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# From Smart City to Meaningful City: A Results-Oriented Perspective on Urban Experience Quality, Governance, and Sustainable Value Creation

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## 1 ABSTRACT

Despite significant progress in urban planning, smart city initiatives, and city branding, many cities still struggle to translate strategic goals into a sustainably experienced urban quality of life. Early work in urban sociology, environmental psychology, and governance research pointed to shortcomings regarding social cohesion, autonomy, trust, and integrated sustainability. Current research (2023–2026) confirms that these aspects remain inadequately addressed despite technological innovations, data-driven management approaches, and institutional reforms. This article revisits this persistent issue and conceptualizes cities as complex service and value creation systems. It systematizes four key areas of tension in urban development: efficiency versus experiential quality, governance versus autonomy, technology versus trust, and sustainability as an external service versus integrated urban logic and provides an integrated framework.

Keywords: Smart City, Urban Experience, Governance, Urban Planning, City Branding

## 2 THE LIMITS OF FUNCTIONAL URBAN EXCELLENCE

Cities today face the challenge of reconciling increasing demands for efficiency, sustainability, and competitiveness with their residents' expectations of quality of life and identification with their community. For several decades, research in urban sociology, environmental psychology, and governance has indicated that functional optimization and technological performance alone are insufficient to create vibrant and attractive cities in the long term (Jacobs, 1961; Lynch, 1960; Arnstein, 1969). Nevertheless, smart city strategies, data-driven governance approaches, and city branding concepts continue to shape the urban agenda. These instruments have undoubtedly contributed to efficiency gains and improved governance. However, recent reviews and case studies show that key aspects such as social connectedness, perceived agency, trust in institutions, and an integrated sustainability logic continue to be insufficiently addressed (Hollands, 2008; OECD, 2023; Rasoulzadeh Aghdam et al., 2025).

This discrepancy between functional performance and experienced urban reality points to a central question of this article: Why don't functionally optimized cities automatically become places where people like to live, get involved, and invest long-term? Hence, the described shortcomings are not new findings, but rather persistent problems that, despite years of theoretical grounding and numerous practical initiatives, have not yet been systematically translated into integrated implementation models. This article therefore aims to conceptually address this integration gap.

### 2.1 Research gap and knowledge contribution

Smart city research has expanded considerably in recent years, addressing key topics such as digitalization, efficiency improvements, and data-driven management of urban systems (Hollands, 2008; Datta, 2015). In parallel, city branding literature emphasizes the importance of identity, narratives, and the coherence of diverse stakeholder groups for the long-term attractiveness of cities (Kavaratzis & Hatch, 2013; Kaufmann and Durst, 2008).

Despite these conceptual advancements, recent reviews and empirical studies show that key challenges of urban development persist and are currently addressed only inadequately in an integrated manner (OECD, 2023; Rasoulzadeh Aghdam et al., 2025). This identified integration gap also provides a clear starting point for further academic research, particularly regarding conceptual modeling, empirical validation, and comparative analyses of urban implementation models. Three key shortcomings can be identified that mark a persistent research gap:

#### 2.1.1 Fragmentation of Analysis Levels

Efficiency, participation, technology, and sustainability are often viewed as separate fields of action, even though they are systemically intertwined in everyday urban life. This sectoral perspective was identified

early on as a key weakness of urban governance (Bulkeley & Betsill, 2005). Current studies confirm that fragmented responsibilities, siloed programs, and a lack of horizontal integration continue to limit the effectiveness of integrated urban development strategies (Yu et al., 2023; European Parliament, 2025).

#### 2.1.2 Lack of an Outcome-Oriented Perspective

Urban performance is still predominantly measured using functional, technical, and process-related indicators, while perceived quality of life, trust, identification, and a sense of responsibility are only marginally considered. This problem was already addressed in early work on perception and environmental psychology (Lynch, 1960; Evans & McCoy, 1998).

Current policy-oriented analyses confirm that outcome-oriented measurement and management approaches are still insufficiently established in urban development (OECD, 2023; Osei-Kyei & Ampratwum, 2025).

#### 2.1.3 Lack of Integrated Implementation Models

While numerous strategic visions, target systems, and pilot projects for urban development exist, consistent models that systematically translate these objectives into everyday urban experiences are lacking. This gap has already been described in the context of New Public Governance (Osborne, 2006).

More recent studies show that living lab approaches and co-creative formats often remain project-based and are not sustainably embedded in overarching governance and value creation logics (Almeida et al., 2025; Sofronievska et al., 2025).

This article addresses these shortcomings and the resulting integration gap by conceptualizing cities as complex service and value creation systems. Building on this, four key areas of tension in urban development are identified, in which the shortcomings manifest themselves in the interplay of efficiency, governance, technology, and sustainability. In addition, an integrated implementation framework is proposed that combines outcome-oriented logic with living lab approaches and provides a starting point for further academic research as well as for empirical and comparative analyses of urban development approaches.

## 3 THEORETICAL FUNDAMENTS

### 3.1 Human experience, connectedness and scope for action

Neuroscience and motivational psychology research show that human well-being, learning ability, and engagement are significantly influenced by two factors: social connectedness and perceived self-efficacy or autonomy (Deci & Ryan, 2000; Hüther, 2015). When these elements are lacking, a demonstrable increase in the risk of withdrawal, aggression, and social disintegration (Evans & McCoy, 1998) occurs.

Current interdisciplinary studies confirm these correlations for the urban context as well and show that perceived social isolation, lack of influence, and lack of identification with one's living environment have negative effects on trust, sense of security, and social engagement (OECD, 2023; Rasoulzadeh Aghdam et al., 2025). Applied to cities, this means that urban design and administrative interaction should not only be functional, but rather relationship- and experience-oriented. Classic works in urban sociology point out that a lack of social integration, poor quality of life, and anonymous spaces can promote perceptions of insecurity and contribute to social fragmentation (Jacobs, 1961; Newman, 1972). Recent studies confirm that participatory design approaches, transparent administrative processes, and tangible participation sustainably strengthen perceptions of safety, belonging, and responsibility (Gjørtzvang et al., 2025).

### 3.2 The city as a service and value creation system

Service-dominant logic understands value creation not as the result of isolated service provision, but as the result of interaction and co-creation between actors within a system (Vargo & Lusch, 2004). Applied to cities, this means that urban quality is not created solely through planning, regulation, or infrastructure, but through the interaction of diverse stakeholders in everyday urban life. This perspective is supported by approaches of New Public Governance, which regard public organizations not primarily as rule-setters, but as coordinators of complex service ecosystems (Osborne, 2006). Current governance research confirms that cities are increasingly acting as platforms where public, private, and civil society actors jointly create value for different stakeholders (Almulhim, 2025; OECD, 2023). The key urban stakeholders include in particular:

- Citizens,

- Local businesses and employers,
- Visitors and commuters,
- Employees of the administration and municipal enterprises,
- Institutional and private partners.

Against this backdrop, results-oriented urban development requires clarity about which services are to be provided to which stakeholder groups and with what intended effect. Recent studies show that a lack of clarity of objectives and insufficient coordination between stakeholder groups can significantly impair the effectiveness of urban strategies (Shao et al., 2025).

## 4 FOUR KEY AREAS OF TENSION IN URBAN DEVELOPMENT

### 4.1 Efficiency versus experience quality

Increasing efficiency has long been considered a central goal of urban planning and administration. Smart city initiatives, digital administrative processes, and data-driven control systems primarily aim to optimize processes, use resources efficiently, and provide services in a scalable manner (Hollands, 2008; Datta, 2015). This perspective has undoubtedly led to measurable improvements in areas such as infrastructure management, mobility, and administrative processes. Additionally, studies on service experience show that perceived quality does not depend solely on functional performance but is significantly shaped by comprehensibility, relationship-building, and personal accessibility (Berry & Carbone, 2007). Early urban sociological studies already indicated that efficiency without a conscious design of interaction can lead to distance, loss of trust, and declining acceptance (Lynch, 1960; Jacobs, 1961).

Current research confirms these tensions and shows that digital solutions without accompanying consideration of user experience, quality of stay and social inclusion often cause acceptance problems and weaken trust in public institutions (OECD, 2023; Rasoulzadeh Aghdam et al., 2025).

### 4.2 Control versus scope for action

Urban development is largely shaped by governance logics. Planning, regulation, standards, and controlling form the basis for the reliability, legal certainty, and coordination of complex urban systems. Smart city approaches, in particular, increasingly rely on data-driven decision support and centralized control mechanisms to design urban processes efficiently and consistently (Datta, 2015; OECD, 2023). However, early work on participation already indicates that formal participation processes alone are insufficient to enable genuine co-creation and the assumption of responsibility. Arnstein (1969) demonstrated that many participation formats are largely symbolic and offer limited opportunities for real influence. Without a perceived sense of agency, identification with, engagement with, and trust in institutional actors decline.

Recent studies confirm these findings and show that while technology-based participation tools increase transparency and reach, they are often not linked to genuine decision-making authority or verifiable feedback (Gjørtzvang et al., 2025). In such situations, a discrepancy arises between formal participation and perceived effectiveness, which can lead to frustration, withdrawal, or political disengagement. At the same time, newer governance approaches indicate that cities become more resilient and effective where spaces for shaping the future are deliberately created and responsibility is shared. Co-creative processes, participatory decision-making formats, and transparent negotiation mechanisms not only strengthen the quality of decisions but also the sense of responsibility among the participating actors (OECD, 2023; Rasoulzadeh Aghdam et al., 2025).

### 4.3 Technology versus Trust

Digital technologies form a central basis for contemporary urban development. Sensors, data platforms, AI-supported analyses, and networked infrastructures promise more efficient processes, better decision-making, and new forms of urban services. Accordingly, technological solutions play a key role in smart city strategies (Datta, 2015; OECD, 2023). At the same time, social science and information systems studies have long shown that technological capability alone does not guarantee acceptance. Trust is not created by technology itself, but by transparency, traceability, and fair governance structures. If these prerequisites are lacking, digital systems are perceived as opaque, controlling, or externally controlled (Gefen et al., 2003).

Recent studies confirm that data-driven applications in urban areas in particular raise sensitive questions about data protection, algorithmic decision-making logic, and institutional responsibility. If these questions are not addressed openly, this can undermine trust in public institutions and have a lasting negative impact on the use of digital services (OECD, 2023; Almulhim, 2025). At the same time, studies show that transparent data practices, clear responsibilities, and understandable communication can significantly increase the acceptance of technological solutions (Rasoulzadeh Aghdam et al., 2025).

Against this backdrop, it becomes clear that technology and trust are in a state of mutual tension. Digital innovations only have an impact when they are embedded in trust-building governance structures and remain comprehensible to different stakeholder groups.

### 4.4 Sustainability: External services versus integrated urban logic

Sustainability has become a central guiding principle of urban development. Climate protection, resource efficiency, circular economy, and social sustainability shape strategies, programs, and funding logic at the municipal, national, and international levels. In practice, however, sustainability is often treated as a separate field of activity and implemented through specialized programs, external service providers, or project-related initiatives (Elkington, 1997; Bulkeley & Betsill, 2005). This outsourcing of sustainability-related tasks often leads to ecological and social goals being perceived as additional cost factors, existing alongside performance and efficiency logics. Current studies show that while sustainability measures can achieve short-term effects under such conditions, they lose their impact in the long term if they are not integrated into the core logic of urban value creation (OECD, 2023; Shao et al., 2025).

Recent governance and urban economics research indicates that sustainability is effective where it is understood as an integral component of urban service and value creation systems. Approaches to the urban circular economy, local energy and resource systems, and community-based service models demonstrate that ecological objectives are compatible with economic attractiveness when value creation is locally anchored and considered systemically (Almulhim, 2025; European Environment Agency, 2024).

Against this backdrop, a tension emerges between sustainability as an externally purchased service and sustainability as an integrated component of urban logic. Cities that understand sustainability not as an additional task, but as a structural principle of their service, investment, and governance models, unlock new potential for economic resilience, innovation, and long-term attractiveness as a business location. The four key areas of tension in urban development are summarized in Figure 1. The figure categorizes the four key areas of tension in urban development identified in this article. It demonstrates that urban quality and long-term attractiveness do not arise from optimizing individual dimensions, but rather from consciously balancing equally important, interwoven areas of tension at the organizational, governance-related, socio-technical, and structural-economic levels. Figure 2 illustrates the integrated implementation framework, which will be explained in more detail in the next chapter.


Figure 1: Key areas of tension in urban development: an overview.

The diagram illustrates the proposed integrated implementation framework, which combines outcome logic with living lab principles. The framework serves to operationalize the four identified areas of tension in real urban contexts by linking co-creation, iterative learning processes, and transparent governance with clear outcome dimensions.

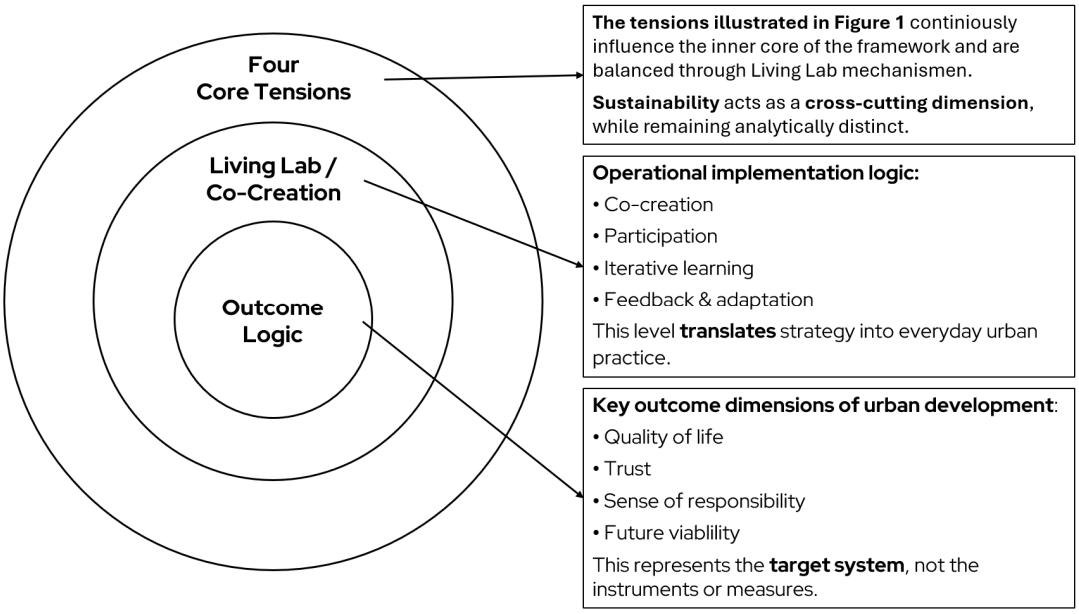


Figure 2: Integrated implementation framework for operationalizing urban tension areas

## 5 INTEGRATIVE IMPLEMENTATION FRAMEWORK: RESULTS LOGIC AND LIVING LABS

The implementation framework proposed here is based on a results-oriented perspective that evaluates urban development not primarily in terms of the instruments or measures used, but in terms of their intended and perceived effects. The focus is in particular on perceived quality of life, trust in institutions, sense of responsibility, and long-term identification with the urban environment. These outcome measures form the connecting reference point for the planning, implementation, and evaluation of urban development processes.

To operationalize this outcome logic, living lab approaches are a suitable option, and are discussed in current urban research as an effective bridge between strategy and everyday practice. Living labs make it possible to test new solutions under real-world conditions together with diverse stakeholders, to develop them iteratively, and to evaluate them systematically (Schuurman, 2016; OECD, 2023). They create a protected space in which efficiency, design options, technology use, and sustainability are not negotiated abstractly, but rather experienced and reflected upon concretely. Efficiency is linked to experiential quality, governance is connected to real design options, technological innovation is embedded in trust-building governance structures, and sustainability is understood as an integral component of urban value creation.

## 6 CONCLUSION AND OUTLOOK

This paper has shown that key challenges of urban development have been known for decades, yet persist despite technological advances, data-driven governance approaches, and diverse sustainability initiatives. The analysis clarifies that this persistence is less due to a lack of theoretical knowledge than to a failure to integrate this knowledge into consistent, results-oriented implementation logics. By conceptualizing cities as service and value creation systems and identifying four key areas of tension, an analytical framework is provided that systematically integrates functional, social, technological, and sustainability-related perspectives. The proposed integrated implementation framework connects this analysis with a results-oriented logic and living lab approaches, thus opening a path to translating strategic objectives into tangible urban practice. This article offers conceptual added value to smart city, governance, and city branding research by explicitly highlighting a hitherto insufficiently addressed integration gap and proposing a structured approach to addressing it. At the same time, it demonstrates that urban performance cannot be measured solely by efficiency or technological maturity, but is essentially manifested in experienced quality of life, trust, and long-term identification. Several starting points emerge for future research. These include the empirical validation of the identified areas of tension in different urban contexts, comparative analyses of outcome-oriented management approaches, and the further development of measurement and evaluation instruments that systematically capture experienced urban impacts. Furthermore, living lab formats offer a promising field for transdisciplinary research in which theoretical concepts can be further developed and tested under real-world conditions.

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