

Article

The Overton Window in Smart City Governance: The Methodology and Results for Mediterranean Cities

Aristi Karagkouni * and Dimitrios Dimitriou 

MaGBISE Research Laboratory, Department of Economics, Democritus University of Thrace, 69100 Komotini, Greece; ddimitri@econ.duth.gr

* Correspondence: arkaragk@econ.duth.gr

Highlights

What are the main findings?

- This study reveals that Mediterranean island smart city initiatives exhibit uneven strategic integration. The SOAR analysis highlights localized strengths in digital tourism, e-governance, and sustainability, but also identifies a lack of holistic vision—manifested through limited cross-sector coordination, the absence of long-term strategic planning, and inadequate stakeholder alignment. The Overton Window framework identifies significant normative and regulatory constraints that determine which smart technologies gain traction through regulatory approval, receive financial support, and secure broader public legitimacy across different insular contexts.

What is the implication of the main finding?

- Holistic smart city transformation in Mediterranean islands requires alignment between local strategic aspirations and evolving public discourse, ensuring innovation legitimacy and adoption.
- The ‘Ecopolis’ concept offers a viable planning framework for integrating sustainable infrastructure, citizen participation, and data-driven governance within tourism-dependent island settings. While the model remains conceptual in its full articulation, various elements, such as digital governance platforms and intelligent mobility systems, have already been implemented in selected cases, particularly in Malta and Mallorca, illustrating partial institutionalization of the framework.



Academic Editor: Pierluigi Siano

Received: 16 April 2025

Revised: 2 June 2025

Accepted: 11 June 2025

Published: 13 June 2025

Citation: Karagkouni, A.; Dimitriou, D. The Overton Window in Smart City Governance: The Methodology and Results for Mediterranean Cities.

Smart Cities **2025**, *8*, 98. <https://doi.org/10.3390/smartcities8030098>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and

conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>).

Abstract: Mediterranean island cities face unique challenges in implementing smart city initiatives due to fragmented governance structures, seasonal economic pressures, and evolving societal expectations. This study investigates how strategic aspirations and public discourse shape the feasibility of smart city policies in insular contexts. Specifically, it combines SOAR (Strengths, Opportunities, Aspirations, Results) analysis with the Overton Window framework to examine both the strategic capacities and normative acceptability of technological interventions. The Overton Window, a model originally developed in political theory, is applied here to evaluate how public and policy acceptance of smart technologies, ranging from digital governance systems to AI-based mobility, varies across different islands. While this study draws on cross-case comparisons of multiple Mediterranean island contexts, the primary data were collected in Athens, Greece, through surveys and focus groups with citizens and stakeholders. The findings reveal disparities in institutional maturity, stakeholder coordination, and levels of citizen support. This study concludes that successful smart city transformation requires both strategic coherence and alignment with evolving public values. It proposes the ‘Ecopolis’ model as a conceptual planning framework that integrates sustainability, citizen participation, and data-driven governance in tourism-dependent island settings.

Keywords: smart city governance; SOAR framework; Overton Window framework; Mediterranean islands

1. Introduction

Recently, the concept of the smart city emerged as a mainstream paradigm in urban planning based on the integration of advanced digital technologies, data-driven decision-making practices, and participatory governance with an emphasis on citizen empowerment. The smart city employs tools like the Internet of Things (IoT), artificial intelligence (AI), big data analytics, and machine learning to improve living standards of citizens, advance service delivery, maximize resource allocation, and foster sustainability. It goes beyond digitalizing urban services; it aims to transform urban governance and infrastructure to better respond to emerging social, economic, and environmental issues.

Tourism plays a significant role in shaping the socio-economic and infrastructural dynamics of many Mediterranean cities. Seasonal fluctuations in population, increased pressure on urban services, and the imperative to preserve heritage sites place unique demands on city governance. Smart city interventions have emerged as promising tools to manage these pressures by optimizing resource use, enhancing service delivery, and improving citizen engagement. This is particularly relevant in tourism-dependent island regions, where adaptive governance frameworks must address both technological potential and societal readiness. Urban environments are increasingly shaped by real-time monitoring systems, predictive maintenance technologies, and adaptive infrastructure. These capabilities are driven by the proliferation of IoT sensors that collect data from physical assets and machine learning algorithms that process these data to reveal patterns, forecast failures, and enable preemptive actions [1,2]. For example, predictive maintenance systems can help municipal governments prevent infrastructure failures before they occur, thereby reducing operational costs and enhancing safety [3]. Energy management is also being revolutionized by real-time consumption tracking and intelligent optimization strategies, leading to significant gains in sustainability and efficiency [4].

Additionally, advanced technologies enable collaboration between different industries, integrating services that have historically existed in a standalone mode, like security, energy, health care, and transport. The ability to enable information exchange between different agencies and departments sustains cohesive governance practices that involve interdisciplinary solutions and systems thinking [5]. Management of smart cities involves the creation of new forms of interaction among governmental, private sector, and civil society organizations, supported by an information infrastructure improving accessibility, responsiveness, and meaningful involvement of community members. These interactions become increasingly supported by tools such as open data portals, participatory budgeting processes, and civic engagement applications in mobile phones [6,7]. Digital participation has emerged as an essential tool to promote inclusive urban governance by supporting municipalities to incorporate citizen feedback in real time into the provision of their services and strategic planning processes [1,3]. In addition, the information generated by residents through mobile phones, social media engagement, and navigating through sensor-saturated environments is an essential input for adaptive governance processes. Such fusion of human-centric data collection and algorithmic assessment marks the evolution from conventional top-down to collaborative urban innovation [1,3,4]. Therefore, the smart city phenomenon marks not just an improvement through technology, but, more importantly, an evolution in the social-institutional dynamics of urban administration. Public acceptance is a central driving force that determines whether these smart city projects

are effective, regardless of their projected gains. Changes like ubiquitous surveillance, intelligent policing, and widespread information exchange often raise legitimate questions about privacy, equity, and democratic accountability. An underlying atmosphere of public distrust or skepticism of institutions can greatly dampen the effectiveness of smart city initiatives, especially when the public is kept out of substantial participation in planning and decision-making processes. Scholarly research more recently emphasizes the importance of trust as an essential enabler of effective public participation, especially in the context of digital modes of governance where issues around privacy, surveillance, and representation are often paramount concerns [4]. Participatory processes carried out under the guise of open communication, responsiveness to feedback, and fostering collective ownership of outcomes can be seen as insincere and, therefore, fail to be legitimized and effective. Empirical studies reveal that trust in digital participation systems is shaped by perceptions around procedural justice, data protection, and institutional goals matching community values [1,3,4]. Thus, there is a need for mechanisms within governance in intelligent urban spaces to monitor and respond to changing public sentiment in order to not only induce technology adoption but to also ensure sustainable democratic accountability.

In an attempt to ameliorate this problem, the work here uses the Overton Window model to examine what ideas are acceptable in society in relation to governing a smart city. Originally developed as an idea in political philosophy, the Overton Window explains how the range of conceivable policies that can be proposed changes due to political support over time, influenced by shifts in public discourse and policy acceptance. By determining the location of each of these smart city technologies on this model, urbanists and policy makers can better anticipate citizen behavior patterns and tactfully navigate windows of opportunity for introducing innovation. Through an approach that marries qualitative with quantitative aspects, a structured questionnaire was administered, with Athens, Greece, serving as the fieldwork location. While empirical data were collected in Athens, Greece, as a representative urban center due to its dense population, high tourism volume, and infrastructural complexity, the broader analysis integrates comparative findings from other Mediterranean cities, including Malta, Mallorca, Crete, Cyprus, and Valencia, based on secondary documentation and strategic plans. This approach allows the study to generalize across insular urban environments while grounding its claims in direct stakeholder perspectives.

This paper contributes to the discourse on smart city development by highlighting the importance of aligning technological innovation with public values and democratic legitimacy. It offers a practical framework for assessing the social feasibility of smart city initiatives, aiding decision-makers in determining appropriate timing, governance strategies, and communication methods. As Mediterranean cities grapple with tourism-driven economies, seasonal demand fluctuations, and aging infrastructure, the findings underscore the need for context-sensitive and participatory approaches to smart urban transformation. Ultimately, this study reinforces the principle that successful smart cities are not only technologically advanced but socially intelligent, capable of adapting to citizen needs, responding to societal concerns, and fostering inclusive urban futures through collaborative governance.

2. Background

2.1. *The Critical Role of Management and Collaborative Governance*

Effective governance is an underlying principle for guiding strategic progress in smart city-related projects. Cities are faced with a series of complicated issues due to urbanization, such as traffic congestion, pollution, poor infrastructure, and resource limitations. To address such issues, local governments use digital technology and data analytics to help enhance urban planning, improve performance, and improve overall living standards for

citizens. One of the features of intelligent governance includes systematic aggregation and scrutiny of large amounts of information through different sources, like Internet-of-Things sensors, social media, and official documents, which help guide proactive and intelligent decision-making [8]. In addition, citizens' participation is essential in assessing effective smart city programs. Digital governance systems encourage openness in communication, engage citizens, and foster an active citizen populace, ensuring that projects and policies appeal to and meet citizens' wishes and needs [9]. Additionally, sustainability is built into intelligent governance systems, helping to decrease emissions, maximize resource use, and improve resilience against climate change [10]. Further, public–private partnership models are especially important since they inspire innovation, pool resources, and improve technological infrastructure in urban areas [11].

Despite these advantages, governance in smart cities faces a variety of ongoing challenges. It is important to protect data privacy and implement robust security measures, notably in accordance with laws like the European General Data Protection Regulation (GDPR) [12]. Additionally, local governments have to address inequalities with respect to accessing advanced technology and dealing with disintegrated governance systems, which are essential hurdles in their push for integrated and inclusive growth in smart cities [5,13]. Collaborative governance involves a multifarious range of stakeholders such as governmental institutions, private sector organizations, non-governmental organizations, and community members, and is critical for successfully addressing urban issues. These types of governance systems ensure democratic participation, foster openness, and enable exchange of different competencies and expertise, ultimately enhancing decision-making processes, as well as project outcomes [14]. Their performance is contingent upon creating shared aims and interests among stakeholders, which in turn enhances commitment, transparency, and accountability [11].

In addition, urban environments require governance systems that are strong yet adaptable, capable of adequately dealing with changing circumstances and emerging issues. Networked systems of governance allow for optimal resource integration and knowledge exchange, which effectively increases how efficient and effective governance is [15]. Collaborative governance offers several benefits that include improved ability to address issues, increased accountability through shared responsibility, and policy outcomes that are better aligned with community needs and priorities [16–18]. Despite this, collaborative governance faces significant challenges. Differences in the power of different stakeholders can hinder equal participation and the resulting decision-making procedures, while institutional hurdles such as entrenched bureaucratic structures can impede collaborative initiatives. In addition, obtaining long-term commitment from stakeholders is challenging given changing interests and changes in leadership structures [17,19,20]. Addressing these challenges head on is critical to ensuring that collaborative governance is effective and sustainable.

Models of smart cities over recent years have placed heightened focus on the uptake of data-driven policy approaches. In this regard, the collection, analysis, and integration of urban data in real time have become pivotal to facilitating adaptive service delivery and fostering participatory planning. No longer are citizens just passive consumers of services; they have become data-contributing, co-creating urban knowledge through multiple digital platforms, participatory mapping projects, application feedback systems, and community engagement through sensors [7,12]. Digital initiatives bridging open data repositories, crowdsourcing websites, and participatory budgeting processes enable urban policy planners to tap into grass root thinking and translate this into policy formulation and decision processes. Data and policy co-production not only enhances the effectiveness of

interventions but also boosts public trust and civic legitimacy to very considerable degrees, both key to the success of transformative urban changes.

2.2. *The Evolution of the Smart City Concept in the Mediterranean Region*

In Southern Europe and notably the Mediterranean, smart cities have moved from an initial interest in technology to a more general interest in sustainability, citizen involvement, and resilience. Mediterranean cities including Athens, Barcelona, and Valencia have come to adopt citizen engagement along with digital platforms to mitigate issues concerning seasonally based economic problems, aged infrastructure, and socio-environmental issues. Smart city initiatives in Europe tend to be aligned with overall goals set by national and European Union policies, such as the EU Cities Mission, which highlights the importance of integrated planning and active stakeholder engagement. While Mediterranean cities offer relevant models for smart urban transformation, selective comparisons with broader European initiatives, such as digital integration in Leipzig or participatory planning in Gothenburg, are included here to illustrate transferable best practices. However, the primary emphasis remains on Mediterranean cases such as Barcelona's digital commons model, Valencia's mission-oriented participatory governance, and Athens' use of digital tools in tourism and urban management. Lyon encourages citizen engagement through the "Eurêka Club," which promotes the co-design of urban services. Valencia applies governance models based on missions with a focus on participatory approaches, and Vienna successfully integrates participatory governance approaches to scale up smart city initiatives [21].

European and Mediterranean cities present divergent approaches to their smart city evolution, prioritizing sustainability, technological innovation, and citizens' engagement. Copenhagen, in particular, focuses strongly on environmental sustainability through a widespread cycling network and renewable energy plans to reduce urban emissions. Amsterdam develops sustainability in various areas such as energy, waste, and sustainable architecture while improving citizens' participation through open data systems and collaborative approaches [22]. London, from a technological viewpoint, applies innovative technologies in areas such as transportation, public security, and environmental monitoring, supported by cooperation with private sector organizations. Barcelona, likewise, demonstrates an ongoing innovative approach, notably through the incorporation of innovative technologies across a range of urban services, with a focus on efficiency and environmental sustainability [23].

Practices based on citizens in intelligent cities are exemplified by Stockholm and Helsinki. Within Stockholm, intuitive digital platforms are used to facilitate citizen engagement, transparency, and feedback systems, which improve governance responsiveness by a significant amount [24]. By contrast, Helsinki's commitment to open data practices empowers citizens by encouraging engagement and innovation in urban governance processes [25]. In the Mediterranean context, Athens demonstrates the potential of smart city technologies in urban economies that are largely driven by tourism. Athens uses digital technologies to better manage its infrastructure and enhance service delivery efficiency, which directly supports its tourism-led economy and urban management goals. European and Mediterranean urban intelligent city programs still face many long-standing obstacles. Alongside Barcelona, Athens, and Valencia, other Mediterranean coastal cities including Marseille, Palermo, and Izmir are increasingly embracing smart city initiatives uniquely oriented toward their coastal profiles and tourism-dependent economies. Each one of these cities is facing long-term governance challenges typified by administrative fragmentation, urban growth, and high population fluctuations by season. For example, Marseille has focused on building digital resilience by fostering community engagement in the neigh-

borhood sphere; Palermo has embarked on pilot programs for digitizing heritage and building smart mobility systems [8]; Izmir has implemented integrated urban platforms centered on smart mobility and environmental surveillance [26]. These projects reflect an overarching shift toward adaptive governance attuned to tourism-related issues in the wider Mediterranean region.

Provision of adequate and sustainably available financial resources is of particular concern, particularly in long-term infrastructural and technological projects. Data privacy and security are of prime concern, calling for rigorous adherence to GDPR as well as many other laws. Bridging the digital divide to ensure equal access to technology and ensuring interoperability between dissimilar systems and platforms are additional major issues. Public acceptability on a grand scale and trust are also of a vital nature for effective application and long-term accomplishment of intelligent city programs [21].

The future development of smart city systems in European and Mediterranean countries is expected to focus on deeper integration of advanced technologies, such as artificial intelligence and machine learning, as well as enhancing 5G infrastructure. Smart city systems are expected to also enhance climate change resilience, incorporate strong cybersecurity, and enhance citizen engagement through participatory governance models. Achievement of these goals is expected to enable sustainable urban expansion, improve administration, and significantly increase the standard of living of urban areas [21]. Although smart city initiatives all over Europe tend to follow common objectives involving digitalization and sustainability, Mediterranean cities often exhibit divergent governance paths. Compared to Northern European environments, where there is an embedded institutionality for participation as well as technical proficiency, Mediterranean cities tend to exhibit fragmented forms of planning, multiple centers of power, and irregular civic participation behaviors [13]. Regional differences stem from factors including sociopolitical historical experiences, degrees of digital literacy, and public trust dynamics. Thus, successful smart governance in the Mediterranean calls for the creation of tailored frameworks that meet infrastructure needs and overcome participation legitimacy issues [26]. Finally, the convergence of tourism dependency and flaws in democratic governance highlights the necessity for smart city models to be context-sensitive and integrated in their locales.

3. Methodology Framework

This study adopts a qualitative comparative case study approach based on a rich analytical framework that combines SOAR (Strengths, Opportunities, Aspirations, Results) analysis with Overton Window theory with regards to policy feasibility. The key goals entail an examination of conceptualization, governance, and implementation of the smart city approach in the distinctive contexts of Mediterranean islands. This study is organized to consider both structural and strategic governance with a focus on the exclusive opportunities and challenges posed by insular geography. The use of a comparative case study approach allows for systematic exploration of contextual differences in policymaking, configurations of stakeholders, technological integration, and strategic focus. This approach is especially suitable for undertaking studies in smart cities, whose effects depend upon spatial qualities such as locality, holiday patterns by season, administrative fragmentation, and unevenness of European Union sources of funds.

In pursuing analytical rigor and interpretative sophistication, this study uses the SOAR methodology as a strategic approach to synthesize information from different cases. Unlike SWOT analysis, which focuses predominantly on identifying weaknesses and threats, the SOAR approach possesses a forward-looking, aspirational approach that aligns with the innovative nature of smart city projects. This approach allows for a systematic evaluation of each island's capacity to capitalize on strong points, foresees future potential, sets long-

term objectives, and determines drivers of performance in the domain of digital urban management. Simultaneously, either complementary to or supplementary to this, we use the Overton Window approach as a normative tool for determining the social and political feasibility of smart city projects. This specific approach maps a systematic process for classifying policies—from digital identity systems and AI-fortified mobility solutions to biometric surveillance and open data portals—along an axis of public acceptability ranging from “Unthinkable” to “Policy.” Combining these two methodological tools allows the research to differentiate between what is strategically optimal versus what is politically possible, enhancing our understanding of drivers of influence for smart city innovation in the Mediterranean island environment.

The methodological approach focuses on an in-depth study of second-order data sources such as strategic papers, assessments of projects funded by the European Union, and policy documents relevant to national or regional contexts. Intensive examination of these documents is carried out to enable inferences about the governance models, responsibilities of stakeholders, and compatibility of smart city projects with sustainability. Cross-case synthesis yields context-relevant findings that can be duly applied for standalone governance systems, thus enhancing regional policy learning for the Mediterranean region.

3.1. Case Study Area Key Features

Selection of case study islands in this study was based on a purposive sampling approach to represent a range of different governance forms, levels of strategic development, geographical variety, and socio-economic features of Mediterranean island territories. Six islands were ultimately included in a comparative in-depth study: Malta, Cyprus, Mallorca (Spain), Sicily (Italy), Crete (Greece), and Corsica (France). These islands present a range of sizes from small to large territorial areas, along with varying levels of development of smart cities, institutional coordination, and digital infrastructure. Various factors determined selection of these islands. First, Mediterranean islands present similar vulnerabilities in environmental, economic, and infrastructural aspects, notably in relation to climate change, depletion of resources, and periodic tourists’ demands [27,28]. Second, island areas often have unique governance systems influenced by national, regional, and local powers, which decisively shape their progress and implementation of smart city policies [29]. Third, such islands often have logistical and technical issues in developing overall smart infrastructures, so they provide useful insights into adaptive and scalable governance systems [30].

Prior academic research on European policy informs the choice of case studies. Six of these islands have engaged with smart city projects that have been funded by the European Union, namely Horizon 2020, URBACT, and European Innovation Partnership on Smart Cities and Communities (EIP-SCC). This choice enables an examination of funding arrangements, alignment with EU purposes, and participation in transnational partnership networks [31]. Table 1 summarizes the key characteristics of each selected island, including population size, the main economic drivers, smart city strategy status, and the governance level responsible for implementation. This structured selection allows the study to conduct a balanced and nuanced comparative analysis, identifying both convergent themes and context-specific divergences.

The rationale behind focusing exclusively on Mediterranean islands, as opposed to broader national case studies, lies in the growing recognition that small island contexts require differentiated governance models and tailored policy frameworks [32]. These island territories operate under spatial constraints and demographic pressures that distinguish them from mainland cities, thus making their experiences particularly valuable for advancing the discourse on adaptive and place-based smart city governance.

Table 1. Analytical dimensions and comparative variables applied in SOAR and Overton Window assessments *.

Island	Country	Governance Level	Smart City Strategy Status	Key Economic Drivers
Malta	Malta	National	Integrated national smart city initiatives	Tourism, Financial Services
Cyprus	Cyprus	Municipal + National	Fragmented, sector-specific pilot projects	Tourism, Services
Mallorca	Spain	Regional (Balearic Govt.)	Regionally coordinated smart tourism and mobility initiatives	Tourism, Agriculture, Services
Sicily	Italy	Regional + Municipal	Mixed; varying local initiatives with some regional efforts	Tourism, Agriculture, Energy
Crete	Greece	Regional + Municipal	Emerging; focused on tourism sector	Tourism, Services
Corsica	France	Regional (Collectivité de Corse)	Emerging; sustainability and e-governance efforts	Tourism, Public Sector, Trade

* The table outlines the core dimensions used to evaluate smart city initiatives, including strategic design, implementation, stakeholder engagement, and contextual constraints across different Mediterranean island cities.

3.2. SOAR-Informed Comparative Analysis Framework

This study employs a holistic analytical approach that combines comparative case study with a strategic SOAR model to assess smart city governance across Mediterranean islands. Its overall goal is to move beyond cursory comparison to offer a strategic synthesis that charts each island's ability to leverage its unique context in driving resilient, innovative urban development. Such a synthesis allows for an examination of the structural diversity, governance complexities, and scope for innovation inherent in smart city projects across selected insular territories. The comparative case study examines six diverse examples: Malta, Cyprus, Mallorca, Sicily, Crete, and Corsica. The islands were selected based on their geographical similarities, tourism dependence, and different levels of advance in smart city development. The analysis was centered on six key dimensions: governance design, implementation approach, engagement with stakeholders, financial resources, idiosyncratic island limitations, and thematic priorities. These dimensions were derived through a combined approach: they build on existing frameworks in smart city research that emphasize institutional capacity, actor engagement, and infrastructural readiness [13] while also incorporating case-specific factors identified during a preliminary document review of Mediterranean island smart city strategies. This dual basis ensured both theoretical alignment and contextual relevance. The framework was designed to facilitate structured cross-case comparison while capturing the heterogeneity of governance configurations and thematic emphases found across tourism-intensive, spatially constrained island settings [8]. These served to provide key inputs for the SOAR analysis, ensuring that the resulting strategic recommendations were founded upon tangible governance and policy contexts.

SOAR serves as the main methodological framework for comparing and analyzing comparative results. Unlike traditional SWOT analysis that involves looking inward to address deficiencies and outward to identify threats, SOAR uses a strengths-based approach that is more interested in future prospects, which is aptly suited to the innovative and transformative nature of smart city projects [33]. The four building blocks of strength, opportunities, aspirations, and results are utilized to describe each island's strategic vision in relation to driving forward smart city development.

Strengths were determined by a rigorous examination of existing capabilities, institutional configurations, and past successful programs. Examples of regionally synergistic strengths that could facilitate enlarging extensive smart systems include Malta's national

coordination sophistication in digital governance, Mallorca's project to establish a smart tourism portal, and Crete's emphasis on renewable energy resources. These strengths were determined by an examination of policy documents, regional development strategies, and reviews pertaining to European Union programs. Opportunities are framed in terms of new development avenues and potential inter-cooperation. Opportunities may entail further EU subsidies available via Horizon Europe, digital and environmental transitions promoted by the European Green Deal, and inter-cooperation development potential between Mediterranean islands. Further development of interoperable platforms, governance models based on citizen participation, and climate adaptation policies also represent strong external drivers for creating smart cities.

Aspirations were inferred through examination of national digitalization frameworks, smart city programs, and stakeholder engagement methods. This categorization follows the principles put forward by [33], who emphasized the importance of congruently matching organization values to strategically focused aspirations. Planning documents and recent academic research specific to the region were used to guide the implementation in this study, combining crucial strategic theory and localized aims for intelligent governance. Some islands, like Malta and Cyprus, have aspirations related to energy independence, mobility innovation, and administrative efficiency. Other islands, like Corsica and Sicily, have aspirations related to environmental sustainability, inclusive governance, and the decentralization of public services. Expected outcomes were designed as measurable achievements against the objectives of the project, including emission reductions, improvements in efficiency in the delivery of services, resilience in infrastructure, and satisfaction among citizens. Performance measures were based on the European Commission guidelines for the assessment of smart cities [31] and earlier research concentrating on urban renewal through case studies [2,8]. Some measures, i.e., for instance, energy usage or digital participation, were taken directly from existing frameworks for monitoring, while others (for example, the responsiveness of localized administration) were inductively adapted based on the specific contextual assessment of each island case. Some islands, like Malta and Mallorca, have set up performance indicators and evaluative frameworks; others, like Cyprus and Sicily, are developing extensive monitoring tools. A SOAR framework allows each island's strengths and aspirations to be aligned with relevant metrics and indicators of success.

In comparative terms, the SOAR model is used as the main analytical tool for framing and interpreting strategic knowledge in different instances. Compared to standard SWOT analysis, the SOAR model is centered on constructive and capability-focused aspects of planning which resonate with aspirational goals underlying smart city projects. The model's four elements are structured so that there is a systematic and positive assessment of how municipal institutions and stakeholders envision and address digital transformation in urban governance. Empirically speaking, qualitative content analysis from available information sources such as strategic planning reports, roadmaps of smart cities, national and regional policy documents, and EU project documents are analyzed. Cases are coded based on each of the components of the SOAR model, thus providing an analytical framework that highlights how institutions use their capabilities, pursue opportunities, articulate aspirations, and design strategies for achieving quantitative goals. The use of comparative case examination, coupled with the application of SOAR, is particularly useful for island jurisdictions with well-defined territorial boundaries and shared governance issues. This systematic methodological approach allows for systematic comparison based on theory while also considering local differences and strategic divergences. Thus, what is produced is an integrated approach to policy that supports both evaluative assessments and adaptive, situational policy recommendations.

3.3. Overton Window Framework

To complement the strategic and comparative dimensions of this study, the Overton Window framework is employed as a conceptual and methodological tool for evaluating the social and political acceptability of smart city policies and technologies across Mediterranean island contexts. First developed in the domain of political theory, the Overton Window model defines the range of policy options that are of contemporary social acceptability at any given instant, classifying them on a continuum from “Unthinkable” to “Policy” [34]. On application to urban planning, governance, and technological innovation, this model offers a multifaceted view of stakeholders’ attitudes towards new emerging smart city technologies that allows us to measure to what extent such attitudes influence possible implementations, development paths, and, ultimately, sustainability.

In this study, the Overton Window is not only used as an intuitive concept but also as a systematic analytical framework. The smart city initiatives are analyzed using six normative categorizations (Unthinkable, Radical, Acceptable, Sensible, Popular, and Policy) derived from Joseph Overton’s formalized theoretical model. Such an ideational model demarcates the range of policy ideas regarded as socially and politically accepted in any given period [34,35]. In using these categorizations for this study, the categories were interpreted based on the background studies to ground policy acceptability in changing narratives among the population [17,29,33]. Each categorization was used through a two-stage analytical process. First, there was systematic coding within strategic documents, public statements, and urban policy debate to assess the rhetorical form and level of institutional acceptance for smart city technologies. Secondly, qualitative information gained from stakeholder interviews and focus group conversations was used to cross-check interpretation regarding legitimacy, desirability, and practicability. The Overton Window was therefore adapted as an effective tool for assessing smart innovation political and social readiness in different localized contexts. These categories exist as an apparatus of normalization that enables various enabling technologies and governance systems, such as facial recognition surveillance, AI-based urban mobility, open data management, and citizen-dedicated digital services, to be evaluated with regards to their legitimacy and preparedness for application in individual island economies’ unique political and cultural environments. From a methodological point of view, program placement along the Overton continuum was based on qualitative content analysis of strategic documents, policy narratives, and public discourse, consistent with the heuristic outlined by [35]. This framework conceptualizes policy acceptability as a socially bounded spectrum, which has been applied in studies of urban governance and digital innovation to assess the alignment between institutional agendas and public norms [36,37]. The categories used—ranging from “Unthinkable” to “Policy”—follow the original Overton model but are adapted here to reflect the dynamic acceptability of smart technologies in context-specific environments. Programs are classified depending on their institutionalization in public policy, degrees of contestation or discussion contained in civic debate, and levels of citizen support and support from political leadership. This measurement is defined as dynamic; it is sensitive to the variable nature of policy rhetoric and allows ideas to move across the window over time based on changed public views, leadership changes, or outside shocks such as the after-effects of the COVID-19 pandemic or calamities induced by climate change [19,38]. The Overton Window conceptual framework for smart city policy acceptability is analytically presented in Figure 1.

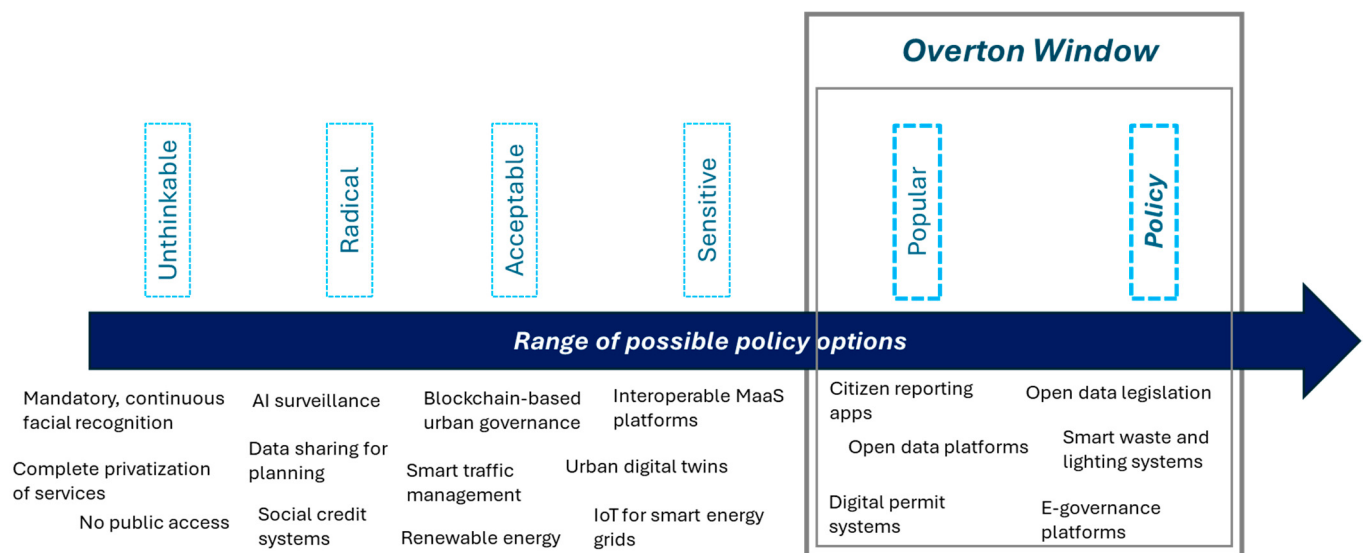


Figure 1. An adaptation of the Overton Window conceptual framework for evaluating smart city governance. The figure illustrates six normative categories (Unthinkable, Radical, Acceptable, Sensible, Popular, and Policy) along a horizontal spectrum. Each segment under the main arrow represents a distinct level of public and institutional acceptability. Technologies or policies placed further to the right are more likely to receive funding, regulatory approval, and political support. Labels indicate example smart city technologies or approaches classified into each category. Annotations within the figure highlight how strategic framing and discourse influence movement along the window.

The empirical part covered an elaborately designed survey combined with the organization of focus groups and semi-structured interviews. The survey included closed questions based on the use of 5-point Likert scales, item rankings, and multiple-choice questions. Subjects covered were awareness about smart city technologies, including e-governance platforms, artificial intelligence-powered mobility services, and open data platforms, as well as digital participation and trust in state authorities. This survey was provided exclusively through face-to-face interactions from March to June 2024, collecting fully filled-in answers totaling 103. A carefully designed sampling plan was utilized to ensure representation by gender, age, educational level, and professional background. Participants were enlisted through municipal community centers, universities, and civic organizations located in the Athens metropolitan region. The qualitative part involved three focus groups totaling 6–8 participants and twelve semi-structured discussions including stakeholders from public administration, urban planners, environmental non-governmental organizations, information technology companies, and university departments. Participant ages ranged from 25 to 68 years, including experience in city administration, information technology, tourism, and civic participation. The main discussion issues were (1) trust in institutional processes and openness, (2) privacy of data and citizen consent, (3) participation obstacles, and (4) the legitimacy seen by participants regarding smart technologies [39,40].

All discussions were analyzed using constructivist grounded theory [41]. This triangulated dataset enabled nuanced placement of smart city technologies within the Overton Window typology, reflecting both institutional intent and societal acceptability. It is noted that ethical principles were rigorously followed: all participants were informed about the purpose of the consultation, participation was voluntary, anonymity was guaranteed, and no sensitive personal or biometric data were collected. Informed verbal consent was obtained from all respondents prior to data collection. A review of extant smart city policy documents and strategic plans was conducted in order to determine the extent of consistency between real-world governance practice and public attitudes [42]. Evidence from

surveys, focus groups, and policy review was consolidated to create a graphical representation of the Overton Window for smart city schemes, identifying which ideas presently sit within the range of public acceptability and which are viewed as emerging or radical [43].

A mixed-methods approach was adopted to synthesize data from policy documents, survey responses, and qualitative transcripts. The analysis followed a three-stage process. First, deductive codes were developed based on predefined themes (e.g., governance, participation, technology legitimacy), which were then supplemented by inductive categories emerging from stakeholder interviews and focus groups. This hybrid coding framework was applied using qualitative analysis software to identify recurring patterns and divergences in discourse. Second, the six Overton Window categories were operationalized using three criteria: (1) the degree of institutional adoption (policy documents, strategic plans), (2) the tone and visibility in public discourse (stakeholder narratives and focus groups), and (3) survey responses reflecting perceived feasibility and acceptability. Each technology or policy idea was classified into one of the six Overton categories by comparing its performance across these criteria. Third, a triangulation matrix was developed to ensure analytic consistency across sources. This matrix cross-referenced survey frequencies with coded qualitative insights and documentary evidence. For example, if a technology (e.g., AI-based mobility) was highly supported in the survey, discussed in positive terms by stakeholders, and present in municipal plans, it was classified as “Sensible” or “Popular.” Conversely, if it lacked institutional presence and received public skepticism, it was placed in “Radical” or “Unthinkable.” This integrative method ensured that Overton placement reflected both institutional positioning and societal perception, thus aligning strategic intent with public legitimacy. While the integration of SOAR and the Overton Window frameworks offers a multidimensional perspective, combining strategic planning and normative acceptability, this dual approach presents certain limitations. The risk of conceptual overlap, particularly between strategic aspirations and public legitimacy, requires careful methodological distinction. To mitigate this, SOAR dimensions were applied strictly to the internal logic of strategic documents and stakeholder intentions, whereas the Overton model was used solely to interpret public-facing discourses and perceived feasibility. Despite these precautions, future research might explore the use of sequential or layered frameworks to reduce interpretive complexity.

4. Results

4.1. SOAR-Informed Strategic Positioning of Mediterranean Island Smart Cities

The application of the SOAR framework (Strengths, Opportunities, Aspirations, Results) to six Mediterranean island case studies—Malta, Mallorca, Crete, Cyprus, Sicily, and Corsica—enables a structured analysis of their smart city development trajectories. By plotting these cases on a SOAR matrix (Figure 2), this study identifies how internal capabilities and external enablers shape the islands’ positions in terms of both strategic preparedness and practical outcomes. The matrix positions reflect not only existing institutional arrangements and innovation assets, but also the degree to which future-oriented aspirations are being realized or remain latent.

The positioning of each island within the SOAR matrix (Figure 2) was determined through a triangulated evaluation of three factors: (1) the presence and clarity of strategic aspirations in official planning documents, (2) evidence of multi-stakeholder alignment from focus groups and interviews, and (3) performance proxies, such as service uptake, budget alignment, and citizen satisfaction where available. The vertical axis represents perceived internal strengths and strategic capacity, while the horizontal axis reflects externally articulated aspirations and innovation readiness. Spatial placement is therefore interpretive but grounded in the synthesis of both textual and empirical data sources.

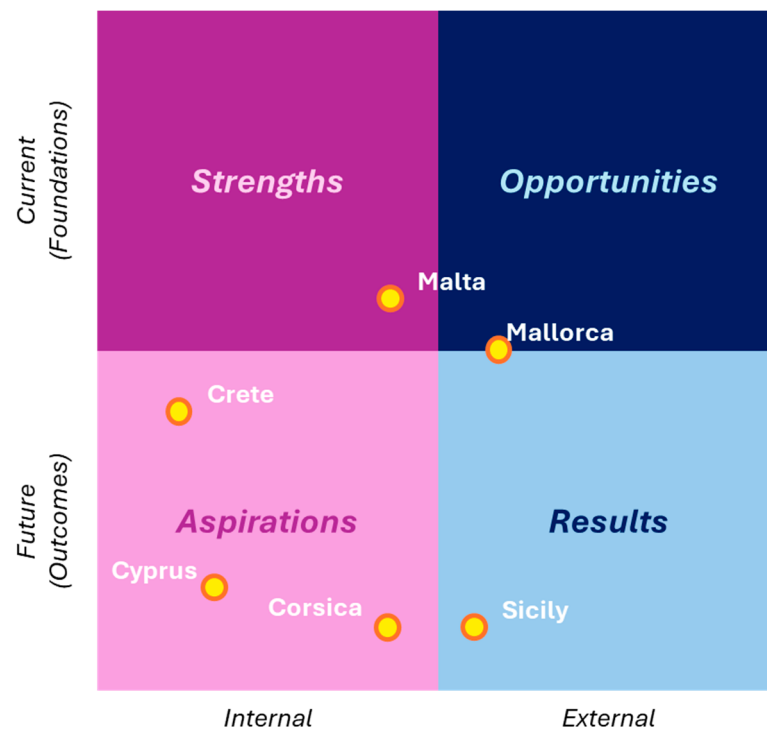


Figure 2. Strategic positioning of Mediterranean smart cities (SOAR matrix). Vertical axis represents internal strengths and capacity (e.g., governance, resources); horizontal axis reflects forward-looking aspirations and innovation readiness. Positioning is based on triangulated data from strategic plans, stakeholder consultation, and documented outcomes. Placement is interpretive and comparative across cases.

4.1.1. Strengths: Institutional Maturity and Strategic Cohesion

Malta and Crete both have strong capabilities on an internal basis, though may manifest through different systems. Malta holds the top-left corner of the matrix based on its high level of institutional integration, underpinned by a centralized system of digital management that is best suited considering its small national scope. It follows an inclusive smart governance architecture, which is complemented by strong inter-ministerial coordination, digital delivery of services, and e-participation. Crete, on the contrary, operates under a decentralized system of administration, emphasizing local innovation drivers based on experimentation with a focus on renewable energy. Crete's national institutions of higher learning, together with regional governments, have efficiently made use of EU structural funds in testing solutions to issues of mobility and sustainable tourism. These, however, are not fairly distributed over the island, which puts Crete in a comparatively weaker location in the strength quadrant compared to Malta.

4.1.2. Opportunities: External Leverage and Emerging Networks

Mallorca holds a unique place in the opportunities quadrant, representing a shift influenced most by factors outside of it. This resonates with regional projects encouraging sustainability and efficient tourism management in the Balearic Islands, with help from established linkages with private sector partners and European networks of urban innovation. Development of digital tourism infrastructure on the island coupled with smart systems of mobility is a prime example of development driven by accessible opportunity, with access to outside funds, and consistency with European Union climate-neutrality targets serving to facilitate sustainable development. Malta also appears to be located here in a similar fashion, with dual capability to stay consistent internally while effectively taking advantage of available external partnerships. This finding supports the hypothesis that

smaller island governments with centralized administration tend to practice greater agility in scaling up pilot endeavors to holistic platforms, pending availability and judicious use of opportunity frameworks like European Union funds or public–private partnerships.

4.1.3. Aspirations: Vision-Driven but Structurally Limited Innovation

In Cyprus, which is in the matrix southwestern part, there is a strong example of policy goals that are clearly stated in discourse but whose effective application is hindered by issues of execution and a lack of coordination between municipalities. Policy goals in Cyprus focus on digital tourism, e-governance, and intelligent transport systems; however, their attainment is hindered by decentralized powers and differences in technical competencies at local governments. Cyprus' strategic value is also highlighted by new projects for information exchange and citizen participation mechanisms. Yet a lack of an overall national planning document for intelligent cities differentiates it from Malta, showing that a strategic vision is not enough without accompanying institutional capacity building and governance mechanisms.

4.1.4. Results: Partial Achievements and Sectoral Outcomes

Both Sicily and Corsica, located in the results quadrant, represent examples of fragmented implementation that have achieved localized accomplishments. Sicily has notably advanced in certain areas, such as open data, managing wastes, and digitizing cultural heritage, especially in urban areas such as Palermo and Catania. Even so, there is no overall regional coherence of these attempts, which affects their scalability and overall performance. Similarly, Corsica follows a similar pattern, with projects addressing eco-mobility and intelligent energy tested on a local organizational setup with national or European Union support. While these projects generate tangible outcomes, these are not properly transferred to sustained governance frameworks, which leads to uneven distribution and reduced overall impact. Although effects become evident, these strategies are made sustainable only by addressing issues of structural fragmentation and horizontal coordination.

4.2. Overton Window Dynamics in Smart City Policy Framing and Acceptance

The Overton Window approach offers a theoretical lens for examining the role of acceptability in public and political opinion in driving the development of smart city innovation in Mediterranean island contexts. This study employs this approach to explore the normative perspective of different technological projects across six different case studies: Malta, Mallorca, Crete, Cyprus, Sicily, and Corsica. Traditionally, the Overton Window has been formulated as a continuum of policy acceptability, ranging from ideas that are socially or politically unimaginable to ideas that have achieved widespread institutional support. In the context of smart city management, this continuum offers an in-depth exploration of the way that innovation is imagined, articulated, and ultimately accepted or rejected by local institutional contexts and broader social–cultural environments.

Figure 3 displays each city's dominant positioning within the Overton Window framework based on triangulated evidence from public discourse, institutional planning, and stakeholder perception. While each city is shown in a distinct category for visual clarity, it is important to emphasize that this typology is heuristic rather than rigid. Some cities displayed characteristics that spanned multiple categories; placement was based on the dominant alignment of narrative framing and perceived public acceptability. Cities were not selected in advance to match individual categories but were mapped according to a post-analysis classification following the methodological pathway described in Section 3.3. Alternative placements were considered and debated where overlaps emerged, and city-specific nuances are discussed in Section 5.

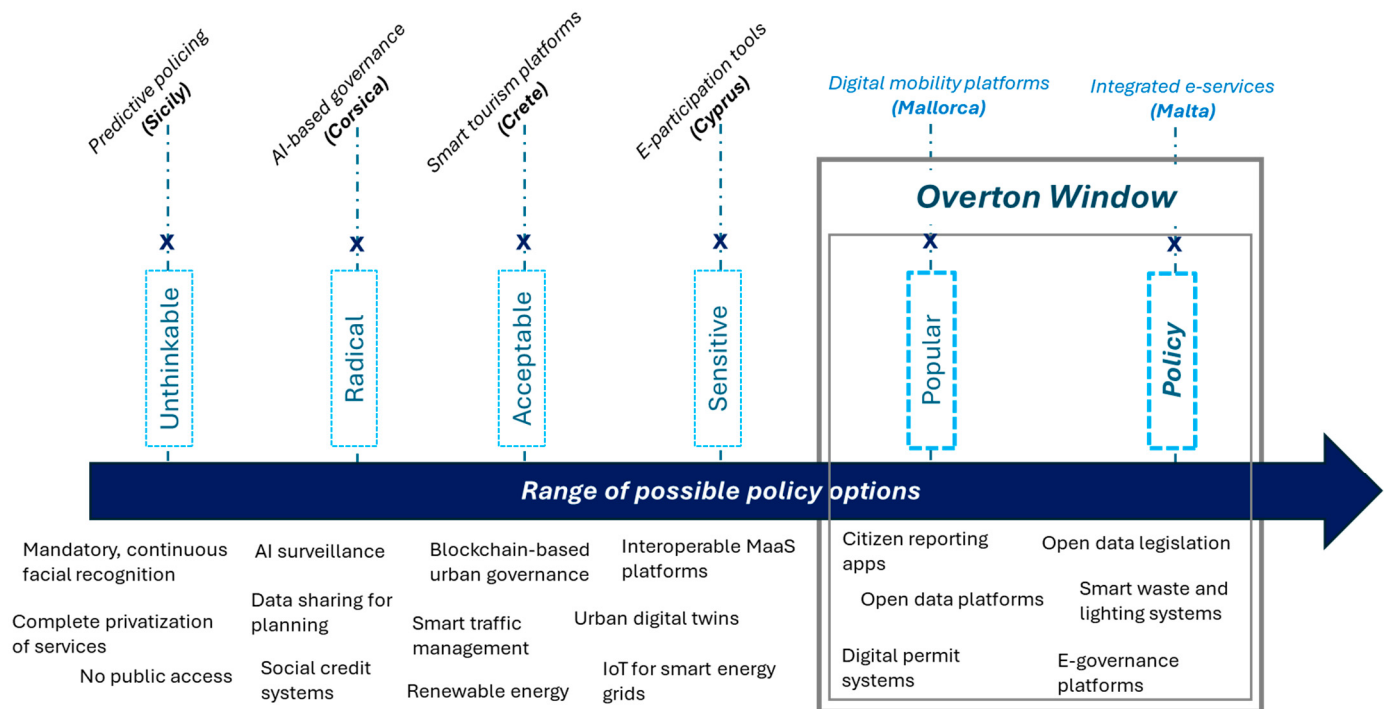


Figure 3. Mapping of smart city innovations across the Overton Window for smart city initiatives. Cities are classified into six normative categories (Unthinkable to Policy) based on triangulated evidence from planning documents, stakeholder consultation, and public discourse. While visually represented as discrete categories, some overlap and ambiguity were acknowledged during analysis, and classification reflects dominant narrative alignment rather than absolute categorization.

Each stage of the Overton Window is marked by a distinct set of characteristics, especially when applied to digital transformation and governance innovation. At the outer boundaries of the window lies the “Unthinkable” step, which is an area where proposals are deemed incompatible with existing values, legal systems, or democratic ideals. These proposals tend to raise ethical issues or elicit popular objections, hence not being appropriate for genuine policy debate. Predictive policing software in Sicily is an example that belongs in this category since surveillance issues, bias, and overreach of state powers have made such proposals unthinkable in popular and political discourses. Moving closer to the center but still at the outskirts is the “Radical” step, which includes proposals that enjoy some academic or technical credibility but no support from institutions and yet remain in a controversial status in politics. Introductions of AI-based systems of decision-making, especially in the context of automation in administration, have appeared in innovation discourses in Corsica but not in mainstream policy due to widespread fear of loss of accountability and transparency.

The ideas that fall under the “Acceptable” stage are recognized to be technically sound and aligned with overall policy goals; however, they are seldom implemented or deeply ingrained. These ideas are usually considered to be deserving of experimental projects or explored on a theoretical level but are faced with severe institutional, infrastructural, or political hurdles. A relevant example of this stage can be seen in Crete’s use of intelligent tourism platforms. While these projects align with sustainability and development priority goals, their overall use is disconnected, not integrated, and not regularly applied by the intended end-users. On the contrary, projects that fall under the “Sensible” paradigm are found to be more mature, widely understood to be relevant, timely, and institutionally approved but not wholly adopted as standard practices. An example of this can be drawn from Cyprus, where digital participation services aimed at enhancing citizen participation

and openness in decision-making are well understood globally and implemented in various municipalities. Yet differences in digital literacy, mixed infrastructures, and poor publicity have prevented their full integration in policy structures.

In the advanced stages of the Overton Window, one finds ideas that have received significant support from both the spheres of society and various institutions. At the “Popular” stage, innovation is not just seen as helpful but is framed as vital by a coalition made up of media, civil society, and private sector stakeholders. These technologies enjoy strong narrative development and are aligned with the day-to-day demands of citizens. Intelligent mobility projects in Mallorca, which encompass a smart portal of transport and meshed mobile apps for tourists, have achieved high credibility, serving both as an effective tool and an attractive element of a modern, efficient city. Finally, projects in the “Policy” window have achieved a point of full institutionalization. These projects are backed by official regulations, specialized funding streams, and integrated strategic frameworks. Malta is a good example, where digital identity management systems, electronic tax returns, and national e-governance systems are not only in place but are also widely accepted as normal means by which citizens interact with their administration.

Identification of unique smart city projects tied to individual phases was underpinned by a mixed-methods approach to evidence gathering. An important part of this was carrying out semi-structured focus groups with tourists in Athens, Greece, a country with a high dependence on tourism, especially with regards to visitors’ experiences on Mediterranean islands. Tourists were selected here as primary subjects in this study based on their critical role in shaping and enjoying services that are openly available, like digital wayfinding, dynamic transport systems, cultural accessibility programs, and environmental management systems. The aim of these focus groups was to clarify understandings of attitudes to smart city services, along with some exploration of the perceived danger, advantages, and bedrock expectations with respect to digital governance. Conversational interviews with these respondents were audio-recorded, transcribed, and coded thematically to identify underlying themes of support, suspicion, or resistance. These qualitative insights were tested through an exploration of policy documents, official smart city reports, media statements, and relevant academic research. Collectively, these sources produced empirical support for assessing the positioning of each initiative in the public sphere, along with each island’s institutional arrangements.

It is in application of the Overton Window that the developments of smart city innovation go beyond technical or administrative issues; instead, they are discursively and politically based. Malta and Mallorca have succeeded in integrating major smart city attributes at the “Popular” and “Policy” levels through design framing, institutional routine, and responsiveness to advocacy, but the same cannot be said for the other islands. While Cyprus and Crete have promising and popularly supported endeavors, these are in need of sustained investment and wider participant buy-in to make further headway in the window. While Corsica and Sicily show that technically appropriate solutions fail to advance under conditions of institutional distrust or innovations that present unresolved ethical issues, it is just these that qualify since, technically, these issues can be resolved.

This dynamic highlights the essential role that strategic framing, inclusive governance, and popular trust play in establishing the acceptability of technological intervention. By situating the innovation of smart cities in the context of the Overton Window, this work underscores the need for local governments not to spend resources only on infrastructure development and capacity building, but also on anticipatory narrative management, nurturing participatory dialogue, and aligning innovations with the existing normative institutions of their respective societies. This process necessarily entails enlarging the range of acceptable innovations, which not only includes policy design but also cultural congru-

ence and democratic legitimacy—all factors that assume greater saliency in the socially heterogeneous and politically volatile environments of Mediterranean island regions.

5. Discussion

The comparative findings drawn from this study, analyzed through a dual lens of SOAR and the Overton Window, clarify changing methods implemented by Mediterranean island communities in their conceptualization, enactment, and legitimization of smart city policies. While each of these cases presents different development paths, there emerge shared issues regarding institutional capacities, citizen participation, and conceptualizations of innovation. Such understandings take on heightened relevance when contrasted with the theoretical model of ‘Ecopolis,’ a concept-dictated but practically drawn-up design of a smart city particularly adapted to respond to Mediterranean tourist islands’ challenges and potentials. The findings presented in Sections 4.1 and 4.2 reveal several consistent patterns across Mediterranean smart city contexts. SOAR analysis showed that while cities such as Athens, Malta, and Crete exhibit clear aspirations for sustainability and innovation, they often lack integrated stakeholder alignment or long-term planning instruments. Overton analysis indicates that certain technologies, particularly AI-based mobility or open data platforms, remain politically feasible but not yet normatively popular. These divergences between strategy and public discourse reveal the central challenge of aligning smart city governance with societal values in complex, tourism-dependent island settings.

The ‘Ecopolis’ concept offers an all-encompassing model for a smart city based on four interrelated pillars: sustainable infrastructure, citizen-centric services, data-driven governance, and economic development. This model reflects rising convergence among academics on the need for systemwide urban innovation over fragmented approaches [6,8]. It highlights that, in this integration, technological, sociopolitical, and ecological aspects must be considered [2]. Features such as intelligent energy grids, multimodal transport plans, and optimized water management systems comply with concepts of green infrastructure [28,30]. ‘Ecopolis’ governance rests on ideals of digital democracy and open government [42], enabled by participation-based platforms and accessible information—partly replicated in Malta and Cyprus. These policies contribute to strengthening transparency levels and boosting citizens’ confidence [7,44]. From an economic point of view, this model supports inclusive development with entrepreneurship-based endeavors, smart tourism, and knowledge-driven innovation—issues of exceptional concern for Mediterranean islands. Its interrelation with EU innovation policies and UNWTO’s (United Nations World Tourism Organization) ambitions for regenerative tourism highlights digital resources’ role in countering visitor effects as well as securing local economies [31,45].

Analysis of the abovementioned case studies explains that most of these examined urban areas demonstrate features consistent with the Ecopolis model; however, a modest number show such integration and long-term strategic coherence that is essential for progressing from sectoral innovation to system-level transformations [46]. Malta and Mallorca represent strong institutionalization of intelligent systems in various fields, i.e., mobility, digital services, and governance. Yet these environments are faced with normative issues and technical weaknesses that hinder their development towards experimental or ethically sensitive themes, e.g., algorithmic governance or surveillance application [47,48]. Crete and Cyprus, on the contrary, are trailblazers with major thematic programs dedicated to digital tourism and civic participation but with no system-level integration expected by the ‘Ecopolis’ model. Meanwhile, Corsica and Sicily show that periphery regions can be hampered by weak institutional trust, disintegrated governance, and citizen distrust, threatening to delay promising technologies’ adoption. These findings highlight that

‘smartness’ is not an inherent feature but derives from relational, conditional aspects influenced by cultural, infrastructural, and political contexts [36].

The empirical basis for these insights was informed not only by strategic document analysis but also by primary qualitative research, including focus group discussions with tourists. Tourists, who are both end-users of smart city services and contributors to local economies, provided critical reflections on public service quality, digital infrastructure usability, and perceptions of urban innovation. Their perspectives validated the centrality of citizen experience in determining the acceptability and perceived legitimacy of smart solutions—particularly in areas like digital wayfinding, multimodal transit, and public Wi-Fi availability. These findings underscore the need for experience-centered design in smart city policy, echoing emerging work in urban HCI and smart tourism [27]. Importantly, the discussion also reaffirms that smart city development is not a discrete, time-bound process, but an evolving continuum of planning, experimentation, and institutional learning. The literature increasingly describes smart city evolution as a form of adaptive governance, where feedback loops, policy recalibration, and civic engagement are critical for sustainability and success [49,50]. This perspective aligns with the ‘Ecopolis’ model, which is predicated on iterative refinement, cross-sectoral alignment, and the integration of predictive analytics to inform resource allocation and infrastructural maintenance.

Mediterranean island cities face distinctive structural and governance challenges. These include fragmented administrative responsibilities, high seasonal population variance due to tourism, aging infrastructure, and constrained resource baselines. Unlike many Northern European cities with institutionalized participatory systems, Mediterranean cities often lack digital maturity and consistent stakeholder pathways. These regional dynamics significantly influence the feasibility, acceptance, and implementation of smart city strategies and require localized governance frameworks that reflect this complexity. Implementation timescales for smart cities vary. Short-term projects, like setting up intelligent systems for waste management or pilot transport projects, can be accomplished in 1 to 3 years. More significant, inter-sectoral projects, such as real-time integration systems or regional transport reforms, will take 3 to 7 years. Systemic changes, like ‘Ecopolis,’ often take longer than a decade. These timescales depend on a range of factors, including the availability of finance, the stability of governments, inter-sectoral collaboration, technological preparedness, and citizen buy-in—all determined by assessments of both SOAR and the Overton Window. Cities located on Mediterranean islands, too, need to improve their ability to engage in multi-level and inter-sectoral collaboration. Successful partnerships between municipalities, national governments, private sector tech companies, and civil society institutions are critical for resource mobilization, technological deployment, and service delivery. Institutionalizing governance systems for such partnerships through innovation councils, digital governance organizations, or regional consortia can help address intersectoral fragmentation and improve accountability. Further, EU resources for joint financial intervention and regional networks offer additional channels to support intersectoral coordination, knowledge exchange, and financial sustainability.

The ‘Ecopolis’ concept proposed here serves as a normative planning model synthesizing insights from the comparative cases. It is grounded in observed patterns from cities such as Malta, Mallorca, and Athens, where citizen participation, digital governance pilots, and environmental priorities co-exist, though often in fragmented forms. The model includes four interrelated pillars: sustainable infrastructure, citizen-centric services, data-driven governance, and inclusive economic development [51]. While not fully implemented in any one location, these dimensions offer a planning template for future interventions.

Digital participation emerged as a key theme in both survey and qualitative data. Respondents valued the potential for participatory platforms to enhance transparency and

responsiveness, but also voiced concerns about accessibility, digital literacy, and institutional follow-through. In this regard, smart city governance must support continuous feedback loops between digital tools and policymaking processes—what the recent literature describes as “cyclical participation” [7,52]. Such mechanisms are particularly vital in tourism-driven settings, where local priorities can shift rapidly in response to seasonal pressures and external investment trends.

In summary, citizen participation must be an integral part of all phases of smart city development, from planning through implementation to evaluation. Structures that facilitate citizen participation, provide open access to information, and promote inclusion programs are fundamental to creating transparency, enabling local communities, and promoting democratic innovation. Citizen participation should move from consultation to joint design and joint delivery of services. This is especially important in island communities with a dependence on tourism that also feel the positives and negatives of urban development. Citizen participation integrated with adaptive policymaking cycles is imperative to ensuring responsiveness, legitimacy, and contextual adaptability in developing smart cities. Ultimately, transitioning Mediterranean islands into smart cities does not require a focus that only addresses technological uptake; it calls for strategic integration, institutional innovation, and citizen empowerment. By using tools like SOAR and the Overton Window for planning, coupled with a long-term, inclusive perspective like ‘Ecopolis,’ urban centers can increase the resilience, equity, and sustainability of their systems.

6. Conclusions

This study examined smart city initiatives’ strategic goals and normative sustainability in Mediterranean island municipalities by using an integrated methodology combining the SOAR and Overton Window frameworks. Field observations in Athens, coupled with comparative analyses in cities like Malta, Mallorca, and Crete, uncovered significant mismatches between public debate and strategic planning processes. Despite many municipalities having ambitions toward sustainability and digital rule, these ambitions are often undermined by fragmented stakeholder participation, low citizen engagement, and variable institutional abilities. Concurrent usage of the SOAR and Overton schemes allowed for the concurrent assessment of internal strategic emergence and external normative legitimacy. The SOAR methodology emphasized both institutional capabilities and aspirational gaps, while the Overton model revealed the role played by societal readiness, discursive frameworks, and political viability in the uptake of technology. Combining these methodologies took theoretical formulation to the ‘Ecopolis’ model, proposed as a normative planning model that is responsive to the Mediterranean reality of governance. These methodologies combine to offer tools to assess smart city initiatives’ sustainability in policy environments against uncertainty or public skepticism.

This study highlights the importance of regional differentiation in strategic planning for smart cities. Island councils in the Mediterranean face singular environmental constraints, complex administrative systems, and seasonally driven economic trends that are not as frequent in many Northern European cities. Engagement by residents, especially via digital platforms, is key as a basis for policy validity; however, its diffusion across the region is uneven. Overcoming these structural and cultural challenges will be central to fostering inclusive and responsive forms of governance in smart cities that win the approval of the residents. Future research should examine how participatory technologies can move beyond being consultative tools to collaborative spaces that redefine the allocation of planning power and build trust among civics. As digital infrastructure matures, smart cities in the Mediterranean must be mindful of ethical implications tied to urban stewardship, even as they concentrate on innovation. In this regard, the smart city concept moves beyond

being an exclusively technical endeavor; it is truly civic in nature—its success depends on how well it addresses the values, needs, and ambitions of the population it seeks to serve.

Author Contributions: Conceptualization, D.D. and A.K.; methodology, D.D.; formal analysis, D.D. and A.K.; investigation, A.K.; resources, D.D. and A.K.; data curation, A.K.; writing—original draft preparation, A.K.; writing—review and editing, D.D. and A.K.; visualization, A.K.; supervision, D.D.; project administration, D.D. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors on request.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Aslam, M.; Abbasi, M.A.K.; Khalid, T.; Shan, R.U.; Ullah, S.; Ahmad, T.; Saeed, S.; Alabbad, D.A.; Ahmad, R. Getting Smarter about Smart Cities: Improving Data Security and Privacy through Compliance. *Sensors* **2022**, *22*, 9338. [\[CrossRef\]](#) [\[PubMed\]](#)
2. Meerow, S.; Newell, J.P.; Stults, M. Defining urban resilience: A review. *Landsc. Urban Plan.* **2016**, *147*, 38–49. [\[CrossRef\]](#)
3. Tsironis, G.; Karagkouni, A.; Dimitriou, D.; Tsagarakis, K.P. Mapping sustainable practices and concepts in the transportation ecosystem for the EU-27 countries, based on LinkedIn company profiles. *Front. Sustain.* **2023**, *4*, 1268575. [\[CrossRef\]](#)
4. Dimitriou, D.; Sartzetaki, M.; Karagkouni, A. *Managing Airport Corporate Performance: Leveraging Business Intelligence and Sustainable Transition*; Elsevier: Amsterdam, The Netherlands, 2024; ISBN 978-0-443-29109-8. [\[CrossRef\]](#)
5. Schaffers, H.; Komninos, N.; Pallot, M.; Trousse, B.; Nilsson, M.; Oliveira, A. *Smart Cities and the Future Internet: Towards Cooperation Frameworks for Open Innovation*; Future Internet Lecture Notes in Computer Science; Springer: Berlin/Heidelberg, Germany, 2011; Volume 6656, pp. 431–446. [\[CrossRef\]](#)
6. Batty, M.; Axhausen, K.W.; Giannotti, F.; Pozdnoukhov, A.; Bazzani, A.; Wachowicz, M.; Ouzounis, G.; Portugali, Y. Smart cities of the future. *Eur. Phys. J. Spec. Top.* **2012**, *214*, 481–518. [\[CrossRef\]](#)
7. Janssen, M.; Charalabidis, Y.; Zuiderwijk, A. Benefits, adoption barriers and myths of open data and open government. *Inf. Syst. Manag.* **2012**, *29*, 258–268. [\[CrossRef\]](#)
8. Angelidou, M. The role of smart city characteristics in the plans of fifteen cities. *J. Urban Technol.* **2017**, *24*, 3–28. [\[CrossRef\]](#)
9. Bertot, J.; Jaeger, P.; Grimes, J. Using ICTS to Create a Culture of Transparency: E-Government and Social Media as Openness and Anti-Corruption Tools for Societies. *Gov. Inf. Q.* **2010**, *27*, 264–271. [\[CrossRef\]](#)
10. Dimitriou, D.; Karagkouni, A. Appraisal of Critical Infrastructure Corporate Performance Upon Sustainability: An Analysis of Impact in National Branding and Welfare. In *Global Developments in Nation Branding and Promotion: Theoretical and Practical Approaches*; Masouras, A., Daskou, S., Pistikou, V., Dimitriou, D., Friesner, T., Eds.; IGI Global: Hershey, PA, USA, 2023; pp. 1–24. [\[CrossRef\]](#)
11. Berardo, R.; Fischer, M.; Hamilton, M. Collaborative Governance and the Challenges of Network-Based Research. *Am. Rev. Public Adm.* **2020**, *50*, 027507402092779. [\[CrossRef\]](#)
12. De Guimarães, J.C.F.; Severo, E.A.; Júnior, L.A.F.; Da Costa, W.P.L.B.; Salmoria, F.T. Governance and quality of life in smart cities: Towards sustainable development goals. *J. Clean. Prod.* **2020**, *253*, 119926. [\[CrossRef\]](#)
13. Caragliu, A.; Del Bo, C. Smart cities and the urban digital divide. *npj Urban Sustain.* **2023**, *3*, 43. [\[CrossRef\]](#)
14. Ansell, C.; Gash, A. Collaborative governance in theory and practice. *J. Public Adm. Res. Theory* **2008**, *18*, 543–571. [\[CrossRef\]](#)
15. Delli Carpini, M.X.; Cook, F.L.; Jacobs, L.R. Public deliberation, discursive participation, and citizen engagement: A review of the empirical literature. *Annu. Rev. Political Sci.* **2004**, *7*, 315–344. [\[CrossRef\]](#)
16. Torfing, J.; Peters, B.G.; Pierre, J.; Sørensen, E. *Interactive Governance: Advancing the Paradigm*; Oxford University Press: Oxford, UK, 2012.
17. O’Leary, R.; Bingham, L.B. *The Collaborative Public Manager: New Ideas for the Twenty-First Century*; Georgetown University Press: Washington, DC, USA, 2009.
18. Huxham, C.; Vangen, S. *Managing to Collaborate: The Theory and Practice of Collaborative Advantage*; Routledge: London, UK, 2005.
19. Dimitriou, D.; Sartzetaki, M. Criticality of a regional airport development to mitigate covid-19 economic effects. *Int. J. Case Stud. Transp. Policy* **2022**, *10*, 581–590. [\[CrossRef\]](#)

20. Huxham, C.; Vangen, S. *Managing to Collaborate*; Taylor & Francis: London, UK, 2013. [CrossRef]
21. European Parliamentary Research Service (EPRS). Social Approach to the Transition to Smart Cities. European Parliament Think Tank. 2023. Available online: [https://www.europarl.europa.eu/RegData/etudes/STUD/2023/737128/EPRS_STU\(2023\)737128_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2023/737128/EPRS_STU(2023)737128_EN.pdf) (accessed on 7 April 2025).
22. Amsterdam Smart City Foundation. Amsterdam Smart City Projects and Strategy. 2022. Available online: <https://amsterdamsmartcity.com/> (accessed on 7 April 2025).
23. Barcelona Smart City Program. Barcelona Digital City: A Program for Smart Urban Transformation. Ajuntament de Barcelona. 2022. Available online: <https://ajuntament.barcelona.cat/digital/en> (accessed on 7 April 2025).
24. City of Stockholm. Smart and Connected City—Stockholm’s Digital Strategy. 2022. Available online: <https://international.stockholm.se/governance/smart-city/> (accessed on 6 April 2025).
25. City of Helsinki. Open Data and Digital Services in Helsinki. 2022. Available online: <https://www.hel.fi/helsinki/en/administration/information/open-data/> (accessed on 6 April 2025).
26. Bakici, T.; Almirall, E.; Wareham, J. A smart city initiative: The case of Barcelona. *J. Knowl. Econ.* **2013**, *4*, 135–148. [CrossRef]
27. Gretzel, U.; Sigala, M.; Xiang, Z.; Koo, C. Smart tourism: Foundations and developments. *Electron. Mark.* **2015**, *25*, 179–188. [CrossRef]
28. European Environment Agency. Urban Sustainability. 2024. Available online: <https://www.eea.europa.eu/en/topics/in-depth/urban-sustainability> (accessed on 7 April 2025).
29. Klijn, E.; Koppenjan, J. Governance Network Theory: Past, Present and Future. *Policy Politics* **2012**, *40*, 587–606. [CrossRef]
30. Kennedy, C.; Pincetl, S.; Bunje, P. The study of urban metabolism and its applications to urban planning and design. *Environ. Pollut.* **2011**, *159*, 1965–1973. [CrossRef]
31. European Commission. Smart Cities Marketplace Annual Report 2021. 2022. Available online: <https://smart-cities-marketplace.ec.europa.eu> (accessed on 7 April 2025).
32. Söderström, O.; Paasche, T.; Klauser, F. Smart cities as corporate storytelling. *City* **2014**, *18*, 307–320. [CrossRef]
33. Stavros, J. The Generative Nature of SOAR: Applications, Results and the New SOAR Profile. *AI Pract.* **2013**, *15*, 7–30. [CrossRef]
34. Nikadambayeva, R. “Overton Window:” Theory. *Eur. Int. J. Philol. Sci.* **2025**, *5*, 11–15. [CrossRef]
35. Russell, N. An Introduction to the Overton Window of Political Possibilities. Mackinac Center for Public Policy. 4 January 2006. Available online: <https://www.mackinac.org/7504> (accessed on 6 April 2025).
36. Shelton, T.; Zook, M.; Wiig, A. The ‘actually existing smart city’. *Camb. J. Reg. Econ. Soc.* **2014**, *8*, 13–25. [CrossRef]
37. O’Leary, R.; Choi, J.; Kim, C. The skill set of the successful collaborator. *Public Adm. Rev.* **2012**, *72* (Suppl. S1), S70–S83. [CrossRef]
38. Putnam, R.D. *Bowling Alone: The Collapse and Revival of American Community*; Simon & Schuster: New York, NY, USA, 2000.
39. Sartzetaki, M.; Karagkouni, A.; Dimitriou, D. A Conceptual Framework for Developing Intelligent Services (a Platform) for Transport Enterprises: The Designation of Key Drivers for Action. *Electronics* **2023**, *12*, 4690. [CrossRef]
40. Huxham, C.; Vangen, S. Ambiguity, Complexity and Dynamics In The Membership Of Collaboration. *Hum. Relat.* **2000**, *53*, 771–806. [CrossRef]
41. Charmaz, K. *Constructing Grounded Theory*, 2nd ed.; SAGE Publications: Thousand Oaks, CA, USA, 2014.
42. Nam, T.; Pardo, T.A. Conceptualizing smart city with dimensions of technology, people, and institutions. In Proceedings of the 12th Annual Digital Government Research Conference, College Park, MD, USA, 12–15 June 2011; pp. 282–291. [CrossRef]
43. Milenkovic, M.; Rašić, M.; Vojkovic, G. Using Public Private Partnership models in smart cities—Proposal for Croatia. In Proceedings of the 2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), Opatija, Croatia, 22–26 May 2017; pp. 1412–1417. [CrossRef]
44. Kitchin, R. The real-time city? Big data and smart urbanism. *GeoJournal* **2014**, *79*, 1–14. [CrossRef]
45. UNWTO. Tourism for Inclusive Growth. United Nations World Tourism Organization. 2021. Available online: <https://www.unwto.org/news/world-tourism-day-2021-inclusive-growth-at-the-centre-of-tourism-s-restart> (accessed on 7 April 2025).
46. Tjallingii, S. *Ecopolis: Strategies for Ecologically Sound Urban Development*; Backhuys Publishers: Leiden, The Netherlands, 1995.
47. Ignatieva, M. Ecopolis—Towards the Holistic City: Lessons in Integration from Throughout the World. 2000. Available online: https://www.researchgate.net/publication/27814153_Ecopolis_-_towards_the_holistic_city_lessons_in_integration_from_throughout_the_world (accessed on 6 April 2025).
48. White, G.; Samuel, A.; Peattie, K.; Doherty, B. Reconciling Social Enterprise: Beyond the paradox perspective. *Int. J. Entrep. Behav. Res.* 2021; ahead-of-print. [CrossRef]
49. Restrepo, C.E. Ecopolis: Architecture and Cities for a Changing Climate. *J. Am. Plan. Assoc.* **2009**, *76*, 128–129. [CrossRef]
50. Dimitriou, D.; Sartzetaki, M.; Karagkouni, A. Airport Landside Area Planning: An Activity-Based Methodology for Seasonal Airports. *Transp. Res. Procedia* **2025**, *82*, 1167–1184. [CrossRef]

-
51. Bibri, S.; Krogstie, J. Smart Sustainable Cities of the Future: An Extensive Interdisciplinary Literature Review. *Sustain. Cities Soc.* **2017**, *31*, 183–212. [[CrossRef](#)]
 52. Jarke, J. *Co-Creating Digital Public Services*; Springer: Berlin/Heidelberg, Germany, 2020. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.