in a more community-oriented, grassroots approach.

The community also began to develop and strengthen providing the so yearned support. This process that started as a social network grew into a sophisticated community that facilitated more than just companionship and assistance between drivers. It became a fully-fledged informal platform that leveraged various software solutions for communication and fare calculations, and established connections with security personnel at primary pick-up locations like apartment complexes, shopping centres, or bars. This emerging and evolving self-governing system even started involving clients.

The payment system within DCB largely operates in cash to avoid credit card fees and platform commissions. This approach aligns with the drivers' desire for autonomy and greater earnings, enabling them to circumvent the financial constraints imposed by larger platforms. Regarding safety measures, DCB focuses on building strong community ties, offering a more secure and reliable environment than multinational platforms. This is crucial given the drivers' experiences with inadequate security responses from these platforms, compounded by the lack of rigorous passenger checks by platforms like Uber. While multinational platforms like Uber advertise GPS tracking as a key security feature in Colombia, DCB counters this with a more localised and community-centric approach, relying on the strength and trust of their relationships within its network.

WhatsApp plays a pivotal role in DCB's operations, serving as a platform for coordinating rides and managing communication between drivers and passengers. The reliance on WhatsApp, however, raises concerns about data security and continuity of operations. Should WhatsApp exit the market or experience significant disruptions, DCB would face the challenge of losing vital communication channels and user data.

This dependence underscores the need for DCB to consider diversifying their digital tools (which they already started to do at the time of writing of this paper, moving part of their activities to the platform 'Telegram'). By doing so, DCB will continue to provide a resilient and secure transportation option, one that is deeply rooted in the community and adapted to the local context of Bogotá.

The initial contact between potential passengers and the DCB is usually through personal interaction with the driver, other clients or security guards at buildings or bars, who receive a commission for recommending DCB. Passengers communicate their ride requests via a dedicated 'riders' WhatsApp group. A selected driver, who acts as the administrator, manages the responses, and assigns the ride to a suitable driver based on distance, communicating the decision back to the passenger. This administrator role is decided monthly through a draw from which six drivers are chosen. These administrators are compensated for their coordination role from a common fund managed by the drivers. However, while serving in this administrative capacity, they do not undertake any rides themselves.

> *(When a) passenger needs a ride (they) communicate with the WhatsApp group of passengers and administrators, and they (the administrators) then notify our group of drivers with the details of the trip, destination and pick-up address. Whoever is closest to that address answers the Zello channel [another platform the DCB uses] and gives the channel administrator the estimated arrival time and that's it. …*
> *Our difference is that we charge (the client) a little less than what the applications [Uber, InDriver, etc] are charging at the time.*
>
> ('Jhonatan', driver)

When interviewed, the drivers display a sense of ownership over the system through their use of collective pronouns like 'our' and 'we' in natural language. This linguistic choice signifies that the drivers view DCB as something they possess or belong to. Such a feeling of ownership and personal connection, indeed, is a key characteristic of a community, reflecting how the drivers consider their creation akin to 'their own' (McMillan, 2011; Talen, 2000; Wise, 2015). The drivers continue to use the other established platforms as a point of reference to what to charge the client, but mostly, they employ an application called 'Blumeter,' a fare metering tool that allows the drivers to set and adapt their fare policy collectively. This includes setting minimum charges, prices per kilometre, and implementing surge pricing during peak times or weekends. These policy decisions are coordinated via their WhatsApp groups or communicated through Zello. However, the DCB's governance approach is flexible, allowing drivers to set their own pricing and manage their everyday activities as they see fit:

The strategy is that we use Blumeter (…) what we generally do (when) I know there is going to be a lot of demand, is that we look at how surge pricing is at Uber, then they communicate through the group and I apply that to Blumeter … of course, sometimes I don't add surge pricing to level the price a bit because if one is more expensive than Uber, then they don't call you at all… Anyway, if I add surge pricing or not when I'm with the Drivers group, it's my decision.

('Catalina', driver)

This community illustrates a self-governed microsphere, offering a flexible, participatory alternative to traditional bureaucracy. It exemplifies the concept of a "microsphere" as defined by (Talbot, 2016) - a localised, small-scale environment where specific governance models are implemented. DCB fills gaps left by other platforms and the state, reimagining ride-hailing with autonomous, communal service provision. This aligns with Wicaksono et al. (2022) findings on self-governance effectively addressing local issues and enhancing community well-being.

DCB's emergence as a response to institutional inadequacies also reflects the broader trend in Latin America of communities innovating to overcome governance failures (Kestler, 2023; Lopes de Souza, 2016). Its platform-based structure exemplifies how digital tools can facilitate self-organisation and resilience (Schneider, 2022, 2024) enabling a form of governance that thrives independently of official structures (Ismael, 2011; Killmister, 2017). Moreover, the case of DCB embodies the interconnection between informality and self-governance prevalent in Latin America, where informal structures arise to handle the shortcomings of formal systems (Basile, 2023; Gómez-Cruz et al., 2024). This informal, self-governed model allows the community to leverage local knowledge and social bonds to manage resources and solve problems effectively, echoing the patterns observed across the region (Polese et al., 2019).

5.2. Microsphere of self-governance 2: resilience and reinvention consolidating autonomy

The autonomy and resourcefulness were further harnessed with the onset of the COVID-19 pandemic and subsequent lockdowns in Bogotá from April 2020, which compelled the DCB to reconfigure their operations. Their foundation as a community and its dynamics, coupled with their distinct model of governance and coordination, equipped them with the evasive agency necessary to adapt and maintain functionality amidst stringent COVID-19 restrictions.

As the 2020 lockdowns unfolded in Bogotá, the members of DCB faced monumental challenges that threatened their livelihoods. Officially subject to the same stay-at-home orders as everyone else and deprived of their means of generating income, these drivers nevertheless showcased an exceptional degree of resilience and adaptability – even when it implied breaking the law established through presidential mandates. They responded promptly and inventively by circumventing lockdown regulations and responding dynamically to both their own emergent needs and those of their clientele during this unparalleled period.

Against the backdrop of vigilant surveillance by traffic police, who were at the forefront of enforcing quarantine and circulation restriction orders, the drivers found innovative ways to diversify and continue offering their services. They clandestinely initiated the delivery of essential goods and food to community members, ensuring those in need were not left without crucial supplies during this challenging period. At times when the traffic police were not patrolling, they also initiated the provision of clandestine local rides to enable people to move around and visit members of their families at other locations.

We did everything we could do. If it was going to buy food from the lady in an apartment that was the mother of one of the boys and lived alone, or if it was to take a ride around 7 pm when the 'Tombos' changed their patrol and were not in the street. [The word 'Tombo' is a colloquial and derogatory way to refer to police officers in Colombia and other countries in Latin America].

('Juan Manuel', driver)

Moreover, as shown in Fig. 1, drivers used platforms such as Waze to internally report the location of police checkpoints. This became a common-used strategy, even during the quarantine months of mid-2020.

Drivers also went beyond merely addressing their material needs and those of their clients, recognising the importance of emotional well-being during these difficult times. For example, the DCB organised informal music concerts in parking areas to bring comfort and distraction to those sequestered in their homes during the lockdown (Fig. 2). Also, to draw new customers to their unconventional (and unauthorised) services, the drivers deployed a multifaceted community-focused strategy. They strengthened the use of personal referrals, direct communication, and assistance of building security personnel by offering them a commission for their help.

In the beginning, I mostly started delivering food and essential supplies to the elderly and vulnerable people in my neighbourhood but mostly in my 'closed [gated] community'. (Note from the authors: The 'conjunto cerrado' or closed community as we translated this term is a very common type of gated community in Bogotá comprised by buildings mostly inhabited by middle to lower-income families. See: (Henao, 2016)) … at first, to be honest, I relied on word of mouth from people in the building but after the first two weeks when it was obvious that (the government)

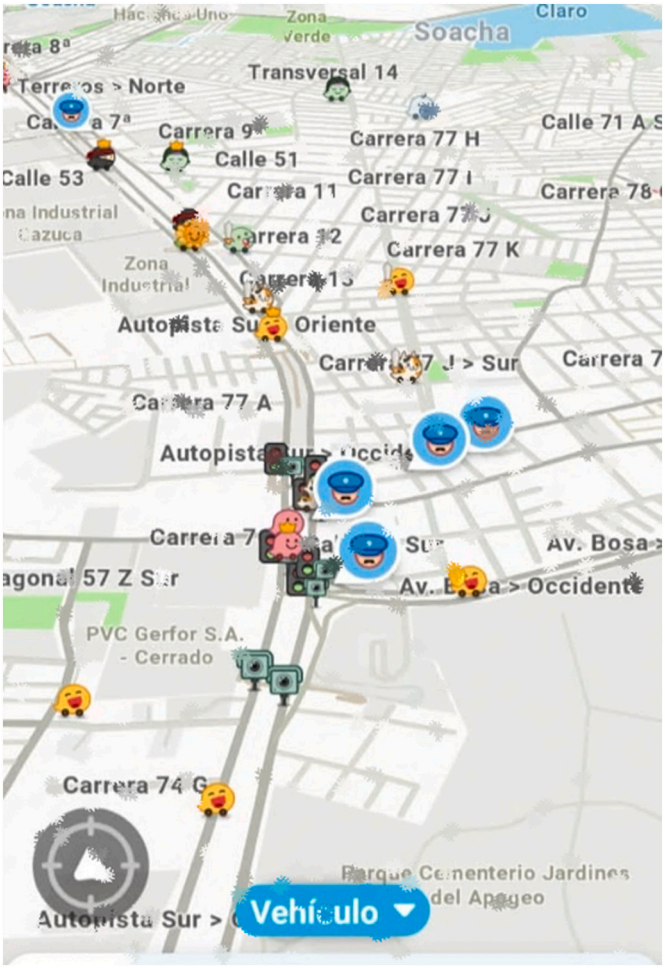

Fig. 1. Drivers of DCB reporting the presence of police using the app Waze. Image modified by the authors (Salmons, 2021). Available in the driver's public Facebook group (DCB, 2023).

Fig. 2. Drivers of DCB organising a concert during the lockdown in May 2020. The text reads: "Giving a voice of respite in the middle of the pandemic… Call us XXXXXX." Image provided by the drivers, modified to protect anonymity and also present in their Facebook page (DCB, 2023).

> *were not going to take us out of lockdown, everyone came back to the WhatsApp groups (of DCB), and they were saying that the building security guards were making the connections with services in exchange for a small commission that we paid in order to keep things down-low.*
> [Note from the authors: The 'conjunto cerrado' or closed community is a common type of gated community in Bogotá mostly inhabited by middle to lower-income families. See: (Henao, 2016)]
> ('Camilo' – Driver)

The self-governing characteristic of the DCB is highlighted in the second part of Camilo's quote, where it is clearly stated that despite the government's restrictions, they took matters into their own hands and continued to function. Furthermore, the DCB members worked in an even more cohesive and united way during the pandemic despite the perpetual threat of apprehension by law enforcement tasked with implementing health orders. This was a vital pivot, embodying their adaptive response to the pressing needs created by the COVID-19 policies. They saw themselves as vital agents in providing care to a wider community, which included not only their immediate families but also the surrounding neighbourhoods.

Most of these actions were carried out discreetly under the ever-present fear of punitive action from authorities. Yet despite the informal nature of their operations, their actions highlighted the ability of such a self-organised community to carve out a space for autonomous operation, even amidst highly challenging circumstances. Their adaptability, resourcefulness, and commitment to community-focused responses were instrumental in navigating the challenges posed by the pandemic, further shaping, and strengthening their unique microsphere of self-governance. Furthermore, their actions conveyed a powerful message about self-governance. The active disregard for official laws and the adoption of their own set of rules signified an intense demonstration of self-management. These actions were not organised in the name of defiance alone, but rather a vital mechanism of survival, which required them to unite and operate on their own terms, and this spirit of self-determination was not driven by selfish motives but rather by a shared necessity to persist and thrive. Their actions demonstrated how these evolving, community-led systems responded to the pandemic-driven challenges, demonstrating a compelling blend of resilience and reinvention in meeting their own and the community's needs as the government was not addressing these.

> *Don't you think they left us alone? And I tell you, everyone left us alone (including) Duque [the then president of Colombia] but also the mayor (of Bogotá), from the right and left. What help could we have? especially those who simply could not 'stay at home' because if we did, we would starve to death? For me it was an obligation to go to work like this, risking COVID or the police taking [arresting] me because in this (situation) we were alone and, so, we had to depend on ourselves… In the news they always said that 'we were in this together' but that was a lie.*
> ('Camilo' – Driver)

This powerful statement resonated with many of the members of DCB as there was a government void in helping marginalised communities, which enabled the consolidation of their autonomy; a microsphere of autonomy that is based on informality and self-governance. The COVID-19-driven lockdown policies may have had the best intention from a public health perspective, but they did not consider the populations they were negatively affecting. No direct financial support (beyond the access to limited amounts of credit and subsidies to enterprises through the program 'Colombia Responde') was provided by either the national or local government (Marriner & Becerra, 2020) leading the drivers (as well as other informal economy workers (Campa, 2021)) to break the mandates and go out to support themselves, their families and their communities. In this case, the drivers began to gather support from their communities, even though they were aware that what they were doing was unallowed in the framework of the lockdowns. In the face of overwhelming adversity, the activities of the DCB show that its members made a resonating proclamation that they would be their community's lifeline, and it is at this juncture that we see the reinforcing of their alternative self-governance model.

DCB, defying legal boundaries during lockdowns, provided crucial services where the government fell short. They consolidated their autonomy, highlighting the need for their self-governance model. Their actions, from delivering supplies to organising parking lot concerts, were both practical support and resistance against a system that neglected them during the crisis. These initiatives, a form of platform municipalism, challenged the government's pandemic response. DCB's actions highlighted the struggles of Bogotá's middle- and lower-income groups during lockdowns, challenging the official narrative of unity in crisis. This calls for a broader dialogue on government roles and balanced crisis responses, particularly in the context of COVID-19.

A statement from one of the founders of the DCB suggests that the absence of government support and suitable responses were, paradoxically, a source of empowerment for them. In his words, their decision to take control of their circumstances was a measure borne out of necessity, thus, underscoring their assertion of agency and autonomy.

> *Look, I am Colombian, and I know that from COVID, and all the things that are going to come out later, we will get ahead as we always do. Colombians are 'echaos pa 'lante' [Note from the authors: colloquial way*

to say 'always moving forward'], and nobody can change that. The issue is that first, the government instead of helping and protecting what it does is chasing people … … During COVID, what we realised is that we were all together, but that in the end, that 'together' are the citizens, the workers, the people on foot like us and like the people we provide the services to. I do not get into politics, but what I do know is that citizens on foot are the ones who matter, and we here put the grain of sand so that things go ahead, despite and not thanks to the government and companies.

('David', driver and one of the founders of DCB)

The founder's quote reflects a belief in the transformative power of ordinary citizens, highlighting "citizens on foot" as key agents of change. This philosophy, exemplified by DCB's actions, validates autonomism principles, showing how individuals can drive political change and build a more equitable society. This concept gains momentum under platform municipalism, where technology underpins this new political agency (Krisch, 2022; Thompson, 2020).

6. Discussion and conclusion

The discussion above has explored the intertwined connections between platform technologies, self-governance and official governance within the Latin American context by focusing on the case of the Drivers Club Bogotá (DCB). It has demonstrated how the weaknesses of traditional states and corporations such as Uber in the region have given rise to informal and insurgent forms of organisation, leading to consolidated self-governance and autonomy. This is a trend that not only persisted but intensified during the COVID-19 pandemic. This paper has also discussed how communities have managed to challenge the unjust and ineffective systems in which they operate through the utilisation of digital platforms, leading to innovative forms of informality as a form of political agency and reaction to the malfunction of government.

The paper examined ride-hailing drivers in Bogotá's informal economy, highlighting their resilience and adaptability in legal grey areas. The drivers were empowered by adversity, offering essential services like unauthorised food delivery during lockdowns. This reveals the significant role of ride-hailing platforms in self-governance and collective action amid institutional failures, emphasising their potential in transformative technology and community-based solutions to governance challenges, particularly during COVID-19. The findings, therefore, address the knowledge gap in platform technologies' role in empowering marginalised urban communities.

Focusing on Bogotá's alternative governance structures offers important insights globally, particularly for similar environments. It highlights innovative responses developed by marginalised communities to circumvent and adapt to governance inadequacies, providing potential strategies for enhancing resilience and fostering sustainable governance where formal institutions are weak or absent. Furthermore, the lessons drawn from this context have broader implications, offering vital perspectives for the 'Global North', where there are growing concerns over institutional inefficiency and a disconnect from community-specific needs. By learning from the grassroots strategies employed in Bogotá, urban areas in the 'Global North' could improve their governance approaches, advancing towards more resilient and inclusive urban ecosystems. In this regard, authors like Belizaire (2020) reinforce this viewpoint, highlighting that the power of partnerships with grassroots stakeholders and inclusive planning processes can significantly enhance public infrastructure and services, effectively supporting sustainable urban governance.

Furthermore, this paper highlights how the digital sphere is becoming a new political arena where power dynamics are continually redefined and where new forms of citizen engagement and political articulation are born. In similar southern contexts, Zamani et al. (2023) explore this further by examining how Tehran's use of digital platforms for urban governance not only facilitates participation but also enhances the responsive capabilities of the city, integrating technology deeply into the social fabric.

In this regard, DCB is not an isolated phenomenon but rather a manifestation of a broader global trend already explored by authors such as Qadri (2021). From community-run digital marketplaces and institutions (Kumar & Mishra, 2023; Marasciulo, 2022) to online mutual aid networks (Abdikerimova & Feng, 2022; Carstensen et al., 2021; Ford & Honan, 2019; Jun & Lance, 2020), there is a global proliferation of platform-mediated initiatives that blur the boundaries between the public and the private, the formal and the informal, the legal and the illicit. These initiatives are reconfiguring the urban political landscape and disrupting traditional governance models.

However, despite the global emergence of diverse platform-mediated initiatives as explored by Qadri and others, which include a wide range of community-run digital platforms and online networks, DCB stands out for its distinctively community-based and resistant approach. Where other models might primarily focus on the digital facilitation of services and economic transactions, DCB extends its impact by forging a strong sense of community and collective resilience among its members. This approach transcends the conventional scope of platform labour, embedding deeper social and cultural values into its operational framework. In doing so, DCB not only contributes to the digital economic landscape but also champions a model of solidarity and mutual aid that reinforces the social fabric of its community, offering a pioneering example of how digital platforms can empower and unite individuals beyond mere economic transactions.

The story of DCB is a testament to the transformative role that platform technology can play in facilitating social innovation, self-governance and enhancing community resilience and empowerment, especially in times of crisis. At the core of this transformation is the idea of digital platforms not just as transactional tools but as catalysts for social and political change. Through platforms, communities can coordinate their actions, leverage collective resources, and devise innovative solutions to the challenges they face. Here, Certomà et al. (2020) discuss the 'fluid governance' of urban public spaces showcasing how informal planning practices can adaptively reshape urban environments to meet community needs better. In the case of DCB, through digital networks that build community, these connections provide an environment where grassroots communities can actively participate in the political process and effect change, promoting inclusiveness and more equitable urban ecosystems.

The DCB case study exemplifies self-governance, resilience, and creative crisis adaptation. It shows adaptive self-governance's potential in marginalised communities, overcoming social and commercial limits of established platforms. The drivers' actions during lockdown highlight their success in self-governance, effectively responding to the crisis and circumventing government constraints and inadequate state support. This demonstrates how alternative self-governance can fill gaps left by traditional public and private governance structures.

It's relevant to highlight here that in the context of Bogotá, corrupt political parties, family-owned corporate conglomerates, and criminal organisations can become aware of self-governed communities like DCB with different consequences. These powerful entities in the framework of Colombian institutionality (Mazzuca, 2021b; Mercado, 2021) may attempt to co-opt or manipulate these grassroots movements for their own benefit, undermining the original purpose and integrity of the community-driven initiatives. Their intervention could take various forms, such as imposing restrictive regulations (Gómez-Lobo, 2019), offering bribes for compliance, or even resorting to threats and violence to maintain their influence and control, as they have been doing with regular ride-hailing drivers (Cortés, 2015). These actions pose significant risks to the sustainability and independence of such self-governed groups. Moreover, the intervention of rent-seeking groups could lead to a loss of trust within the community, hampering its ability to function effectively and potentially causing internal conflicts.

In Latin America and Colombia, as discussed previously, the complex governance landscape, marked by predatory coalitions and institutional

mistrust, poses even more challenges for policy implementation regarding platform technologies (Espada & Marino, 2021; Orozco Palacio, 2015; Reilly, 2020), as well as the emergence of new forms of political articulation and resistance to these pressures (Pinheiro-Machado et al., 2023; Pinheiro-Machado & Scalco, 2023; Pinheiro-Machado & Vargas-Maia, 2023).

The resilience and adaptability of these communities, however, will allow them to navigate these challenges, as they have done in the past, by finding innovative ways to resist external pressures and maintain their autonomy. Despite potential threats, platforms like DCB demonstrate resilience and democratic control (Barns, 2020; Caprotti et al., 2022; van der Graaf & Ballon, 2019). Platforms have spurred socio-economic and political transformations, challenged traditional governance structures, and fostered cooperative and alternative models that we argue, have been embodied in the narratives and agency of these drivers (Avermaete, 2021; Frenken, van Waes, et al., 2020; Karvonen, 2020). Here is where their strength lies.

The emergence of self-governed groups like DCB in Bogotá represents a significant shift in the dynamics of power and governance, particularly in the context of Latin America's complex political and institutional landscape. These platforms not only disrupt traditional governance structures but also create new spaces for democratic participation and collective action. Their ability to foster cooperative models and promote socio-economic empowerment is a testament to their innovative approach to addressing local challenges. This adaptability and resilience become even more crucial in the face of potential manipulation or coercion by powerful entities, as they offer a beacon of hope for sustainable, community-driven development. In essence, the strength of such platforms lies in their ability to embody the narratives and agency of their members, fostering a sense of ownership and collective identity that transcends external pressures and challenges. This grassroots mobilisation can effectively counteract the influence of predatory coalitions and institutional mistrust, paving the way for more inclusive and equitable forms of urban governance.

DCB exemplifies a model of community-driven self-governance supported by digital platforms and mutual aid, hinting at the dawn of a new governance landscape framed within the structures of platform municipalism (Krisch, 2022; Thompson, 2020). Thus, the analysis of the DCB case study raises fundamental questions about the evolving nature of urban governance in the age of digital transformation. It provokes reconsidering the understanding of state and non-state actors and the dynamics between formal and informal economies. DCB's survival-driven defiance of legality calls for a broader dialogue about the role of the government and the potential for grassroots initiatives to stimulate political change. It unveils the often-neglected potential of marginalised communities and informal sectors in shaping public discourse and political landscapes.

Furthermore, the findings presented in this paper push the boundaries of traditional understandings of crisis management politics, particularly emphasised by and during the COVID-19 pandemic. They challenge the conventional narrative of 'unity in crisis' by bringing to light the disproportionately burdensome impacts of government actions and mandates on certain communities and demonstrating the failures of blanket policies that do not account for socioeconomic differences. The analysis underscores the importance of nuanced, localised crisis responses, thereby prompting to reconsider the role of centralised governmental structures in managing crises.

It is crucial to recognise that informality in contexts like Bogotá is not merely a result of necessity but often a deliberate choice by communities seeking autonomy and self-governance. This reflects a critical shift in how urban governance and policy need to adapt to reflect the realities of how people actually live, work, and move in cities. The concept of 'diffuse design' provides a valuable framework for understanding how social innovations can be integrated into everyday life to enhance community resilience and empowerment. This approach empowers citizens as potential designers of their city and its policies, shifting away from top-down governance models.

Considering these insights, the notion of a 'partner state' (Bauwens & Kostakis, 2015; Pazaitis & Drechsler, 2020; Restakis, 2021) emerges as a promising collaborative governance model. In this approach, the state acts as a facilitator and partner in co-creating solutions deeply rooted in community practices and needs. This model represents a significant departure from traditional governance structures, emphasising the importance of co-design or the potential of "liberal design" (Colin-Jaeger, 2024), understood as constructing a framework of rules that enables beneficial spontaneous orders while maximising individual liberty, autonomy and reasonable expectations as the cornerstone of governance.

Thus, this paper argues for the recognition of the emerging grassroots phenomenon of technology utilisation for social innovation and the provision of urban social services. In the context of the institutional void outlined above, the way to fill that gap is precisely by harnessing the alternative governance and coordination processes of online communities such as DCB and developing a co-designed form of new platform municipalism. Co-design processes have been historically present in the Latin American context, emerging from a population that already has worked in informality and harnesses these processes daily. Thus, the role of urban policymakers would be to apply the above to unite the state capacity, the platform companies' power, and the everyday life practices of the users and workers linked platform technologies.

Based on the analysis discussed above of the DCB case study and echoing the insights of Manzini (2015, 2017), this paper advocates for policy reforms adopting a co-design process that capitalises on social innovation. The idea of the 'partner state' previously discussed is seconded. This proposed idea applied for city governance shifts away from viewing the state as an autonomous body towards a governance model that enables and encourages social innovation and value creation by actively engaging citizens. Such collaboration in urban governance ought to be the objective of forthcoming urban strategies, not only in Bogotá but across Latin America. By doing so, the dominant spheres of power—whether governmental or private sector—would be enabled to pursue a gradual, democratic, and co-designed process to formulate effective policies and better urban governance.

This study contributes to the broader debate on the changing dynamics of urban governance and the capacity of grassroots movements to drive political change through the discussion about the transformative potential of platform technologies within a Latin American context. Furthermore, it encourages policymakers to collaborate with people, recognise the value of these alternative governance models and explore ways to integrate them into existing structures to, ultimately, promote more inclusive, equitable, and resilient urban ecosystems.

Finally, this paper highlights the potential of platform technologies in empowering citizens, driving social innovation, and reshaping urban governance. The case of DCB showcases how digital platforms enable self-governance and empower marginalised communities, challenging traditional political structures. It suggests that rethinking urban governance through technology opens new possibilities for social and political innovation. The findings offer crucial insights for researchers, policymakers, and those interested in urban development, democracy, and digital advancements.

In summary, drawing from this study's insights, particularly the case of Drivers Club Bogotá, we advocate for a paradigm shift in urban governance towards a 'partner state' model. This approach calls for policymakers to actively engage with and support grassroots innovations and self-governed communities, rather than attempting to regulate or suppress them. Such a model would involve creating formal channels for dialogue and collaboration with groups like DCB, providing resources while respecting their autonomy. Cities could establish 'innovation zones' where alternative governance models are given space to develop, with opportunities for co-designed policies.

Furthermore, investments in digital infrastructure and literacy programs are crucial to ensure equitable access to the technologies that

enable these new forms of organisation and participation. By embracing platform municipalism and fostering an ecosystem that supports bottom-up innovation, cities can harness the creativity and resilience of their communities to address urban challenges more effectively. This approach has the potential to promote more inclusive, equitable, and resilient urban ecosystems, not only in Bogotá but across Latin America and potentially in other contexts facing similar governance challenges.

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CRediT authorship contribution statement

Luis Hernando Lozano Paredes: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Gabriela Quintana Vigiola:** Writing – review & editing, Supervision, Project administration, Conceptualization.

Declaration of competing interest

There are no conflicts of interest to declare.

Data availability

The data that has been used is confidential.

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