Inclusive Innovation for Urban Justice: A Framework for Participatory Social Entrepreneurship

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Article Information

Abstract

In the recent two decades, Cities face challenges of inequality, exclusion, and uneven development. As an answer to this, an urgent need to rethink how innovation and entrepreneurship can advance justice and inclusion emerged. This paper examines the role of inclusive innovation in shaping socially grounded forms of urban entrepreneurship that could respond to these pressing issues. We did a systematic literature review and conceptual synthesis, and we explored the emerging intersections between inclusive innovation and urban social entrepreneurship. So, from this analysis, we introduce the Urban Inclusive Social Entrepreneurship UISE Framework, which integrates four interrelated layers: Foundational Infrastructure, Social Drivers and Stakeholders, Participatory Processes, and Inclusive Outcomes. We, in the UISE framework, focus on collaboration among local governments, universities, civil society organizations, and communities. Conceptually, we reframe inclusive innovation as a structural and ethical foundation for urban transformation. Practically, we provide policymakers, urban planners, and local entrepreneurs with a roadmap for fostering more just and inclusive cities through participatory and collaborative approaches.

Introduction

Cities today are shaped by several overlapping forms of inequality, spatial, economic, and digital, that continue to push some groups to the margins (George et al., 2012). These inequalities are not accidental. They are built into the systems, infrastructures, and institutional norms that structure everyday urban life (Fainstein, 2014; Roy, 2012). Because of this, many residents struggle to access basic services, take part in decision-making, or influence how their neighborhoods are designed. For marginalized groups especially, the city often feels less like a place of opportunity and more like a system that keeps them excluded. Even though policymakers have tried different planning reforms over the past decades, traditional top-down and technocratic models still fall short. They tend to reproduce existing hierarchies by prioritizing expert-

driven solutions over the lived experiences of citizens (Fainstein, 2014; Roy, 2012). As a result, the deeper structural issues behind inequality remain unaddressed.

In response to these shortcomings, researchers and practitioners have started turning toward new ways of thinking about urban change, ones that center participation, justice, and innovation. Much of this work also explores how entrepreneurship and innovation can be used to advance social inclusion in different settings (George et al., 2012; Ansari et al., 2012). Within this broader shift, urban social entrepreneurship has emerged as a promising approach. It brings together the flexibility and creativity of entrepreneurship with a commitment to tackling inequality from the ground up. These initiatives usually grow out of local contexts and draw heavily on community knowledge, trust networks, and social capital. Because of this grounding, they tend to address real needs rather than externally imposed priorities. Their work aligns with what Roy (2012) describes as subaltern urbanism, a view of urban transformation that recognizes marginalized groups as active contributors to change, not just passive recipients of policy.

Parallel to this development, the concept of inclusive innovation has gained prominence as a framework for ensuring that innovation processes are designed with, by, and for marginalized populations (Foster & Heeks, 2013; Pansera & Owen, 2018). Inclusive innovation extends beyond questions of access to technology or markets; it challenges who innovates, for whom, and toward what ends. This concept remains under-theorized in urban studies. The practical mechanisms through which inclusive innovation can enable structural change in cities or align with the social and ethical goals of urban social entrepreneurship remain insufficiently understood. The lack of a clear conceptual bridge between these two areas, inclusive innovation and urban social entrepreneurship, limits our ability to operationalize inclusion within the context of urban transformation.

We address this conceptual and practical gap by exploring how inclusive innovation can serve as both a philosophical foundation and an applied framework for fostering urban social entrepreneurship. We ask three interrelated research questions:

1. How can inclusive innovation principles be integrated into urban entrepreneurial ecosystems to support social and spatial justice?
2. What are the key social, institutional, and infrastructural enablers that facilitate inclusive forms of urban entrepreneurship?
3. How can a synthesized framework help policymakers, practitioners, and scholars conceptualize and implement inclusive innovation in urban contexts?

To answer these questions, we employ a systematic literature review and thematic synthesis of three key bodies of work: inclusive innovation, social entrepreneurship, and urban justice. From this analysis, we develop the Urban Inclusive Social Entrepreneurship (UISE) Framework, which integrates the ethical and structural dimensions of inclusive innovation within urban ecosystems. The framework comprises four interconnected layers: Foundational Infrastructure (digital platforms, public services, spatial access); Social Drivers and Stakeholders (universities, civic groups, municipal policies); Participatory Processes (co-design, local governance, citizen experimentation); and Inclusive Outcomes (redistribution, empowerment, spatial justice).

Literature Review and Theoretical Background

Rethinking urban inequality and innovation

Urban inequality has become one of the challenges of the twenty-first century (Fainstein, 2014; Roy, 2012). It takes the form of unequal access to infrastructure, economic polarization, spatial segregation, and asymmetric involvement in governance. These inequalities form interconnected systems of exclusion that reinforce one another through institutional practices, spatial design, and socio-technical configurations. The persistence of such inequalities highlights how urban development often reproduces hierarchies of power and privilege instead of dismantling them. As Fainstein (2014) and Roy (2012) argue, justice in cities can be achieved through the epistemic and procedural injustices embedded in how urban knowledge and innovation are produced (Fransolet, 2023; Sánchez Soriano et al, 2024; Yigitcanlar & Velibeyoglu, 2008). Addressing these multifaceted exclusions requires moving beyond technocratic understandings of innovation. Conventional innovation paradigms, rooted in market efficiency, profit maximization, and technological determinism, aim to privilege the voices of dominant actors while sidelining the knowledge, creativity, and lived experiences of marginalized communities (Pansera & Owen, 2018). In this way, innovation itself can become an instrument of inequality when it reinforces existing power relations and excludes non-mainstream ways of knowing. Consequently, rethinking innovation requires reframing its purposes and beneficiaries: innovation must not only generate economic growth but also serve as a means for social transformation, empowerment, and justice (Heeks et al., 2014; Foster & Heeks, 2013).

A response to these critiques was the development of the notion of inclusive innovation by scholars. They start by redefining who participates in innovation and who benefits from the outcomes. Inclusive innovation represents both a critique of the mainstream systems of innovation and a constructive alternative at the center of which lies equity and participation. It seeks to extend access, voice, and agency into those individuals and groups that have been traditionally excluded from the ecosystems of innovation by recognizing them as legitimate innovators and producers of knowledge (Heeks et al., 2014; Foster & Heeks, 2013). While scholars have articulated inclusive innovation through diverse lenses, such as inclusive entrepreneurship (George et al., 2012) and technology for development, such perspectives meet one common goal: democratizing the processes of innovation and redistributing its social and material benefit.

Inclusive innovation in the urban context

While the concept of inclusive innovation has become popular in development and business studies, its application to urban systems remains limited. Cities are often portrayed as natural incubators of innovation, and smart city discourses emphasize innovation and technological optimization, data-driven governance, and digital infrastructure upgrades (Yigitcanlar & Velibeyoglu, 2008). These initiatives frequently operate within top-down governance frameworks that prioritize efficiency over inclusion, risking the deepening of digital and spatial divides. However, a growing body of scholarship now challenges these technocratic trajectories, calling for a shift toward inclusive smart cities that link technological advancement with social justice, participatory governance, and community-driven problem-solving (Makkonen & Inkinen, 2024). Within such models, innovation is reframed as a social process that unfolds through dialogue, collaboration, and shared learning among diverse urban actors. Inclusive innovation in this context extends beyond the deployment of digital tools, it redefines the meaning of urban progress and innovation success. (Heeks et al., 2014; Foster & Heeks, 2013). It emphasizes social legitimacy, relational equity, and responsiveness to the lived realities of marginalized groups. This conceptual shift has

profound implications. It repositions citizens as co-creators of urban futures. It also situates inclusion as both a normative goal and a procedural principle guiding how urban systems evolve. Thus, inclusive innovation in urban contexts becomes an ethical and political project aimed at restructuring governance relationships and redistributing the capacities to shape the city.

Social entrepreneurship as a catalyst for reducing urban inequalities

Social entrepreneurship has increasingly become an important practical pathway for addressing urban inequalities, especially when we look at how cities try to deal with persistent social and economic gaps. In contrast to traditional entrepreneurship, which focuses mainly on market success, urban social entrepreneurship aims to create social value by responding to needs that public institutions or markets often fail to meet (Trabskaia et al., 2023). What makes this form of entrepreneurship particularly relevant to urban contexts is its strong connection to place: initiatives usually grow out of the specific challenges, histories, and community relationships of a neighborhood or city.

Many of these initiatives are rooted in grassroots organizations, cooperatives, and mission-driven enterprises. Their close connection to local communities allows them to respond flexibly and quickly to emerging problems, while drawing on community knowledge and trust. This relational embeddedness is especially valuable in resource-constrained environments, where top-down interventions often struggle to achieve sustainable or meaningful outcomes (Ansari et al., 2012). Social entrepreneurs also play an important bridging role by connecting formal institutions with informal community structures, helping to mobilize local participation and challenge assumptions about who is allowed to innovate and whose needs matter in the city.

Recent studies reinforce this point. For example, research on social entrepreneurship in Montijo, Portugal, shows how community-driven initiatives can strengthen local cohesion and build new capacities for collective problem-solving when supported by a broader social innovation ecosystem (Severino et al., 2025). Similar work highlights how socially innovative projects in Portugal, Germany, and Ireland have contributed to community empowerment by promoting new forms of collaboration between citizens, NGOs, and local government (Christmann et al., 2024). These findings collectively suggest that social entrepreneurship can do more than fix isolated problems, it can reshape the relationships, expectations, and power dynamics that structure urban life.

Bringing inclusive innovation and urban social entrepreneurship together therefore offers significant potential. Inclusive innovation provides the normative and procedural foundation for fairness, participation, and equity, while social entrepreneurship brings the practical agency, adaptability, and community-level infrastructure needed to put those principles into action (Tišma et al, 2024). When these two domains interact, they can create a mutually reinforcing ecosystem where ethical intent is translated into concrete initiatives that meaningfully improve everyday urban experiences. In this sense, social entrepreneurship acts not only as a mechanism for reducing inequalities but also as a catalyst for advancing a broader vision of urban justice.

Toward a new conceptual framework: Gaps and opportunities

Although research on inclusive innovation and social entrepreneurship has grown in recent years, we noticed that these two areas are still treated mostly as separate conversations. Many studies on inclusive innovation focus on digital access, technological tools, or the spread of new technologies. At the same time, research on social entrepreneurship often centers on business models, support mechanisms, or

organizational design. Because of this divide, we still lack frameworks that bring these strands together in a way that helps us understand how innovation and entrepreneurship can jointly contribute to justice-oriented urban change.

Another important gap concerns the practical and policy dimensions of these fields. Most of the existing models describe what inclusive innovation or social entrepreneurship is, but they say little about how to embed inclusivity into real urban systems. The need is for frameworks that provide clear direction for action. They should, in our view, be rooted in theories of justice such as Rawls (1971), so they address both material needs and questions of recognition and representation. They must also attend multi-actor collaboration, since meaningful urban transformation requires the involvement of governments, universities, civil society, and local communities. In addition, future models must bring together issues of digital, environmental, and spatial equity, reflecting the complexity of today's cities. Finally, they need to connect individual entrepreneurial efforts with broader institutional and policy changes.

The gaps identified above motivated us to propose the Urban Inclusive Social Entrepreneurship Framework. It integrates ideas of inclusive innovation, social entrepreneurship, and urban justice into a more integrated way of thinking about inclusive urban development. Our aim is to show how principles of inclusion can be put into practice through entrepreneurial activities and the social dynamics that shape urban ecosystems. By combining insight from innovation studies with justice-oriented perspectives, the UISE Framework provides a structured way whereby researchers and policy makers can investigate ways in which cities can become not only more innovative but also fair and inclusive.

Methodology

In this study, we use a qualitative and theory-driven approach based on the principles of a systematic literature review (SLR). Because research on inclusive urban innovation spans several disciplines and is still evolving, we found that conventional empirical methods alone could not capture the depth and variety of ideas in this field. For this reason, our methodological strategy brings together three steps. First, we conducted a systematic review to understand the main debates and identify gaps. Second, we used thematic synthesis to organize the recurring ideas that appeared across different studies. Finally, we moved toward conceptual abstraction to build the Urban Inclusive Social Entrepreneurship (UISE) Framework.

To begin, we searched the Scopus database using a set of keywords related to innovation, entrepreneurship, and justice. The search produced 1,571 records. After removing duplicates and applying filters for publication type, language, and time range (2000–2024), 732 unique articles remained. From these, we purposively selected 58 peer-reviewed articles for full-text analysis. We chose studies that clearly addressed at least one of our core topics: inclusive innovation, urban social entrepreneurship, or justice-oriented governance. Throughout this process, we followed the PRISMA 2020 guidelines (Page et al., 2021), which helped us document our steps and keep the review transparent and replicable.

The analysis of the selected studies unfolded through three rounds of coding, following the logic of qualitative content analysis. In the open coding stage, we read each article carefully and identified key ideas, concepts, and observations. In the axial coding stage, we grouped related codes into broader categories such as "institutional enablers," "participatory mechanisms," and "justice-oriented outcomes." The final stage, selective coding, helped us organize these categories into the four layers that form the UISE Framework: Foundational Infrastructure, Social Drivers and Stakeholders, Participatory Processes, and

Inclusive Outcomes. This step allowed us to link ideas across disciplines and form a coherent conceptual structure.

We also carried out a structured quality assessment of the 58 studies. Each article was evaluated on three criteria: conceptual clarity, methodological transparency, and relevance to urban inclusion or entrepreneurial ecosystems. We scored each criterion from 0 to 2, and only articles with a total score of at least 4 were included in the final synthesis. This helped us ensure that the framework was based on solid and meaningful scholarship. To increase the reliability of our analysis, two coders independently reviewed 20% of the sample (12 articles). We calculated inter-rater reliability using Cohen's Kappa, and the coefficient of 0.82 reflected strong agreement. When differences occurred, we discussed them and refined our coding approach before applying it to the rest of the dataset.

Results

Through a systematic review and conceptual coding of 58 high-impact academic sources, this study identified recurrent constructions across three main domains, Inclusive Innovation, Urban Justice, and Urban Social Entrepreneurship, which together reveal a shared epistemic commitment to justice-oriented transformation. The synthesis of these different bodies of work shows a growing overlap between innovation theory, social equity, and urban governance. This gradual convergence creates the foundation for the Urban Inclusive Social Entrepreneurship (UISE) Framework.

Table 1, which reviews the Inclusive Innovation literature from 2018 to 2024, shows how the field has expanded in both its ethical and empirical dimensions. Scholars such as Kalkancı, Rahmani, and Toktay (2019) argue that inclusive innovation is more than a technical activity, it is a way to create fair value through collaboration across sectors. Mortazavi et al. (2021), in their bibliometric analysis, also point out that the field still lacks clear definitions and shared language, which makes it difficult to build coherent innovation ecosystems. The work of Levidow and Papaioannou (2017), along with Papaioannou (2021), pushes this discussion further by examining the justice assumptions behind innovation policies. They compare market-oriented views of inclusion with more collective and solidarity-based approaches. More recent studies, such as Wiarda et al. (2025) and Uyarra et al. (2025), link innovation to spatial justice and regional equity, emphasizing that the "where" and "for whom" of innovation matter as much as the how. This literature positions inclusive innovation not only as an ethical commitment but also as a practice that is shaped by place, institutions, and participatory governance (Razaghi & Finger, 2018).

Table 2, which summarizes key work in Urban Justice (2020–2024), provides the normative and philosophical grounding for the framework. Fainstein's (2014) idea of Just City remains a central reference, connecting justice to equity, democracy, and diversity. Roy (2012) adds to this by critiquing planning systems that overlook or suppress informality, suggesting that grassroots practices also deserve recognition in urban development. More recent contributions extend these ideas through participatory design and civic experimentation. For example, Ebbesson et al. (2024) show how living labs can institutionalize citizen agencies within planning processes. Fransolet (2023) and Sánchez Soriano et al. (2024) link justice to concepts like just transitions and inclusive governance. Research by Bondi et al. (2021) and Yigitcanlar and Velibeyoglu (2008) also demonstrates how institutions, such as universities and civic AI initiatives, can help mediate fairness, inclusion, and access to knowledge. Collectively, these works highlight that urban justice

requires both redistributive measures and recognitional strategies, combining structural reforms with participatory empowerment.

Table 1: Inclusive Innovation Literature (2018–2024)			
Citation	**Title / Source**	**Focus Area**	**Key Contribution**
Kalkanci, Rahmani & Toktay (2019)	Production and Operations Management	Social sustainability in emerging economies	Highlights how inclusive innovation enables equitable value creation through cross-sector collaboration.
Mortazavi et al. (2021)	Technological Forecasting & Social Change	Bibliometric review of inclusive innovation	Identify clusters, definitional ambiguity, and future research directions.
Levidow& Papaioannou (2017)	Innovation and Development	Normative assumptions in innovation	Contrasts liberal and collectivist views of inclusion in tech-based systems.
Wiarda et al. (2025)	Science & Public Policy	Mission-oriented innovation	Maps how justice logics are integrated (or omitted) in innovation policy.
Papaioannou (2021)	Sustainability	Justice in technological innovation	Advocates for inclusion of equity in governance and impact assessment.
Uyarra et al. (2025)	Research Policy	Innovation geographies	Argues for spatial justice in innovation-driven regional policy.
Razaghi and Finger (2018)	Government Information Quarterly	Smart-city governance	Centers participation and transparency in digital city initiatives.
Wiarda et al (2025)	Tech Forecasting & Social Change	Justice in innovative ecosystems	Proposes ways to repair systemic justice gaps in policy design.

Table 3 focuses on Urban Social Entrepreneurship and shows how these justice-oriented ideas can be put into practice. Studies by Alonso et al. (2020) illustrate how grassroots enterprises and civic innovation initiatives contribute to local regeneration and help communities gain more influence in urban decision-making. Trivedi (2010) frames social entrepreneurship as a justice-oriented activity that supports empowerment and social repair. Work by Nagy and Somosi (2022) and Wei et al. (2024) explores digital and post-crisis contexts, showing how technological and social innovation can strengthen community resilience. Steenkamp (2024) integrates these insights into a broader view of urban entrepreneurial ecosystems, highlighting the importance of inclusivity and collaboration for long-term, sustainable impact.

Across these three domains, a clear conceptual pattern emerges, aligning with the four layers of the UISE Framework: Foundational Infrastructure, Social Drivers and Stakeholders, Participatory Processes, and Inclusive Outcomes. Inclusive innovation helps explain the infrastructural and procedural aspects of justice. Urban justice scholarship provides ethical grounding. Urban social entrepreneurship adds the practical tools and agency needed for implementation. Together, these insights create a multidimensional understanding of urban inclusion, one that aims to reshape power relations and institutional structures so that cities become more co-produced, fair, and socially just.

Table 2: Urban Justice Literature (2020–2024)			
Citation	Title / Source	Focus Area	Key Contribution
Fainstein (2014)	The Just City	Normative urban theory	Canonical argument for equity in planning, redistribution, recognition.
Roy (2012)	Urban Studies	Urban informality & justice	Highlights how formal planning marginalizes informal settlements.
Ebbesson et al. (2024)	CoDesign	Participatory urbanism	Documents on how living labs create sustained civic design power.
Fransolet (2023)	Sustainable Cities	Urban resilience & transitions	Shows how justice is embedded in "just transition" frameworks.
Sánchez-Soriano et al. (2024)	Frontiers in Sustainable Cities	Inclusive urban governance	Explores models of civic-state collaboration for equitable policy.
Yigitcanlar & Velibeyoglu (2008).	Knowledge-Based Urban Development	Institutional roles	Advocates for universities as equity agents in smart cities.
Bondi et al. (2021)	AI & Society	Participatory AI	Community-led algorithmic design for social equity.

These domains, while diverse in origin, converged around four interlinked thematic layers, which together form the conceptual foundation of the UISE Framework:

1. Foundational Infrastructure
2. Social Drivers and Stakeholders
3. Participatory Processes
4. Inclusive Outcomes

Each layer is elaborated below with references to supporting literature, theoretical contributions, and observed empirical patterns.

Table 3: Urban Social Entrepreneurship Literature (2018–2024)			
Citation	Title / Source	Focus Area	Key Contribution
Alonso et al. (2020)	Urban Regeneration	Grassroots innovation	Case studies of community-led enterprise for urban renewal.
Trivedi (2010)	Journal of Social Entrepreneurship	Justice-oriented ventures	Ties SE to criminal justice reform and empowerment.
Nagy & Somosi (2022)	Technological Forecasting	Digital SE	Digital transformation as driver of urban entrepreneurship.
Wei et al. (2024)	Disasters	Post-crisis SE	Role of entrepreneurship in disaster recovery and cohesion.
Steenkamp (2024)	Entrepreneurship Theory & Practice	Ecosystems	Framework of urban SE ecosystems and inclusive networks.

Foundational infrastructure

This layer concerns the foundational digital, physical, and policy infrastructures that enable equitable access to innovation and services in urban contexts. Research in inclusive innovation emphasizes the critical role of technological infrastructure in bridging access gaps. Mortazavi et al. (2021) and Kalkanci et al. (2019) highlight how digital platforms and service delivery mechanisms can expand opportunities for marginalized communities when designed inclusively. Similarly, Razaghi & Finger (2018) frame platforms (such as open data portals or smart city dashboards) are not neutral tools but as governance infrastructures that shape inclusion or exclusion.

Fainstein (2014) and Roy (2012) warn in the literature on urban justice that infrastructure development needs to reflect spatial equity and go beyond top-down deployment. From the perspective of entrepreneurship, Nagy & Somosi (2022) demonstrate that the growth of urban entrepreneurial ecosystems, particularly in underprivileged areas, is directly impacted by digital transformation and broadband penetration (see Table 4).

Table 4: Theme from literature for Foundational Infrastructure		
Theme	**Key Authors**	**Keywords**
Infrastructure Access	Foster & Heeks (2013)	Broadband, public platforms
Technological Justice	Papaioannou (2021); Smith et al. (2023)	Digital divide, AI ethics
Spatial Access	Fainstein (2014); Roy (2012)	Urban informality, access

Social drivers and stakeholders

This layer focuses on organizations and networks that cultivate capability, legitimacy, and resources for inclusive innovation. Inclusive innovation studies such as Levidow & Papaioannou (2017) and Wiarda et al. (2025) suggest that enabling environments, through education, governance reforms, and intermediary organizations, are essential to bridging innovation gaps. Alonso et al (2020) addressed how NGOs, academic institutions and hybrid organizations serve as social entrepreneurship facilitators in underserved communities by providing legitimacy, funding, and training. These actors are also recognized as inclusion brokers in justice literature. Co-governance models involving civil society enhance the credibility and responsiveness of urban institutions, as demonstrated by Sánchez-Soriano et al (2024). According to Bondi et al. (2021), these intermediary institutions are necessary for AI ethics and innovation governance to convert values into design (see Table 5).

Table 5: Theme from literature for Social Drivers and Stakeholders		
Theme	**Key Authors**	**Keywords**
Institutional Support	George et al. (2012)	Redistribution, policy
Local Government	OECD (2015)	Municipal co-production

Participatory processes

This layer captures mechanisms of inclusive decision-making and co-creation in urban innovation, from participatory budgeting to co-design workshops. Inclusion in governance is central across all domains. In inclusive innovation, Foster & Heeks (2013) and Pansera & Owen (2018) emphasize the need for epistemic inclusion, valuing diverse forms of knowledge in design and implementation. Participatory methods like living labs or digital democracy tools Ebbesson et al. (2024) embody this logic (see Table 6). This is the foundation of urban justice ideas; Fainstein (2014) and Fransolet (2023) argue for participatory urbanism, which goes against traditional expert-led approaches (Anthony, 2023).

It has been demonstrated that these methods produce more reputable and long-lasting results. When community actors take the lead in urban initiatives, civic engagement can be a type of entrepreneurial action in and of itself, as demonstrated by Trivedi (2010).

Table 6: Theme from literature for Participatory Processes		
Theme	Key Authors	Keywords
Co-production	Pansera & Owen (2018)	Co-creation, feedback
Participatory Governance	Ebbesson et al. (2024); Bondi et al. (2021)	Participatory design
Knowledge Justice	Trivedi (2010)	Urban labs, civic science

Inclusive outcomes

This final layer synthesizes the goals of inclusive urban innovation, redistribution, empowerment, spatial justice, and community well-being. Here, the inclusive innovation literature connects directly with justice frameworks. Papaioannou (2021) and Rodríguez-Gironés and Wiarda et al (2025) advocate for measurable outcomes in innovation systems, such as improved access, dignity, and equity (see Table 7).

The research on social entrepreneurship places emphasis on outcome indicators such as environmental restoration, social capital, and empowerment that transcend financial performance (Wei et al., 2024). These writers support impact narratives that prioritize underrepresented perspectives and success as defined by the community.

Table 7: Theme from literature for Inclusive Outcomes		
Theme	Key Authors	Keywords
Empowerment	Ansari et al. (2012)	Social capital, local capacity
Redistribution	Levidow and Papaioannou (2017); Fainstein (2014)	Access, equity
Spatial Justice	Roy (2012); Brandão & Silva (2023)	Right to the city

Discussion

Across the reviewed literature, a consistent theme emerges conventional approaches to urban innovation often fall short in addressing the layered inequalities that shape urban life. Despite the proliferation of technologies, policies, and programs aimed at enhancing urban development, marginalized communities continue to face barriers to participation, recognition, and opportunity. This observation validates the need for a more integrated, justice-oriented model that connects innovation to community needs and power structures, an insight that has guided the development of the UISE framework.

Foundational infrastructure

Understanding how digital platforms, urban data systems, and access-oriented technology can facilitate more equitable urban life is made possible by research on inclusive innovation. The significance of acknowledging digital infrastructures as systems that have the potential to either empower or exclude people is demonstrated by the work of (Razaghi & Finger, 2018). Together, these sources emphasize the infrastructure prerequisites of responsiveness, accessibility, and connectedness that enable inclusive innovation.

Social drivers and stakeholders

Institutional frameworks that support inclusive entrepreneurship often rely on strong local governance, active university–community partnerships, and policies that intentionally promote broad participation. Research by Yigitcanlar and Velibeyoglu (2008) shows how knowledge institutions and mission-oriented innovation ecosystems can help cities move toward more inclusive development goals. Similarly, work by Sánchez Soriano et al. (2024) provides concrete examples of governance arrangements that encourage co-creation between citizens and state actors. Together, these studies suggest that inclusive outcomes rarely happen on their own, they require institutions that are willing to commit time, resources, and long-term support. This insight directly reinforces the second layer of the UISE Framework, which views institutions not only as service providers but also as social catalysts that help drive inclusive innovation forward.

Participatory processes

Across all three research domains, one of the most persistent themes is the idea that participation is not optional or secondary, it is structural. Studies by Ebbesson et al. (2024) and Fainstein (2014) show that sustained and inclusive participation leads to more legitimate, widely accepted, and effective urban outcomes. In the entrepreneurship field, scholars such as Bondi et al. (2021) describe how community co-design, feedback loops, and collaborative decision-making shape the development of urban technologies and services. These contributions shift participation from the edge of planning processes to the center of innovation practice. The UISE Framework builds on this understanding by framing participatory governance as a core mechanism rather than something added after decisions have already been made.

Inclusive outcomes

Finally, literature consistently highlights a shared set of outcomes, equity, empowerment, and spatial justice, as key criteria for assessing whether urban innovation efforts are truly effective. Authors such as Levidow and Papaioannou (2017) and Foster and Heeks (2013) argue that innovation without justice is incomplete and may even reinforce existing inequalities. Similar points appear in AI ethics research, such as Bondi et al. (2021), and in the social entrepreneurship literature, including the work of Trivedi (2010). These studies emphasize that justice-oriented outcomes should guide evaluation, but they should also be embedded from the very beginning of entrepreneurial initiatives and urban development processes. The UISE Framework reflects this approach by placing inclusive outcomes at the final layer, ensuring that innovative efforts are aligned with broader social and ethical goals.

The UISE framework consists of four interrelated layers that capture the conditions, processes, and outcomes of inclusive social entrepreneurship in urban settings: (Figure 1).

Layer 1: Foundational infrastructure

This layer includes the physical, digital, and institutional infrastructures that enable or constrain inclusive innovation.

- Digital Infrastructure: broadband access, data-sharing platforms, and digital literacy programs
- Policy and Regulatory Environment: transparency rules, participatory budgeting frameworks, and urban entrepreneurship policies
- Institutional Enablers: municipal innovation labs, incubators, and knowledge-transfer hubs

Function: Provides the enabling conditions for socially inclusive entrepreneurial action to take root and scale.

Layer 2: Social drivers and stakeholders

This layer identifies key actors and sociocultural forces that shape the ecosystem of urban inclusive entrepreneurship.

- Actors: local entrepreneurs, marginalized communities, civic groups, universities, tech providers, city agencies
- Social Drivers: community trust, inter-organizational networks, historical patterns of exclusion or inclusion
- Partnership Mechanisms: cooperative models, public–private–people partnerships (PPPPs), multi-stakeholder forums

Function: Mobilizes cross-sector coalitions and ensures epistemic and procedural justice through collaborative design and delivery.

Layer 3: Participatory processes

At the heart of the framework are democratic and participatory mechanisms that facilitate inclusive entrepreneurial activity.

- Co-creation Platforms: citizen science projects, urban labs, hackathons
- Deliberative Mechanisms: forums for local agenda-setting, community voting tools, neighborhood councils
- Design Thinking for Inclusion: iterative prototyping based on local needs, not external assumptions

Function: Ensures agency, voice, and context-embeddedness, turning marginalized residents into co-producers of solutions.

Layer 4: Inclusive outcomes and impact

The final layer concerns the impacts of urban inclusive social entrepreneurship, focusing on redistribution, recognition, and resilience.

- Social Impact: job creation for excluded groups, affordable services, empowerment of informal actors
- Spatial Justice: equitable access to mobility, public services, and safe spaces
- Environmental Co-Benefits: green jobs, climate resilience, and sustainability-oriented enterprises

Function: Links entrepreneurial action to broader urban transformation goals, beyond individual or financial success.

To move from concept to practice, the following six-step implementation roadmap is proposed, these items could be the future research area:

1. Urban Diagnostic and Mapping: Identifying inequalities, infrastructure gaps, and existing grassroots efforts through participatory data collection.
2. Stakeholder Coalition-Building: Creating multi-level coalitions involving municipalities, local innovators, NGOs, universities, and residents.

3. Co-Design of Interventions: Facilitating workshops to collaboratively identify and prioritize innovation opportunities.
4. Institutional Embedding: Aligning outcomes with city planning tools, regulatory frameworks, and budgeting processes.
5. Iterative Experimentation: Using urban labs and digital twin simulations to test solutions before city-wide rollout.
6. Monitoring and Reflexivity: Embedding equity indicators and community feedback loops to refine and scale successful initiatives.
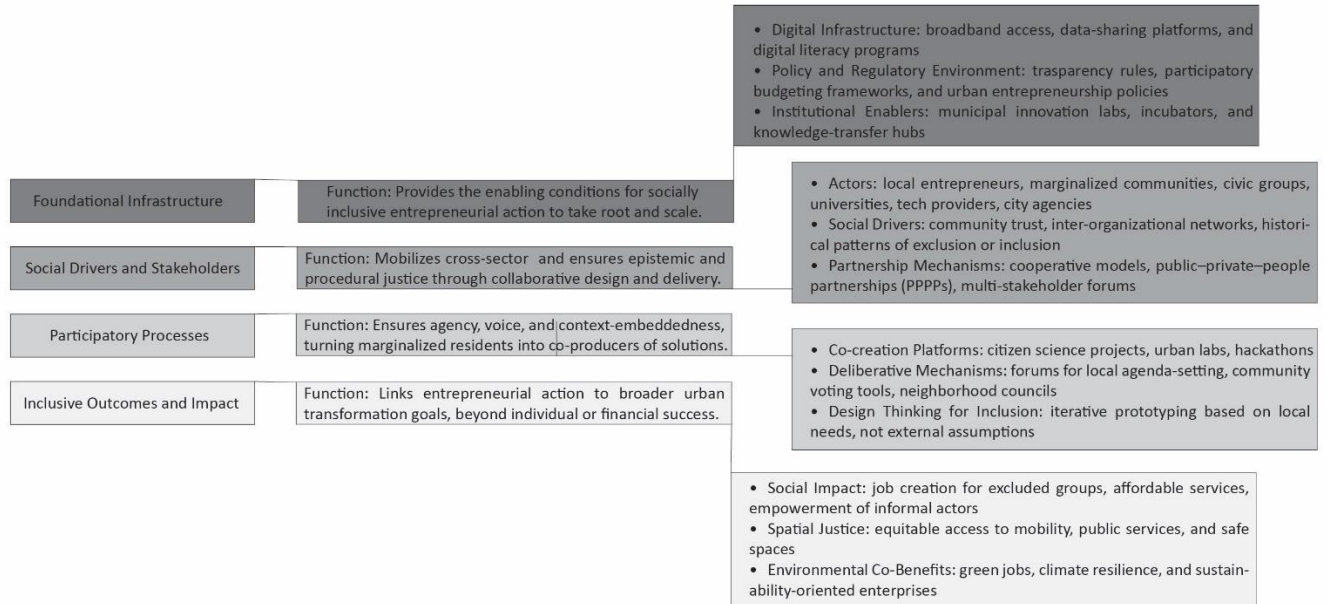

Figure 1: UISE framework

To demonstrate the practical relevance of the UISE Framework, this study draws on three illustrative examples from diverse urban contexts. These cases highlight how the framework's four layers, Foundational Infrastructure, Social Drivers and Stakeholders, Participatory Processes, and Inclusive Outcomes, can be operationalized to support inclusive urban entrepreneurship in practice.

In Barcelona, a strong digital social innovation ecosystem has taken shape over the past decade through initiatives like Decidim and community-based Fab Labs. Previous research shows that the city is widely recognized as a global leader in civic technology and digital democracy (Aragón et al., 2017). In this context, open data systems and publicly accessible maker spaces act as the basic infrastructure that allows residents to participate in innovation. Municipal innovation offices and university labs also play an important role, as they bring together actors from different sectors and support collaborative problem-solving (Martí-Costa & Tomàs, 2017). Through digital democracy platforms, people can take part in co-designing policies and urban solutions on a large scale. The new enterprises and community initiatives that emerge from these spaces often expand civic agencies, improve transparency, and strengthen the city's capacity for innovation. Together, they show how digital infrastructures combined with collaborative governance can encourage socially oriented forms of entrepreneurship.

A different example comes from Nairobi's low-income settlements, where grassroots enterprises often grow out of local efforts to address everyday issues such as waste management, mobility, and small-scale infrastructure. Basic tools like M-Pesa's mobile payment system create an important foundation because they make micro-financing easier and allow more people to take part in the local economy (Jack & Suri, 2014). NGOs and community-based organizations act as social drivers by offering training, building trust, and helping local innovators gain visibility. Participatory innovation hubs provide shared spaces where residents work together to design solutions that reflect their own experiences and needs. As shown in recent African urban innovation studies, these community-led initiatives can create jobs, improve access to essential services, and increase community ownership even when infrastructure is limited (Fransen et al., 2023). Nairobi's experience demonstrates that inclusive innovation can grow and scale in resource-constrained settings if the ecosystem supports participation and local agency.

Helsinki offers another perspective by showing how formal experimentation environments can integrate inclusive entrepreneurship into urban governance. The city's extensive network of Urban Living Labs is considered one of Europe's leading examples of co-creation and urban experimentation (Leminen & Westerlund, 2012). These labs function as physical spaces within the city where researchers, startups, municipal staff, and citizens work together to design and test new ideas. Strong partnerships between universities and the city government support this model by enabling knowledge exchange and providing resources for emerging entrepreneurial projects (Parjanen & Pässilä, 2025). Participatory processes, such as co-design workshops, iterative prototyping, and ongoing citizen feedback, are central to how these labs operate. The innovations that result, including accessibility solutions and climate-resilient services, show how inclusive entrepreneurship can be systematically embedded within policy frameworks and urban development strategies.

Taken together, these cases show the practical usefulness of the UISE Framework as a tool for diagnosing, designing, and evaluating inclusive urban innovation efforts. The framework helps identify gaps in local ecosystems, such as weak collaboration or limited infrastructure, and points to ways stakeholders can intervene more effectively. For policymakers, the UISE provides a clear way to assess whether urban innovation initiatives are aligned with broader goals related to social justice and equity. For social entrepreneurs and ecosystem builders, it offers a step-by-step guide to ensure that new ventures respond to community needs, rely on participatory processes, and create measurable social value. Overall, the UISE Framework helps connect the theoretical ideas of inclusive innovation with real-world practice by showing how urban entrepreneurship can support both economic vitality and justice-oriented urban transformation.

Conclusion

This study aims to bring together two important conversations: inclusive innovation and urban social entrepreneurship. We reviewed the existing literature and organizing the main ideas into a clear structure, we developed the Urban Inclusive Social Entrepreneurship (UISE) Framework. The framework is meant to help researchers and practitioners understand how different components, such as infrastructure, social actors, participation, and outcomes, work together to support more just and inclusive urban development.

The examples from Barcelona, Nairobi, and Helsinki show that the framework is flexible and can be applied in different types of cities. Although these cities operate in very different conditions, they all

highlight the importance of collaboration, community participation, and supportive institutional environments. The findings suggest that inclusive innovation relies heavily on people, their relationships, and the opportunities they have to influence decisions that affect their everyday lives. Social entrepreneurship can play a strong role in this process by turning community needs into practical initiatives and helping cities move toward more equitable and participatory forms of development.

Like any study based on a systematic review, this research has some limitations. First, the review includes only English-language sources, which means that important insights from other regions, especially from the Global South, may be missing. Second, the study is mainly conceptual. It does not include primary data. Third, most of the selected articles lean toward theoretical discussions rather than detailed case studies, which may limit the depth of practical insights in some areas.

Future research can expand this work in several meaningful ways. One important direction is to apply the UISE Framework in different cities and evaluate how well it captures the real dynamics of inclusive innovation and social entrepreneurship. Comparative case studies could help identify which elements of the framework are most influential in different contexts.

Researchers could also explore how marginalized groups experience and influence inclusive innovation processes. Understanding their approaches more directly can help refine the framework and make it more responsive to diverse urban realities. Finally, there is a need for more interdisciplinary studies that connect urban planning, entrepreneurship, public policy, and social justice. Such work can help deepen the theoretical foundation of the UISE Framework and support the design of more inclusive and democratic urban innovation systems.

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