KU LEUVEN

FACULTY OF SOCIAL SCIENCES

**DIGITAL PUBLIC GOVERNANCE**

# Unveiling Public Value in Smart City Governance

## A qualitative study of the Rome Smart City Plan

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# INTRODUCTION

The increase in urban population has been a constant trend since at least the mid-twentieth century, with a series of consequences in terms of environmental, economic, and social impact. In fact, in 2022 the percentage of the world's population living in an urban context reached 57%, meaning that more than four billion people are living in a city (The World Bank, 2021). This situation calls for innovative and swift actions from the governments.

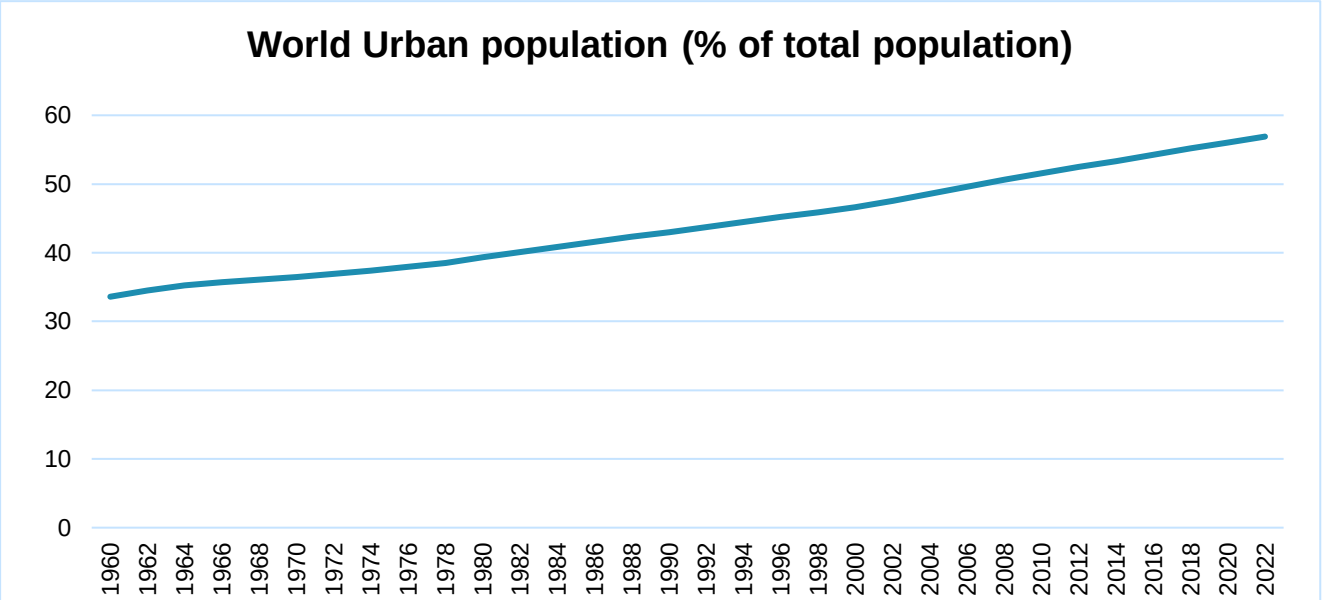


***Figure 1 Percentage of Urban Population (source: The World Bank, own elaboration)***

Many studies highlighted that urbanization is a multidimensional phenomenon that can act as an enabler for both prosperity and challenges (Chuantao et al., 2015; Gracias et al., 2023). Indeed, the concentration of people in urban areas permitted rapid economic growth as well as innovation and creativity. However, the number of new inhabitants imposed significant burdens on the city administrations: the constant pressure on infrastructures, housing, and public services resulted often in challenges that were difficult to overcome. Moreover, from an environmental point of view, cities consume 78% of the world's energy and produce more than 60% of greenhouse gas emissions – yet they cover less than 2% of the Earth's surface (United Nations, 2021).

To deal with and balance the benefits and drawbacks of urbanization, new planning solutions are necessary to ensure that cities remain sustainable and livable. In this matter, recent years have shown a rapid development of Information and Communications Technology (ICT), data-driven solutions, and Artificial Intelligence (AI) tools being used in the public sector to enhance organizational and service-delivery capabilities. Governments throughout the world have started to use new approaches to scale or solve urbanization issues by leveraging the potential of these disruptive technologies.

It is precisely within this innovative context that urban administrations worldwide have begun to design plans to make their cities "smart", employing new technologies to enhance efficiency, openness, sustainability, and participation (Kunzmann, 2014). In fact, according to the United Nations (2022b) ICTs play a strong role in shaping urban futures, with an estimated

demand for smart city systems and solutions that is projected to increase annually by 25% – with an overall market value of approximately 517 billion dollars.

But what does *Smart City* mean, and what characterizes a project in this direction? Since the notion of smartness can be involved in different dimensions and intervention areas, the concept of Smart City is still fuzzy in the literature – lacking a comprehensive reference framework for academics and policymakers. However, there are few returning core elements and institutional recommendations: for example, according to the European Commission (2023b) a smart city is a place where traditional networks and services are made more efficient with the use of digital solutions for the benefit of its inhabitants and businesses. Moreover, in general, several definitions from the literature refer to digital technologies, Big Data, IoT, and AI to create an efficient and effective urban environment for administrators and citizens (Gracias et al., 2023).

Nevertheless, while holding onto these references, the implementation of ICTs in public administrations and smart cities can also enable other capabilities and possibilities that go beyond the pursuit of efficiency. In more recent years, scholars started to call attention on the various components that comprise the framework of a smart city plan, such as the governance structures. Without being strictly entangled in the technical sphere of Smart City Projects, it's therefore also important to understand how the implementation of ICTs in public organizations is changing the way administrators, stakeholders and citizens engage with each other. Literature has shown that there is a strong link between open government policies in a multistakeholder environment and public value creation – especially when this is achieved by technological tools that improve transparency, accountability, and citizen participation (Pedro, 2019).

Drawing upon the existing research on Smart City and eGovernment, this paper will try to address precisely the forementioned link between smart city projects and the process of public value creation. Indeed, little has been said about the governing dynamics of Smart Cities and their relevance in terms of permitting a broader and comprehensive policy result (Pedro, 2019). Starting from a theoretical standpoint that sees eGovernment and digitalization as means to achieve public value creation, it is necessary to focus on the governance structures which lead to more fruitful societal outcomes.

Thus, the main research questions that guide this work are:

- How are governance and eGovernance strategies organized to address public value generation in Smart Cities? What are the key trends?
- What is the eGovernance structure in the case study context?
- Does it have the characteristics to be a potential driver in public value creation?

To deal with these issues, a literature review, a descriptive qualitative analysis of the Rome Smart City Plan, and one semi-structured interview will be carried out using a contingent and ecological approach.

# LITERATURE OVERVIEW

## Defining the Smart City

As already stated, in the case of Smart Cities there is no universally agreed definition, creating challenges for policymakers when designing and implementing new projects.

Nonetheless, there are a series of elements that recur in different definitions proposed by scholars and public institutions, suggesting at least a blurred framework. In fact, it is possible to identify certain core features in terms of *technical infrastructure* and *architecture*, *application domains*, *system integration*, *stakeholder engagement*, and *project outcomes*.

Starting from the first key pillar, the main importance of Smart Cities is given by technology advancements (Pedro, 2019). In fact, the rapid development of ICT has offered some tools to scale or completely solve certain urbanization issues. In other words, the emergence of multifaceted and "wicked" problems has made it necessary to use these new technologies to make city governance more efficient, citizens happier, businesses more prosperous, and the environment more sustainable. The essential components that are used to increase efficiency and enhance fair development for everyone are IoT, AI, and Big Data (Caputo et al., 2023). Those three disruptive technologies can be used to create a data-driven architecture that will help policymakers in developing evidence-based and tailored policies – gathering active and passive data and using it in an open environment (Chuantao et al., 2015).

This data-centric smart city is characterized by the application of the forementioned technologies in different domains – however, there is no general agreement upon the areas of implementation. In the literature, Smart Cities' domains are mainly identified by a specifically wide list of tight categories or by fewer classes with a broader extension (Sánchez-Corcuera et al., 2019). For instance, according to Gracias et al. (2023), Smart Cities have several areas of implementation: *healthcare*, *governance*, *environment*, *transportation*, *energy*, *safety*, *infrastructure*, and *education*. The same approach is followed by Giffinger and Gudrun (2010), who define the smartness of a City in six domains: *Smart economy, smart people, smart governance, smart mobility, smart environment*, and *smart living*. On the other hand, authors such as Chuantao et al. (2015) and Sánchez-Corcuera et al. (2019) propose a division of application domains into fewer categories, identifying the same four and operationalizing them into distinct subdomains. In this case, the implementation areas are *government*, *citizens*, *businesses*, and *environment* – that are consequently specified in twenty-seven subcategories. The identification of application domains is a critical step, since it leads to alternative actions involving various stakeholders and power structures. Furthermore, in terms of resources allocation for Smart City initiatives, funds and other important assets may be directed to specific areas instead of others.

Regarding system integration, the structure generated by these new projects, which partly replaced past modes of city administration, takes the shape of new governance models. The local government remains the key actor in developing Smart City Plans – thus, it's important to methodologically refer always to the perspective of the municipality; however, behind this government-centric approach it's common to find a collaborative ecosystem which ensures a smooth implementation over public and technical issues. In fact, according to Clement et al. (2022), positive outcomes are more likely to occur when the government, in an orchestration role, provides tools and structures to drive collective actions. Furthermore, a multistakeholder environment can tackle the rapid dynamics that characterize Smart Cities, bringing new knowledge and information to the table – in terms of each sector or community's problems and potential solutions. Behind it all is technology, which is the main driving force that may modify citizen involvement in decision-making processes while fostering a co-creative and inclusive engagement (Anthony, 2023; Sæbø et al., 2008).

The outcomes of this complex architecture have been widely conceptualized in the literature. Generally, each implemented project aims at addressing societal issues via digital innovation, generating benefits for specific actors in society. This means that, in the end, Smart Cities aim at making life in the city more equitable, qualitatively relevant, prosperous, and

sustainable. Going more thoroughly, the definitions offered by many researchers fundamentally point to positive outcomes in three spheres: *citizens*, who experience a higher quality of life; *companies*, which generate higher profits; and the *environment*, thanks to a greater attention to the anthropic impact that humankind generates (Chuantao et al., 2015).

## New tendencies: eGovernance, co-creation and public value

Still, it's important to consider that recent shifts in Smart Cities pointed out another important sphere that is both part of the drivers and results of this kind of projects: public governance structures. More and more authors believe that smart cities should be understood beyond the mere relevance of ICTs, studying the governance and the key players involved to foresee potential outcomes (Smigiel, 2018). Notwithstanding the fact that the main and most common notion of smart city is strictly entangled with technological matters, more and more projects are trying to evolve towards a socially inclusive collaborative ecosystem (Bouzguenda et al., 2019). Not surprisingly, when a public administration concentrates solely on technological innovation (Big Data, IoT, AI and more) while ignoring the interdependence with social and political condition, the potential benefits are limited. This is the reason why people-centricity and multistakeholder approaches are emerging as driving concepts to digital transformation and city administration (Anthopoulos et al., 2023) – shedding light on another essential step of urban planning. Within this paradigm, inclusiveness, openness, and empowerment are the most important principles that need to be ensured through a mindful and human-sized implementation of digital technologies. In other words, using ICTs, *digital* citizen participation can increase the chances of having more evidence-based and efficient policies (Sæbø et al., 2008). Citizens are therefore included in the planning and/or development of new government services with a higher probability of meeting their needs and, consequently, generating public value.

Recognizing the impact of this factor within Smart City Projects, this paper specifically focuses on these new governance structures that seek, with the help of technological developments, to meet citizens' needs in a co-productive and open environment. Once the dangerous fascination with technology that characterized some Smart City studies and projects has been overcome (Bouzguenda et al., 2019), this new framework will allow to understand the intensive implementation of ICTs as an enhancement for citizen-to-government (C2G), business-to-government (B2G), and the reverse kind of relations. Indeed, those disruptive innovations have made local administrations capable of creating new relationships with users and providers, expanding the opportunities to involve all the relevant stakeholders in the service development.

Most importantly, not only this collaborative ecosystem is pivotal to mobilize ideas and resources through fruitful new relationships, but it can also generate public value for all the actors participating in the interaction itself. In fact, even if there's no specific definition of the concept of public value, it is something that can be referred to as being created by the government in a specific context, calling for the direct involvement of all those key players that can add information on how to tackle problems in local environments (Pedro, 2019).

Due to this tendency, many public organizations started to be attentive to the governance structures that underlies any policy change. Innovative municipalities worldwide

have developed a whole new paradigm based on Public Value Management[1] (Pedro, 2019) focusing on networking, dialogue, shared capacity building, and organizational capabilities. Thanks to the direct and indirect help of co-producers and stakeholders, public administrations can thus generate public value through tackling specific problems that arise in an urban environment. Moreover, this broader focus on social aspects and participatory governance created a wave of smart city projects that are citizen-centric, recognizing multistakeholder participation as an enabler both for efficient public service delivery and public value creation.

Concretely, this paradigm shift is operationalized through a series of actions that see the municipality as the orchestrating actor, unlocking the added value of each player in the arena through infrastructure, funds, and open government policies. Local governments thus *delegate* part of their power to other stakeholders, giving them the possibility to engage in the decision and in the making of public services. That is why this framework is constructed as a formal top-down initiative implemented by a governmental body to ensure the positive accomplishment of these urban plans. Therefore, the government must navigate the double and complex role of partner and regulator, allowing and controlling the constitution of participatory spaces or co-creative initiatives while, at the same time, participating in a collective and collaborative decision-making stage (Pedro, 2019).

Literature has shown various methods of stakeholder engagement in a co-productive environment within Smart Cities. The most classic way to actively include citizens is through eParticipation, which, according to Sæbø et al. (2008), involves the extension and transformation of participation in societal democratic and consultative process via ICTs. In this way, citizens see a rise in their abilities to engage with the government planning or development, making their voices and needs heard through direct or indirect channels. Recently, along with a more favorable environment for public-private partnerships, new spaces for innovation and experimentation have emerged under the name of Urban Living Labs (ULLs). These are local places for innovative solutions that aim to solve urban challenges and contribute to long-term sustainability by actively and openly constructing solutions with citizens and other stakeholders (Chronéer et al., 2019). Those ULLs are multistakeholder settings that take place in a specific real-world context, where the municipality structured a long-term commitment to ensure that activities are carried out with the goal of enhancing policy making and quality of life. Rooted in the field of *open innovation*, these collaborative initiatives help the to achieve social sustainability and innovation, eventually generating public value.

As it is shown, community and stakeholders' engagement are crucial to develop a sustainable and smart urban environment; nonetheless, certain hurdles are present in the implementation path and should be kept in mind while analyzing existing or future urban plans. Anthony (2023) points out that there are mostly three types of elements that risk causing a backlash in the processes of eGovernance that characterize Smart Cities. First, social factors such as the readiness and availability of the citizens or the unequal demographics can represent an obstacle to ensure fair access to these processes. On the other hand, in the institutional domain, distrust of government authorities, lack of fundings and unfair access to decision-making generate cascading negative effects on the success of a specific urban plan. Finally, since technology is one of the core elements beneath all these initiatives, low-quality technical infrastructure, scarce know-how and gaps in data security are all primary factors of failure. Furthermore, other drawbacks and challenges are individuated by Gracias et al. (2023) in terms of high implementation costs, privacy and security concerns, lack of standardization, and difficulty in integrating new insights into existing infrastructure.

[1] Pedro (2019) refers to *Public Value Management* as an evolution from the mainstream *New Public Management*.

This new eGovernance structures, especially in the form of Lab participatory experiences, will be comprehensively assessed in the context of Rome Municipality – taking as reference the Smart City Plan that was implemented in 2021.

# METHODOLOGY

The research has been conceived as a descriptive analysis of a policy plan and, more specifically, of the governance structures stemming from it. The study started with a literature review aimed at understanding the key elements and trends in Smart City and eGovernance at the local level. The overview was conducted using major scientific paper databases – namely *Google Scholar* and *Web of Science* – and concurrently drawing from highly reputable academic journals – such as *Government Information Quarterly*. The keywords that were used to find valuable material were “Smart city literature overview”, “Smart City Governance”, “local eGovernance”, “Citizen participation”, “Co-Creation”, and “Public Value creation”. Simultaneously, and based on the findings of the literature, the Rome Smart City Plan published in 2021 was analysed, paying particular attention to the governance implications.

According to Anthony (2023), the investigation on the processes and actors partaking these urban policies may be conducted throughout semi-structured interviews that allow to collect valuable insights into the identified structures. In line with this methodological suggestion, the research initially planned to interview a series of prominent actors in the political framework promoting Smart City initiatives. However, after sending emails and reminders to participate in the research, only one out of six identified potential interviewees responded. Eventually, the interview benefited from focusing on one of the most important actors regarding the topic of this research, as the individual is the elected president of the Rome Smart City Lab. The interview was transcribed and examined considering the key findings from the literature overview; it was then used in the research process itself to corroborate the case study analysis. The mentioned sections are the direct translation from Italian.

Due to time and resource constraints, together with a lower engagement level from the public officials that were reached during the whole process, this work may lack of a broader and deeper approach. Indeed, further analysis are needed to ensure a clearer understanding of how certain governance structures are linked to public value creation in the urban context. Moreover, future research could use quantitative tools and data analysis to explore and assess the effects of this kind of policies on the city-users.

# CASE STUDY DISCUSSION: ROME AND ITS SMART CITY PLAN

## Introduction to the case study

As highlighted before, there is no single definition of a Smart City – although common areas or dimensions reappear in the literature and institutional landscape. This situation also gives rise to a series of analytical consequences regarding the approach to be undertaken in the analysis of any Smart City Plan. In reality, it’s difficult to study a specific institutional context

and its output in terms of urban planning as if it were happening in a vacuum, completely independent from situational elements such as organizational structure or environmental features. This is precisely why, lacking an official benchmark for analyzing Smart Cities, the most valid approach is the one that considers the specific context in which the plan is being developed – thus, national conditions, regulations and policies vary considerably and have a strong influence on the local level (Pedro, 2019). Moreover, other than a contingency approach (Clement et al., 2022), an ecosystem perspective is needed to grasp the large number and diversity of participants and resources, as well as the interrelationships that result from them. Smart City solutions take shape in networks, since, as it was pointed out before, collaboration among multiple stakeholders is essential for the successful implementation and in public value creation. Therefore, other than technology, the conceptual lenses should focus also on the interaction between different key players – studying the structures, modalities, and actors that shape participation (Pedro, 2019).

With this in mind, the core of this following paragraphs will be the descriptive analysis of the Rome Smart City Plan, presenting and assessing the institutional context, key actors, interaction dynamics, and intervention areas in the light of public value creation.

## The National and Local Environment

Taking the European Interoperability Framework (EIF) and its Monitoring Mechanism as a tool for understanding the Italian situation in digital public services matters, Italy scores as high as the EU average in almost all three pillars – namely, *interoperability principles*, *layers of interoperability*, and *conceptual model*[2]. With the change of government and the appointment of the Minister of Technological Innovation and Digital Transition in 2021, it also developed new political initiatives in the digital public administration sphere – dragging the whole country's municipalities into an open government innovation process. As a matter of fact, local governments are increasingly adopting digital platforms for information disclosure, multistakeholder engagement, and public service delivery, leveraging ICT potential for efficient service delivery and environmentally friendly operations. Focusing on the urban level, according to the Local Online Service Index (LOSI) – a measurement that ranks worldwide capitals based on how ICTs are being used[3] – Rome is 16$^{th}$ with a LOSI score of 0.8488 out of 1 (United Nations, 2022a). Moreover, the Italian capital is first among other cities in the dimension of *Institutional Framework*, meaning that it has a strong municipal eGovernment strategy and organizational structure.

[2] The European Interoperability Framework (EIF) was published in 2017 by initiative of the European Commission to give specific guidance on how to set up interoperable digital public services. The EIF Monitoring Mechanism was built to evaluate the level of implementation of the EIF among Member States. It is based on 71 Key Performance Indicators (KPIs) clustered within three pillars (Principles, Layers and Conceptual Model). The *Principles* are the fundamental behavioral aspects to drive interoperability actions, the *Layers* are the segment of interoperability that should be comprised in a cross-cutting governance model, and the *Conceptual Model* is the guide for successful digital public service delivery (European Commission, 2023a).

[3] The Local Online service Index (LOSI) it's an ongoing project made by the *Division for Public Institutions and Digital Government* at the United Nations. The 2022 version comprises 86 indicators, divided in five areas: *institutional framework*, *content provision*, *services provision*, *participation and engagement*, and *technology*.

All these experiences in the domain of local eGovernment, together with the wicked problems of modern urbanization, have led to the emergence of more comprehensive initiatives and projects all over Italy, such as Smart Cities[4].

## Rome Smart City Plan

In 2021, the municipality of Rome formalized a plan to make its territory *Smart*, leveraging new technological developments and pre-existing assets to efficiently meet citizens' and city-users' needs. In the literature is widely recognized that formal strategic planning processes have a strong positive influence on creativity and innovation, leading to more successful outcomes (Alcaide Muñoz et al., 2023). As a matter of fact, formalized strategic plans provide a structured program for all the processes, objectives, and lines of action that stakeholders must consider – allocating resources and tasks in an efficient way. Accordingly, the city of Rome represents a virtuous case: it has a programmatic document aiming at creating a methodological and strategical framework to achieve the prefixed objectives in different dimensions. The Plan is presented as a "living tool", flexible and able to capture city-users' needs and demands through a co-creative, reciprocal, and transversal approach. In this direction, the vision that underlies the whole plan is the idea of *city as a network of ecosystems*, that should be engaged and enhanced in a collaborative and integrative way. It's possible to highlight the application of this principles already during the plan drafting process, when the municipality co-produced the proposal together with universities, companies, citizen, and the so-called Rome Smart City Lab. Theoretically, the local government followed the *Quadruple Helix Model* conceptualized by Carayannis and David F.J. Campbell (2011): the idea is that citizen and societal stakeholders can support the public innovation processes leading to tailored solutions generating public value. This model helps to understand that the four core components of the digital innovation in Rome – Local Government, Universities, Companies, Citizens and Smart City Lab – are interconnected in multi-layered, dynamic and bi-directional interactions (Schütz et al., 2019). Obviously, the municipality keeps the primary position; however, its orchestrating role functions as an enabler for data, information, and knowledge sharing among stakeholders.

This collaborative way of working is reflected also in the data management and in the embracement of open government and open data policies. In fact, data and information are constructed according to interoperability and openness principles to ensure collaboration both in the designing process and in the service delivery.

In addition to the collaborative framework presented so far, there are four more fundamental principles: *sustainability*, *technological coherence*, *evaluation*, and *financial resources.* These pillars are the guidelines in the implementation of the Smart City projects in the 11 areas identified by the municipality, which are *security, economic development, cultural participation, urban transformation, tourism, education, social, energy, environment, mobility, transversal among all areas*.

Looking now at the governance structure underlying this project, it is based on three different levels, with the inclusion of a participatory formal space of dialogue among various actors. According to the Plan, the first and main level is the *Strategic Governance*, with the Smart City Council and the Mayor who provide the guidelines and promote the different

[4] In 2022, the market value of Smart City projects grew to 900 million euros and one out of five Italian municipality launched Smart initiatives (Intesa Sanpaolo Innovation Center, 2023).

projects. This level is aided by the scientific committee and the Rome Smart City Lab, ensuring that these high-level decisions are taken in a co-creative and inclusive manner.
The next level is the *Project Governance*, in charge of overseeing the implementation of the forementioned guidelines and interdepartmental initiatives. This stage comprises the Smart City Guide Committee, an interdisciplinary board with six executive employees, and the City Lab – reaffirming the principles of inclusivity and participation.
The third and last level is represented by the *Operative Governance* with the Program Management Office (PMO) that oversees the executive and monitoring part of the whole project.
As it is stated by the municipality, the idea is to embrace with different actors in an *open government* way of working, using the Smart City Lab as an institutional and formal place to start an iterative dialogue among stakeholders. Furthermore, the three levels are strongly interconnected, with a permeability that promotes the exchange of information and data.

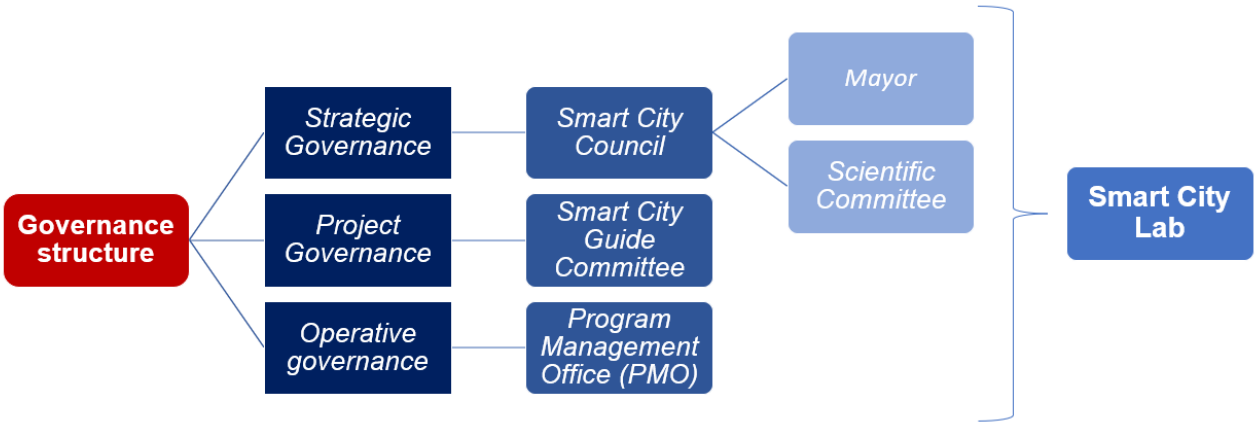


***Figure 2* Organizational Chart of the Rome Smart City Plan; own elaboration from Roma Smart City Lab (2023)**

## Rome Smart City Lab

In the literature, City Labs or Urban Living Labs are connected to the process of open innovation, entailing an inclusive and collaborative approach in a multistakeholder environment. To support these experiments, the municipality must be actively involved, providing a variety of methods and technological tools to the City Labs (Chronéer et al., 2019).

In this matter, the Rome Smart City Lab is clearly the major policy space to investigate when focusing on eGovernance structures – since the relationships between citizens and administrators in a participative setting are critical for public value creation.

The history of this governance experiment in Rome is quite tumultuous in terms of administrative procedures. As the current coordinator stated in the interview, the laboratory was initially part of the *Forum for Innovation* established in 2018 by the innovation department of the municipality. Afterwards, in 2021, it was included in the broader Rome Smart City Plan with specific tasks tailored to the intended governance structure. Eventually, only in 2023, it

was comprehensively refined in terms of organizational positioning within the forementioned plan – thoroughly strengthening its consultative and influential features.

In this novel advisory body, individuals, NGOs, associations, and companies take part in a continuous dialogue on issues related to the digital innovation and *smartness* of Rome. Stakeholders are thus engaged in these dynamics not only as ex-post consultants, but they directly participate in defining additional strategic programs for the public agenda. Thus, in the vests of advisory body, the laboratory specifically refers to the elected mayor and municipal council in smart city matters.

More precisely, the main activity of the Lab is a strategic oversight of the Smart City initiatives in Rome – this is conducted through discussions, proposals, and collaborative elaborations with the local governing bodies. Furthermore, there is a strong involvement in a periodic monitoring of its own activities and of the co-created public services – ensuring successful outcomes also in terms of multilevel regulatory demands (from the European, National and Regional level). Organizationally speaking, the laboratory is organized into ten working tables, that are included in a directive board which manages the innovative initiatives, reporting them to the higher municipal decision-making bodies. In the end, the main task of these tables is to adapt each Smart City project to the multiplicity of societal interests – thus, ultimately, generating public value.

## An assessment of governance structures considering public value creation

While being a descriptive research, the qualitative analysis of the Rome Smart City plan can be contextualized within the broader academic debate, assessing its potential in terms of public value creation. In fact, scholars pinpointed specific principles, and organizational structures that function as enablers for positive outcomes. In the light of these findings, it is possible to stress few elements from the latter municipality's initiative.

As previously indicated, the first virtuous sign is the presence of a formalized and structured plan itself. Alcaide Muñoz et al., (2023) showed that the existence of a formal strategic planning allows for potential outcomes in three distinct areas. Firstly, the municipal plan offers a clear governance structure with predetermined decision-making levels – avoiding the potential emergence of conflicts of interest. Consequently, a more fruitful dialogue among stakeholders can be undertaken when each actor precisely knows its role and tasks in the broader plan. Finally, although the concept of smart city remains fuzzy, the formulation of a programmatic document creates context-specific guidelines for this environment.

Yet, given the focus of this research, the most important element is the strong multistakeholder and open approach to policy making and the presence of a co-creative body, such as the Rome Smart City Lab. In fact, thanks to ICTs, the governance structure implemented by the municipality aims at expanding the opportunity to involve citizens and other private actors more actively in service development. The Rome Smart City lab represents the most virtuous example and application of the forementioned *Public Value Management*, based on networking, dialogue, and openness (Pedro, 2019). Therefore, the municipality formalized a proper potential driver in public value creation – ensuring that a participatory strategy lies in the heart of any smart action.

All of this appears to be confirmed in the interview with the most prominent actor in the matter, the head of this Urban Lab, who argues that this organism is characterized as a

multistakeholder, holistic and multidisciplinary environment capable of bringing together the demands and expertise of many different actors. These features are then directly operationalized in a specific methodology which creates a breaking point with the traditional working methods of the local administration, introducing a co-creative space among peers. Instead of engaging in a top-down approach with low citizen participation, the Lab's aim is to increase the quality of the public services through an innovative policy-making process.

Considered this emphasis on inclusivity, openness, and social sharing of new projects and ideas, the Lab itself possesses all the characteristics to foster societal benefits and operate as an enabler for public value creation in a local urban context. Furthermore, this innovative governance body is clearly in line with the forementioned new trends which characterize Smart City Projects, focusing on the societal policy outcome rather than on the mere application of disruptive digital technologies – as indicated by the interviewee. Accordingly, the laboratory balances the willingness to use new technologies across the city with the necessity to assess the usefulness of each project in terms of citizens' advantages – contributing to a proper public service delivery.

Ultimately, it is important to recognize certain limitations that may arise while trying to implement these governance structures. The first challenge is the difficulty of steering more traditional and centralized political bodies from a path-dependent policy-making perspective: indeed, this new governance structure initially clashed with the higher government levels due to its extraordinary and revolutionary scope, based on what the interviewee stated. Secondly, without a broad citizen sharing and interest there is the strong risk of potentially generating high levels of dissatisfaction among city-users – something that happened with smart initiatives in Rome that didn't fit at all in the citizens' demands[5].

# CONCLUSION

This article presented a brief overview of Smart Cities, shedding light on their core components and recent trends, eventually analyzing the Rome Smart City Plan through the lenses of the newest scientific findings. Indeed, acknowledged an evolution in how Smart City project are implemented and assessed, a strong importance was given to governance structures and their potential role in public value creation. Beyond the fascination for technology, the research highlighted the importance of multistakeholder environments and co-creation for this type of urban planning – connecting the role of technology, participation, and inclusiveness for a better quality of life in the city. The Rome Smart City Plan served as a practical case study for a qualitative analysis of the existing governance structures. The discussion then emphasized the role of the Smart City Lab, a co-creative body with significant features in terms of public value creation.

With this case study exploration, this research was the first to comprehensively map the Rome Smart City Plan. Nevertheless, the analysis presents certain methodological limitations: it could have benefited from a broader number of interviews along with a quantitative assessment of long-term policy outcomes and citizens perceptions. Future research may build upon this research to further measure the quantitative impact of certain governance structures and policy procedures.

[5] The head of the Smart City Lab made direct reference to situations where citizens resisted the implementation of smart projects in their neighborhood – highlighting weak public acceptance and minimal clear societal benefits.

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