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ARTICLE

Integrating Local Culture in Smart City

'Sombere' Based Governance Collaboration in Makassar City, Indonesia

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Abstract: This research aims to examine the integration of local culture in a smart city. The novelty of this research introduces the concept of a Culturally Integrated Smart City, which emphasizes the importance of integrating the Smart City technology framework with local cultural values so that the development of smart cities becomes more inclusive, sustainable, and rooted in local wisdom. The research used a descriptive qualitative. The main data source in this research was obtained from informants. The initial informants were selected purposefully: people who understand problems in collaborative governance and smart cities. The research found that effective communication through face-to-face dialogue in development planning provides space for the community to convey aspirations, which become part of government policy. In addition, building trust between the government and the community has proven crucial in managing Smart City initiatives, especially in developing technological infrastructure such as CCTV surveillance systems and tourist alley revitalization programs. The commitment of local governments, the private sector, and active community participation in every stage of the implementation of the Sombere-based Smart City in Makassar reflects solid collaboration based on local cultural values. The limitations of this research emphasize the aspects of collaboration and cultural integration in Smart Cities but have not discussed in depth the technical and economic aspects that also affect the sustainability of Smart City.

Keywords: Collaborative Governance; Smart City; Local Government; Sombere; Culture Integrated Technology.

1. Introduction

Local governments in Indonesia have been granted extensive autonomy by the central government, allowing them to manage their territories according to local needs under the principle of decentralization. This authority is crucial for ensuring that public services are provided more efficiently and closer to the people, thus enhancing the quality of life and promoting prosperity. By delegating authority to local governments, the objective is to shorten bureaucratic processes and facilitate faster, more responsive public service delivery, particularly in urban settings where the demands for services are higher and more complex.

Smart cities leverage advanced information and communication technologies (ICT) to improve urban life and management (Bawany et al., 2015). These initiatives aim to integrate various city services, improving citizens' efficiency and quality of life (Gracias et al., 2023). In Indonesia, smart city applications have proven useful during the COVID-19 pandemic, enabling remote access to public services and promoting digital literacy (Rachmawati et al., 2021). Smart cities offer a promising solution for urban development, potentially revolutionizing areas such as transportation, energy management, and public safety. To fully realize the benefits of smart cities, it is essential to promote collaboration across the private, public, and government sectors (Gracias et al., 2023).

Smart city implementations face several challenges, including information security risks, privacy concerns, system incompatibility, and digital skills gaps among citizens (Balfaqih & Alharbi, 2022). Another challenge concerns the misconception that Smart Cities are purely ICT projects. Many local governments fall into the trap of equating Smart City development with ICT procurement or infrastructure projects without understanding the broader implications of transforming work cultures and governance processes (Wahyudi et al., 2022). Furthermore, there is a common assumption that Smart Cities cannot be realized without sufficient budget allocation from local government budgets. This mindset ignores the important role of innovation, collaboration, and governance in driving the Smart City agenda. Furthermore, there are practical issues such as uneven distribution of ICT infrastructure, lack of technical expertise, and inadequate commitment from local leaders, all of which hinder the effective implementation of Smart City programs (Wismabrata, 2022).

Given the complexity of Smart City implementation, it is unrealistic to expect local governments to achieve this alone. Collaborative governance is essential for success. Emerson and Nabatchi (2015), define collaborative governance as a process and structure for decision-making and public policy management involving multiple stakeholders from different sectors—public institutions, government agencies, private entities, and civil society organizations. These diverse groups work together across institutional and sectoral boundaries to achieve public objectives that cannot be realized by any single entity acting alone. In the smart city concept, collaborative governance is crucial as it enables the pooling of resources, expertise, and legitimacy, thereby enhancing the capacity to address urban challenges effectively (Abramson, 2013; Donahue & Zeckhauser, 2011).

The local government has strongly committed to this initiative in Makassar, a pioneering city in Smart City development. During a presentation on the evaluation of the 100 Smart City Movement, the Mayor of Makassar outlined several regulations that support the implementation of 'Makassar Sombere' and Smart City. Among these are Makassar Mayor Regulation Number 84 of 2022, which governs the implementation of an electronic-based government system, and Makassar Mayor

Regulation 92 of 2022, which pertains to integrating data at the regional level under the "One Indonesian Data" initiative. Academic papers and draft regulations on Sombere' and Smart City have also been developed to provide a legal framework for the city's transformation into a smart, culturally-rooted urban center.

The idea of Smart City governance in Makassar is unique, as it combines technological sophistication with local cultural wisdom. The Sombere' concept, which emphasizes friendliness, hospitality, and human warmth, is deeply rooted in the Bugis-Makassar ethnic culture. Sombere' represents the "heartware" of Makassar's Smart City initiative, while the technology—hardware and software—forms the infrastructure supporting it (Negara, 2021). This cultural and technological blend aims to create a city that is not only intelligent but also compassionate, fostering an environment where both residents and tourists feel welcome and engaged.

Makassar's vision for Smart City development encompasses six main pillars: smart government, smart branding, smart society, smart living, smart environment, and smart economy. These are further broken down into 117 specific programs. Despite the ambitious scope of the Smart City agenda, progress has been uneven. A self-assessment conducted in 2022 revealed that not all programs have been successfully implemented. In particular, six programs under smart government, smart branding, smart society, and smart living have yet to be realized. Similarly, five programs under the smart environment category and four in the smart economy category are still pending. Nevertheless, there has been steady progress overall, with an increase of 5% in the implementation rate from 2021 to 2022, though data from 2020 remains incomplete and will be collected through further field research.

The challenges encountered in Makassar's Smart City development underscore the importance of collaborative governance. According to Ansell and Gash (2007), collaborative governance involves the active participation of non-state actors in formal, consensus-based decision-making processes. These actors include private companies, civil society organizations, and community representatives, all of whom contribute their expertise and perspectives to ensure that public policies align with the needs and aspirations of the broader community. In the Smart City development, engaging in the community is particularly important, as it ensures that policies are responsive to local conditions and that residents feel a sense of ownership over the changes taking place.

In addition to community participation, collaborative governance requires coordination between government agencies (Utami et al., 2022). Effective coordination ensures that Smart City programs are implemented in a cohesive and integrated manner, preventing duplication of efforts and maximizing resource efficiency. Moreover, collaborative governance enhances transparency and accountability, as multiple stakeholders are involved in monitoring and evaluating the progress of Smart City initiatives (Wahyuni et al., 2021). This level of openness builds trust between the government and the public, essential for sustaining long-term support for Smart City projects.

Smart City management, as highlighted by Meijer and Bolívar (2015), is a multifaceted concept that requires collaboration, technological integration, and active community involvement. A Smart City is about deploying technology and creating a more efficient, inclusive, and livable urban environment. By working together, local governments, private companies, and civil society can overcome urbanization's challenges and create smarter and more resilient cities. Previous studies show that collaboration between government entities is vital for the success

of Smart Cities (Amir, 2022; Nam & Pardo, 2011; Triyanto et al., 2022). Collaboration enhances the efficiency of public services, improves the quality of life for residents, and contributes to the sustainability of urban development. Based on the description above, the main focus of the research is to explore how government collaboration based on local cultural values can strengthen Smart City initiatives, increase community participation, and ensure the sustainability of more inclusive city development rooted in local wisdom.

2. Methods

In this study, the researcher employs a descriptive qualitative method, which focuses on understanding phenomena through the in-depth exploration of informants' perspectives. The method is used to explore the informants' in-depth perspectives regarding the collaboration of Smart City governance based on Sombere's culture. With this approach, the research can capture social nuances, cultural values, and factors that influence the success of cultural integration in smart city policies. This approach is more flexible in capturing social dynamics and interactions between actors when applying the culture-based Smart City concept. The primary data source consists of informants with substantial knowledge of Collaborative Governance and Smart City initiatives. These initial informants are selected purposively, a sampling technique where individuals are chosen based on their expertise or involvement in the subject matter (Siyoto & Sodik, 2015). Key informants in this research include government officials such as regional secretaries, department heads, entrepreneurs involved in smart city projects, and local community leaders who actively participate in collaborative efforts.

To ensure a comprehensive understanding, the researcher applies snowball sampling, a technique that allows for identifying additional informants through recommendations from the initial respondents. This method is particularly valuable in capturing diverse perspectives, as information flows progressively from one participant to another, ensuring that a broader range of insights and experiences related to implementing Collaborative Governance are included. According to Naderifar et al. (2017), snowball sampling is effective in accessing hidden populations and gathering a wide range of knowledge from individuals deeply embedded in specific networks.

In the data collection process, maintaining the validity and reliability of the information is critical. This requires rigorous and systematic monitoring throughout the study to ensure that the data accurately reflects the phenomena being investigated. As Cypress (2017) points out, validity in qualitative research depends on the careful application of data collection and analysis procedures that strengthen the credibility and dependability of the findings.

Multiple data collection techniques are utilized to achieve a rich dataset, including in-depth interviews, field observations, and the examination of documentation such as reports, meeting minutes, and relevant policy documents. Interviews allow for gathering detailed personal experiences and providing insights into participants' thoughts, attitudes, and behaviors in collaborative governance. As Kallio et al. (2016) suggest, well-structured interviews can uncover in-depth information and clarify complex issues, making them valuable qualitative research tools. Observations capture the contextual realities of collaborative practices in the Smart City framework, while documentation further complements the data by providing official records that support and validate the findings. According to Bowen (2009),

document analysis is an efficient, cost-effective method that adds depth to qualitative data by reviewing formal records.

For data analysis, the researcher follows the framework [Miles et al. \(2020\)](#) proposed, which involves three key steps: data reduction, data presentation, and conclusion drawing. In data reduction, irrelevant or redundant information is filtered out, leaving only essential data. This data is then presented in a structured manner, allowing for clearer interpretation. Finally, the researcher draws conclusions based on the analyzed data, providing insights into the dynamics of Collaborative Governance within the Smart City initiative.

3. Results and Discussion

Collaborative governance enables close collaboration between government, the private sector, and society in developing policies, planning projects, and making decisions that impact city development. By involving various stakeholders, including local communities, collaborative governance helps ensure that every action taken supports Makassar Sombere's vision and Smart City. This means that collaboration between parties is one of the main foundations in realizing this smart city, and to achieve success, all parties must unite in this effort.

The results of this research are described based on the collaborative government concept of [Ansell and Gash \(2007\)](#). The discussion of the research results is explained by referring to the dimensions of Face-to-Face Dialogue, Building Trust, Commitment to the Process, Mutual Understanding, and Intermediate Results in the implementation of smart cities in Makassar.

3.1. Face to Face Dialogue

The collaboration process in implementing public programs, such as the alley revitalization initiative in Makassar, underscores the importance of effective communication as a fundamental element for building mutual understanding among stakeholders. In collaborative governance, particularly at the local level, face-to-face dialogue between government representatives and the community is critical in bridging the gap between policy formulation and community needs. This interaction is typically facilitated through *Musrenbang* (community development planning meetings) and annual evaluations, where citizens are encouraged to express their aspirations and concerns. These aspirations are considered during policy formulation, reflecting a participatory governance model that values community input.

Based on the results of the interview with Assistant III for General Administration of the Makassar City Government, Mr. H. Muhammad Mario Said explained that "The collaborative governance process in realizing Makassar Sombere' and Smart City in Makassar City can be seen from the face-to-face dialogue between all stakeholders or related parties in the framework of Sombere and Smart City negotiations in Makassar City. In this dialogue, various parties can convey their aspirations and views related to the programs to be implemented."

In addition to these formal meetings, various forums, such as workshops and public discussions, foster communication and dialogue between the government and the public. These forums are essential in ensuring that communication is two-way: the government disseminates information and actively listens to the community's input. Such exchanges ensure that the policies developed are more attuned to the local context and address the needs of the residents. A notable example is the Tourist Hallway initiative in Borong Village, Manggala District, where the Makassar

Local Representative Council collaborated with the local community to discuss tourism development. The impact of this initiative on residents was a key consideration, ensuring that local voices informed government action, thus enhancing the relevance and sustainability of the project.

For collaboration to succeed, communication must be carefully managed, particularly in face-to-face dialogues, to ensure stakeholders reach a mutual understanding and align their efforts toward shared goals. According to [Ansell and Gash \(2007\)](#), the success of collaborative governance relies heavily on the quality of communication, as it fosters trust, mitigates conflicts, and promotes cooperation. In the alley revitalization and tourism development initiatives in Makassar, this careful communication management ensures that community members remain active participants in decision-making, particularly in initiatives that directly affect their welfare. For example, tourism development around the Somerset Tourism Hallway is shaped by continuous input from the community, leading to more inclusive and effective outcomes that reflect the community's aspirations and enhance public trust in the government's responsiveness.

3.2. Trust Building

Building trust is a crucial foundation for fostering strong and sustainable collaboration, especially in the Smart City development in Makassar. Trust-building is a time-intensive process that requires open communication, concrete actions, and a firm commitment from all parties involved. In many cases, particularly where there has been historical distrust or prior conflicts, building or repairing trust demands significant effort and patience. According to [Bachmann and Zaheer \(2013\)](#), trust is essential in collaborative governance because it mitigates inherent uncertainties and risks in joint endeavors. In the case of Makassar's "Sombere' Smart City" initiative, trust between the government, local communities, and other stakeholders is indispensable to ensure the successful implementation of programs that affect both urban development and residents' quality of life.

Trust in this process is nurtured through continuous dialogue and collaboration among various actors, including government agencies, local organizations, and the private sector. For instance, the Makassar police, transportation department, and Communications and Information Service work together, particularly in managing CCTV systems in public areas. These surveillance systems, particularly in tourist corridors, are co-managed by local communities and youth groups, embedding a sense of ownership and responsibility at the grassroots level. This type of collaboration reinforces public safety while supporting broader initiatives such as food security programs.

Moreover, the establishment of 1,096 tourist hallways contributes to public safety and has a profound impact on the city's economic growth and stability. Based on the results of an interview with the Head of the Code Division of the Makassar Communication and Information Service, Abram Lululangi, he explained that "Between 2022 and 2023, economic growth in Makassar increased from 4.47 percent to 5.40 percent, largely due to these collaborative initiatives that stimulated local commerce and tourism. Furthermore, these efforts contributed to inflation control, dropping from 5.99 percent in November 2022 to 5.72 percent by February 2023." These tangible outcomes underscore the importance of trust as a cornerstone of effective collaboration—without trust, the alignment of goals and coordination of actions between stakeholders would be significantly hampered. The social and economic benefits stemming from such collaborations demonstrate how

trust enhances not only interpersonal relationships but also the overall development trajectory of the city.

In addition to local collaborations, Makassar's partnerships with international companies play a pivotal role in the city's smart infrastructure development. For example, the city's collaboration with Nippon Koei and Oriental Consultants Global, two renowned Japanese firms, exemplifies a strong commitment to implementing advanced smart city infrastructure. A key initiative emerging from this partnership is the extensive toll road project, which incorporates Japanese technology as a foundation for further infrastructure enhancements. This partnership showcases how trust and synergy between local stakeholders and international partners can significantly contribute to achieving the broader Smart City vision.

The collaboration between local governments, international companies, and local communities illustrates the multifaceted nature of trust-based partnerships in urban development. According to [Ansell and Gash \(2007\)](#), collaborative governance thrives on mutual trust and reciprocity, which are necessary to align diverse interests and create a unified effort toward shared goals. In Makassar's case, trust is not merely a byproduct of collaboration but a strategic asset that drives the success of long-term development projects. By fostering trust across various levels—government, community, and international stakeholders—the city can ensure that its sustainable development goals are achieved through cooperative and coordinated efforts. Thus, the Makassar Smart City initiative is a prime example of how trust plays a pivotal role in facilitating not just infrastructure development but also social and economic progress.

3.3. Commitment to Process

Stakeholder commitment in the collaborative process of implementing Smart City in Makassar City is an important element that influences the success of this initiative. This commitment refers to the willingness and determination of the various parties involved, including the government, private sector, and society, including, he said, to work together to achieve common goals related to Smart City development in Makassar City.

Stakeholder commitment in the collaboration process regarding the smart city in Makassar can be seen from various aspects, including:

3.3.1. Local Government of Makassar

The Local Government of Makassar has strongly committed to developing the smart city concept. This is clearly shown in their vision and mission announcement: "Making Makassar a world city that is comfortable for its entire population." The city government has taken concrete steps to make this vision a reality, starting with preparing policy regulations as follows:

- a. Regional Regulation Number 1 of 2019 concerning the Medium-Term Development Plan for South Sulawesi Province for 2018-2023;
- b. Makassar City Local Regulation Number 5 of 2021 concerning Regional Medium-Term Development Plans for 2021-2026;
- c. Makassar Mayor Regulation Number 5 of 2021 concerning Makassar Recovery;
- d. Makassar Mayor Regulation Number 55 of 2021 concerning Determination of Regional Apparatus Strategy Plans for 2021-2026.

Apart from that, other steps include forming a forum called Makassar Sombere' Smart City, which involves various parties, including the government, the private sector, the academic world, and the wider community. This forum functions as a platform for discussion, sharing ideas, and looking for innovative solutions that can support the development of Makassar as a smart city.

3.3.2. Private Sector Involvement

The private sector plays a pivotal role in developing and successfully implementing the Smart City concept in Makassar, significantly contributing through strategic partnerships with the local government. These collaborations encompass critical urban services, including IT-based public transportation systems, waste management, and city security, benefiting from the private sector's investment in technology and expertise. By involving private enterprises in these areas, the city gains access to cutting-edge technology and enhances its ability to deliver public services more efficiently. This partnership model aligns with global trends, where public-private collaborations are increasingly recognized as key urban innovation and sustainability drivers.

The Head of the Makassar City Trade Service, Arlin Ariesta, said in the FGD in the Assistant III Room for General Administration of Makassar City that "A notable example is the partnership with Japanese companies, which has introduced advanced technology, global experience, and innovation into Makassar's smart city initiatives. Japanese firms such as Nippon Koei and Oriental Consultants Global have contributed to developing vital infrastructure projects, such as intelligent transportation systems and smart surveillance networks, significantly improving the city's urban management capabilities."

The inclusion of foreign expertise not only enriches the city's approach to Smart City development but also provides a foundation for the city to adopt best practices from international experiences, ensuring that Makassar remains competitive and forward-thinking in its urban planning strategies. Private sector involvement is not limited to technology transfer; it provides essential financial resources and technical infrastructure. These contributions are crucial in accelerating the city's transformation into a fully realized Smart City. Private companies are motivated by the potential for business growth and new market opportunities that come with investing in digital infrastructure and innovative applications. Their participation underscores the mutual benefits of public-private partnerships, where businesses profit from new avenues for investment while the city gains from enhanced urban efficiency and sustainability.

The private sector's commitment to Smart City development in Makassar reflects a broader collaborative effort to address urban challenges through technology-driven solutions. This synergy between government and business demonstrates the importance of cross-sector collaboration in fostering innovation and ensuring that smart city projects are economically viable and socially beneficial. By leveraging private investment and expertise, Makassar is better positioned to achieve its vision of becoming a more efficient, sustainable, and livable city for its residents.

3.3.3. Society Participation

Active community participation is crucial to the success of smart city development in Makassar. The local government has strongly committed to involving residents in planning and collaboration through surveys, public discussions, and training programs. The community actively contributes to various forums and initiatives to

enhance the quality of life, such as revitalizing alleyways, resilient village programs, and smart city management efforts. In this process, the community provides input and drives key decisions, ensuring their aspirations are incorporated into the city's development agenda.

This active involvement offers valuable resources to the Makassar government, aligning smart city programs with the needs and expectations of the citizens. Integrating the community in decision-making makes policies more responsive and grounded in local realities. The strong participation and commitment of residents in these governance efforts reflect the collaborative spirit among stakeholders, working together to build a smarter, more sustainable, and inclusive city.

3.3.4. Academics

Historians play a crucial role in supporting the Smart City initiative in Makassar through their intellectual contributions, research, and innovation. Their involvement extends beyond providing insights into the Smart City concept, as they actively participate in developing strategies and technologies that advance the city's transformation. This reflects their deep commitment to fostering Makassar's progress toward becoming a smart city.

Students also contribute significantly by engaging in various activities such as dialogues, workshops, and seminars related to Smart City development. Their participation facilitates the exchange of ideas and fosters collaboration between historians, the government, the private sector, and the community. Through their knowledge and research, these students help equip Makassar with the intellectual resources needed to create a smarter, more efficient, sustainable urban environment.

The firm commitment of the Makassar government to advancing the Smart City concept is evident in its prioritization of creating a comfortable and high-quality environment for all residents. The Makassar Sombere' Smart City forum, which brings together local government, the private sector, educational institutions, and the public, exemplifies an inclusive approach to fostering collaboration. This forum serves as a platform for generating innovative solutions and ideas, highlighting the government's dedication to transforming Makassar into a smarter, more efficient, and livable city for all its citizens.

3.4. Shared Understanding

In collaborative governance for smart city development, all stakeholders must cultivate a uniform understanding of the concept. A shared vision enables the diverse actors involved—government, the private sector, civil society, and other stakeholders—to align their efforts and work toward common objectives. This shared understanding is not merely about agreeing on goals but also about ensuring that all parties equally benefit from the outcomes of smart city initiatives. According to [Ansell and Gash \(2007\)](#), the success of collaborative governance hinges on developing a collective vision that reflects the interests and expectations of all stakeholders, which in turn fosters a sense of ownership and commitment to the process.

Based on the results of the interview with the Acting Head of the Makassar City Communication and Information Service, Mrs. Ismawaty Nur, St. M.Sc, explained that “the crime rate is still high, and the environmental quality is still poor. The Makassar City Government, the community, the private sector, and academics have agreed to realize a smart, characterful, and environmentally aware Makassar City,

and it has been agreed to uphold the values of togetherness, family, and local wisdom in realizing Makassar Smart City and Sombere are local values.”

Achieving such unity of purpose requires coordinated efforts, particularly by establishing forums or working groups where stakeholders can regularly exchange ideas, insights, and experiences. These platforms promote continuous dialogue and foster collaborative problem-solving, essential in adapting smart city strategies to the community’s evolving needs. In the case of Makassar’s Smart City initiative, these forums allow diverse stakeholders to contribute to shaping policies, ensuring that the city’s transformation is not driven solely by government or private interests but is a truly participatory process.

A strong, unified framework of thinking, strategy, and action is critical to the success and sustainability of smart city initiatives. Developing policy documents and strategic plans incorporating multistakeholder input ensures that all voices are heard, resulting in a more inclusive and comprehensive approach. Such inclusivity strengthens the legitimacy and relevance of the strategies, as a broad range informs them of perspectives. According to [Ostrom \(2010\)](#), inclusive policy-making in collaborative governance is essential for long-term success, as it leads to policies that are more attuned to the needs of various groups and ensures fair distribution of the benefits.

Makassar’s Smart City initiatives can be executed more efficiently and equitably by involving stakeholders from diverse sectors and incorporating their input into the planning and policy development process. This approach not only enhances the effectiveness of the transformation but also ensures that the benefits are widely shared, contributing to a more resilient and inclusive urban future.

3.5. Intermediate Outcomes

Intermediate Outcomes arising from a series of Collaborative Governance steps in the smart city development process in Makassar should provide several positive benefits to all parties involved in this effort. This may manifest as a clearer understanding of the issues or problems that may arise in the context of smart cities, the ability to manage conflict more effectively, and increased levels of trust and mutual trust among stakeholders. These Intermediate Outcomes have had a positive impact on the people of Makassar. This can be seen from the increase in community satisfaction with the development. The Makassar Tourist Hallway Program was selected as the Outstanding Award for Integrated Initiative category winner at the 2023 Indonesia Award. Some intermediate results that have been achieved in Makassar Sombere and Smart City are:

- a. The hallway revitalization program has succeeded in improving the cleanliness and beauty of alleys in Makassar.
- b. The Dottoro’ta program allows residents to receive fast and comprehensive health services in remote, rural, and slum areas.
- c. The Resilient Village program has succeeded in improving community security and comfort in several areas in Makassar.
- d. The smart city governance program has succeeded in increasing the transparency and accountability of Makassar.

Collaborative governance in Makassar’s Sombere and Smart City initiative has led to significant improvements in decision-making processes, the integration of diverse knowledge, and increased legitimacy in collaborative efforts. The government has involved various stakeholders, including the public, private sector, and historians, in

joint fact-finding efforts to better understand Makassar's challenges and determine appropriate strategies. This approach not only clarifies complex or ambiguous issues but also fosters cooperation in identifying problems and formulating solutions, ultimately leading to more effective conflict management and a unified strategy for the city's development.

3.6. Discussion

The development of Makassar as a Smart City under the "Sombere" concept represents an innovative fusion of local cultural values and modern technological advancements. Derived from the Bugis-Makassar language, "Sombere" embodies values such as friendliness, empathy, and hospitality, deeply embedded in the local community's social fabric. Integrating this cultural concept into Makassar's Smart City framework demonstrates the city's commitment to preserving cultural heritage while advancing technologically. This approach reflects the emerging trend in urban governance, where cities increasingly seek to balance technological progress with the need to maintain social cohesion and cultural identity.

The "Sombere" Smart City concept is operationalized through a collaborative governance model that engages a wide array of stakeholders, including government bodies, the private sector, local communities, and academia. By fostering an inclusive, cooperative environment, this model ensures that multiple perspectives are considered in decision-making processes, which is critical for the sustainability and acceptance of smart city initiatives. According to [Ansell and Gash \(2007\)](#), collaborative governance is particularly effective in contexts where diverse interests must be aligned toward common goals. In Makassar, this framework enables stakeholders to work collectively to improve the city's infrastructure, service delivery, and overall quality of life, ensuring that technological advancements serve the needs of the people.

Moreover, integrating local cultural values into a Smart City framework aligns with recent scholarly discourse emphasizing the importance of contextualizing technological innovations within local socio-cultural environments. This approach enhances the social legitimacy of smart city projects and encourages greater community involvement, as residents are more likely to support initiatives that resonate with their cultural identity.

The private sector's involvement is equally crucial, as it provides the technological expertise and financial resources necessary for implementing advanced urban management systems, such as IT-based transportation and surveillance infrastructure. Public-private partnerships play a crucial role in smart city development, offering technological expertise, financial resources, and innovation ([Lende & Ambadkar, 2024](#); [Pianezzi et al., 2023](#)). While smart city initiatives often prioritize technology, there is a need to balance this with cultural preservation and social inclusivity ([Allam & Newman, 2018](#)).

The public-private collaboration, supported by local academia, ensures that the city's smart city projects are technologically sound, socially inclusive, and culturally appropriate. Successful smart city projects should focus on urban outcomes rather than technology alone, incorporating dimensions of culture, metabolism, and governance ([Allam & Newman, 2018](#)). In this way, the "Sombere" Smart City initiative serves as a model for other cities seeking to balance cultural preservation with technological innovation.

One of the essential elements of collaborative governance is face-to-face dialogue, which facilitates effective communication and builds mutual

understanding among stakeholders. In Makassar, this dialogue is evident in initiatives such as the alley revitalization project, where community members actively engage in discussions about urban development. An example is the “Tourist Hallway” initiative, which highlights the importance of dialogue in addressing tourism-related issues in Borong Village. This open communication strengthens decision-making and ensures that local communities remain central to the development process. This aligns with the theory of participatory governance, which posits that involving citizens in decision-making leads to more effective and democratic outcomes (Fung & Wright, 2001).

However, while face-to-face dialogue is a crucial element of collaborative governance, it is also time-intensive and requires sustained effort from all stakeholders. Some scholars argue that this process may become inefficient in large-scale urban projects if not managed properly (Purdy, 2012). Despite these challenges, Makassar's consistent engagement with its citizens demonstrates a commitment to incorporating diverse perspectives in its Smart City vision.

Trust-building is essential in fostering sustainable collaboration, particularly in contexts with historical distrust or stakeholder conflicts. In the case of Makassar, trust has been nurtured through continuous dialogue and the successful implementation of collaborative initiatives. For example, establishing CCTV systems in public areas managed by community groups demonstrates how shared responsibilities can build trust among government agencies, citizens, and the private sector. Partnerships with international companies, such as Nippon Koei and Oriental Consultants Global, further strengthen trust between local and global stakeholders.

Nonetheless, scholars have criticized the overreliance on trust in collaborative governance, arguing that it may overlook power imbalances between stakeholders (Ansell & Gash, 2007). In Makassar's case, the involvement of powerful private sector actors in infrastructure projects could potentially overshadow the voices of local communities. Therefore, ensuring that trust-building efforts remain inclusive and equitable is crucial.

Commitment to the process is another critical dimension of collaborative governance. In Makassar, this commitment is demonstrated by the local government's strong vision for the Smart City, as outlined in several key regulations, including the Regional Medium-Term Development Plans (2021-2026). These policy frameworks lay the foundation for long-term government, private sector, and citizen collaboration.

Private sector involvement has been significant in advancing Smart City initiatives, with companies contributing technological infrastructure, financial resources, and expertise. However, this raises concerns about the privatization of public services, which may limit accessibility for certain groups (Bovaird, 2007). Thus, while private sector participation is crucial for the success of Smart City projects, it is important to balance this with public interests to ensure that Smart City initiatives benefit all residents.

Additionally, the active participation of the local community in various forums, such as those related to alleyway revitalization and resilient village programs, highlights the importance of citizen engagement in the collaborative process. Scholars argue that community participation enhances the legitimacy of governance processes and ensures that policies reflect local needs (Cornwall & Gaventa, 2001). However, the challenge remains to ensure that this participation is not tokenistic but genuinely influences decision-making.

A shared understanding among stakeholders is crucial for the success of collaborative governance. This shared understanding is reflected in policy documents and strategic plans that incorporate input from various parties, ensuring that Smart City initiatives align with the diverse interests of stakeholders.

Intermediate outcomes, such as the improvement of alleyway cleanliness and the success of the Dottoro'ta program, demonstrate the tangible benefits of collaborative governance in Makassar. The recognition of Makassar's Tourist Hallway Program at the 2023 Indonesia Award further underscores the positive impact of collaborative efforts on the city's development. However, the focus on intermediate outcomes should not detract from long-term sustainability. Critics argue that short-term successes may overshadow deeper systemic issues that require sustained collaboration (Huxham & Vangen, 2013). Therefore, ensuring that the achievements in Makassar's Smart City initiative are accompanied by continuous evaluation and adaptation to address emerging challenges is important.

Based on the descriptions above, something new related to the Smart City concept can be developed, namely the Culturally Integrated Smart City. This concept emphasizes integrating local cultural values, such as "Sombere," into the Smart City technology framework. This concept recognizes the importance of balancing technological innovation with cultural preservation, ensuring that Smart City initiatives are inclusive and reflect the local community's identity.

The concept of a Culturally Integrated Smart City offers an innovative approach to urban development, where integrating cultural values into the technological framework becomes a central element. This approach contrasts with the more conventional, technology-centric Smart City models, which often prioritize efficiency and digital transformation at the expense of local identities. By embedding cultural values such as "Sombere"—which represents hospitality, openness, and social harmony in Makassar—into Smart City initiatives, urban development can better reflect the unique character and identity of the local community. As scholars like Graham and Marvin (2002) explored, urban development strategies that overlook the socio-cultural context risk creating technologically advanced but socially disconnected cities. In this light, the Culturally Integrated Smart City concept bridges this gap by ensuring that technological advancements remain rooted in community values.

Moreover, this approach aligns with theories of participatory governance and inclusive urban planning, as articulated by Arnstein (2019) and Fung (2006), who emphasize the importance of community involvement in decision-making processes. The "Sombere" values resonate with these participatory principles by fostering inclusive dialogue among stakeholders, ensuring that Smart City technologies serve not only the operational needs of a city but also enhance social cohesion. Cultural integration, therefore, can enhance the legitimacy and acceptance of Smart City projects. According to Giffinger et al. (2007), the success of Smart Cities hinges on their capacity to be "smart" not only technologically but also in how they engage and empower local communities. In Makassar, the culturally integrated approach could ensure that innovations like smart surveillance systems, digital infrastructure, and public services align with community values, promoting greater public trust and collaboration.

In practical terms, the Culturally Integrated Smart City model could serve as a blueprint for other cities seeking to implement Smart City technologies without eroding their cultural heritage. By blending tradition with innovation, cities can create environments where technological progress is seen as an extension of, rather than a

threat to, local customs and values. This dual focus on cultural preservation and technological advancement could make Smart Cities more adaptable and sustainable in the long term. As argued by Komninos (2011), the future of Smart Cities depends on their ability to integrate human, social, and cultural capital alongside digital infrastructure. The Makassar experience with “Sombere” could serve as a pioneering example, illustrating how culturally conscious urban development can foster a more inclusive, resilient, and community-driven Smart City model.

4. Conclusion

The collaborative governance process in realizing Makassar Sombere and Smart City in Makassar is going well. This is shown in the face-to-face dialogue, effective communication, and intense dialogue with shareholders. In building trust, mutual trust between stakeholders is the key to realizing the Smart City that the City of Makassar has established. The Commitment to the process dimension shows joint efforts and deep mutual trust between the parties involved. In the dimension of Shared Understanding, we see collaborative efforts that enable all stakeholders to move in line and make shared understanding a strong foundation for successful smart city development. The Intermediate Results dimension of the collaborative governance process can build stronger legitimacy in collaborative efforts, providing a more solid foundation for all stakeholders in taking part in the journey towards a successful Smart City. This study introduces the concept of a Culturally Integrated Smart City, which emphasizes the importance of integrating cultural values within the framework of Smart City technology to make its development more inclusive, sustainable, and in accordance with the local community's identity. This study also shows that a culture-based approach in Smart City can improve the effectiveness of city governance and strengthen community engagement. Further studies can deepen the study of the role of technology in maintaining a balance between modernization and preservation of local culture in the context of Smart City.

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