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Culture and Technology: Government Strategy Ciamis Regency In Developing Digital Ecosystem Year 2023-2024

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Abstract

The development of digital technology brings both challenges and opportunities for local governments in their efforts to advance development and improve public services. Ciamis Regency as one of the regions in Indonesia responds to this dynamic by integrating local cultural elements I the digital ecosystem development strategy. This article aims to analyze the strategies implemented by the Ciamis Regency Government in building an inclusive and sustainable digital ecosystem, taking into account local socio-cultural characteristics. This research uses a qualitative approach with a case study method, through policy analysis and in-depth interviews with stakeholders in Ciamis. The results show that collaboration between the government, local communities, and the private sector plays an important role in the implementation of digital technologies that are aligned with local cultural values. In addition, the role of technology in echancing community participation and public services was identified as a key factor in the success of this strategy. The findings are expected to contribute to the development of digital policies in other regions with similar characteristics.

Keywords: Culture, digital ecosystem, local government, technology**.**

1. Introduction

Smart cities play a crucial role in the context of regional development, as they enable the use of digital technologies to improve the efficiency of public services, strengthen community participation, and enhance the efficiency of public services (Apud et al., 2023). (Apud et al., 2023) and promote sustainable economic growth (Chatzistamoulou, 2023; Hua & Yu, 2023; Pangandaheng et al., 2022). By integrating smart infrastructure, such as transportation systems, energy management (Gritsenko, 2024), and healthcare (Gafari et al., 2024), smart cities can improve the quality of life of citizens and reduce development disparities between regions (Holroyd, 2022; Kurnia et al., 2024). (Holroyd, 2022; Kurnia et al., n.d.; Mahayani, 2024; Rinaldi & Kianfar, 2022). In addition, the concept supports more transparent and responsive governance (Faraji et al., n.d.; Mahayani, 2024; Rinaldi & Kianfar, 2022). (Faraji et al., 2021; Firmansyah et al., 2022) In addition, it supports more transparent and responsive governance (Faraji et al., 2021; Firmansyah et al., 2022), enabling regions to face modern challenges, such as urbanization, climate change, and resource constraints, more effectively.

The shift from industry 4.0 to society 5.0 creates new challenges and opportunities in social and economic development. In this case, society 5.0 is presented as a response to rapid technological advances, aiming to improve the quality of human life through a deeper integration of technology in everyday life. (Alhalafi & Veeraraghavan, 2023). Mazali emphasizes that Society 5.0 focuses not only on efficiency and productivity, but also on solving complex social problems, by leveraging technologies such as artificial intelligence and the Internet

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of Things (IoT) to create more inclusive and sustainable solutions. (Mazali, 2018). Thus, the transition to society 4.0 is expected to strengthen competitiveness and innovation, and ensure that technological development provides tangible benefits to all levels of society. (Mazali, 2018; Sim et al., 2019).

Other research highlights the importance of integrating cultural and technological initiatives in creating sustainable tourist cities, emphasizing the crucial role of local authorities and community involvement in formulating effective strategies for real estate development and urban sustainability. (Vardopoulos et al., 2023). Other research emphasizes that the successful transition to sustainable smart cities relies heavily on understanding and integrating local cultural factors in the planning and implementation of technologies, so as to increase public acceptance and the effectiveness of proposed solutions (Myeong et al., 2021; Rinaldi & Kianfar, 2022; Vardopoulos et al., 2023).

One of the keys to ensuring that the technologies implemented are in line with the values and needs of local communities is to integrate local culture in smart city development. (Carlsson & Rönnblom, 2022; Faidati & Khozin, 2018). Ciamis Regency, as a region rich in culture and history, still faces problems in integrating culture and technology. One of the main problems is the lack of digital literacy awareness among the community. According to the data, in 2022 the level of digital literacy in Ciamis Regency was still at a moderate level, with a score of 3.49 (Sujai et al., 2018). (Sujai et al., 2022). With these conditions, people do not understand the benefits of digital technology in improving the quality of life and government efficiency.

In addition, the Smart Society 5.0-based digital literacy program launched by the Communication and Informatics Office of Ciamis Regency has had a positive impact, but there are still challenges in maintaining the interest of program participants. (Fauzi et al., 2023; Lestari et al., 2024). Communities may lose interest in digital literacy programs due to the lack of a significant digital divide or due to the lack of attractive incentives. In this context, dissemination of cultural information is also an important aspect. Research on cultural dissemination may suffer if there is no systematic effort to disseminate information about historical sites and cultural traditions. (Erwina, 2023). Therefore, the government and the community must collaborate to educate the public about the importance of cultural preservation in the current era of digital technology development.

Another issue is the limited technological infrastructure that can limit people's access to digital technology. Despite the government's efforts to improve technological infrastructure, there are still limitations that need to be overcome. This can slow down the process of regional digitalization and hinder the implementation of planned programs. Ciamis Regency is currently in a significant digital transformation phase, with strong efforts from the local government to develop an inclusive digital ecosystem. One of them is through the Galuh Digital Festival 2024 event, the Ciamis Regency government is committed to accelerating regional digitalization and improving the quality of public services (Portal Ciamiskab, 2024). The following is data on the development of the digital ecosystem in Ciamis Regency.

Table 1. Development of Digital Ecosystem in Ciamis Regency

Indicator	Year 2023	Year 2024
Application/Innovation	Cheap Market Operation with QRIS	WebR Application Launch, Galuh Go Digital Program, Smart City Implementation, SITU Application, SIJAGO Application, CHDS Application, Si Kismis Application, MANTAN TERINDAH Innovation
Transparency and Efficiency	Cheap Market Operation with QRIS	WebR App, SIJAGO App
Community Welfare	Cheap Market Operation with QRIS	CHDS Application, Cyclism

Source: Ciamiskab portal, 2024 (processed by researchers)

The launch of various applications, such as WebR for regional retribution management and the Galuh Go Digital program, shows concrete steps in encouraging people to switch to digital transactions. In addition, an evaluation of the implementation of the Smart City concept is also conducted to ensure that the innovations implemented can provide maximum benefits to the community. With these various initiatives, Ciamis seeks not only to improve government efficiency but also to create a more transparent and responsive environment to the needs of its citizens. (Yuniasih et al., 2024).

Issues in the development of a digital ecosystem in Ciamis Regency, which integrates culture and technology, point to challenges in realizing effective and inclusive governance. Obstacles such as the digital

literacy gap, cultural resistance to technological innovation, and limited infrastructure become obstacles in implementing responsive digital policies. This attracts the attention of researchers to study it from the perspective of *sound governance*, which emphasizes the importance of transparency, accountability, public participation, and inclusiveness.

The *sound governance* approach provides a relevant framework for analyzing how collaboration between government, communities, and the private sector can be enhanced, as well as how local cultural values can be integrated without hindering technological development. (Firmansyah et al., 2022). Through this study, researchers hope to find policy solutions that are not only adaptive to digital challenges, but also aligned with the needs and cultural identity of the Ciamis community.

2. Research Methods

The research method used in this article is a qualitative approach with a case study focusing on the development of the digital ecosystem in Ciamis Regency. The research involved primary and secondary data collection, where primary data was obtained through in-depth interviews with key stakeholders, such as local government officials, local community representatives, as well as private sector actors involved in digital policy implementation. Secondary data was collected from policy documents, government reports, and other relevant sources to provide a broader context.

This method was chosen to deeply understand how local culture and technology are integrated in government policies, as well as how *sound governance* principles are applied to overcome challenges in the field. Data analysis was conducted using thematic analysis techniques, which allowed researchers to identify the main patterns and issues that emerged in the development of the digital ecosystem in Ciamis.

3. Research and Discussion

The successful implementation of smart technologies depends not only on technical innovations, but also on how they are adapted to local cultural needs and preferences. In this context, technologies must be designed and implemented with a deep understanding of the communities they serve. Neglect of cultural aspects can result in social resistance or even complete failure in the application of technology (Safitri et al., 2017). In developing countries, many areas have specific value systems, habits and norms, which require a more contextual and sensitive approach. Technology adaptation that considers local cultural aspects in the development of digital ecosystems, such as in Ciamis Regency, reflects the importance of this approach.

Ciamis Regency, known for its rich culture and history, has many cultural heritage sites (Disbudpora, 2023), making it one of the regions rich in cultural heritage in Indonesia. The diversity of these sites includes historical relics, local traditions, and handicrafts, providing great potential to support regional development. In this case, the government can utilize the cultural wealth as a tourist attraction that can increase local revenue and create new jobs for the community. In addition, the integration of culture and technology is also very important, aiming to accelerate regional digitalization, increase transparency, and facilitate active interaction between citizens and the government.

The limited digital infrastructure in Ciamis Regency is one of the significant challenges faced in the effort to accelerate regional digitalization. one of the main limitations is internet access which is still limited and difficult to reach in some areas. Geographical and economic factors are the main obstacles in the development of telecommunications infrastructure in rural areas. Natural conditions and the distance between settlements in some rural areas make digital infrastructure development more complex and expensive. This limits internet access both in terms of quality and coverage.

Another problem, as stated by the Office of Communication and Informatics, is that one of the important issues is that the utilization of Information and Documentation Management Officers in regional apparatus is not yet optimal, and PPIDs at the sub-district level have not yet been established. This adds to the complexity of data and information management, and exacerbates limited internet access in some areas (Diskominfo, 2024).

The limitations of digital infrastructure in Ciamis Regency are not only limited to internet access, but also include the arrangement of passive telecommunications infrastructure, data management, and coordination between related parties. Overcoming these limitations needs to be a priority to ensure digitalization can run effectively and evenly throughout the Ciamis Regency area. The following is an overview of the development of the digital ecosystem in Ciamis Regency from 2018 to 2023.

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Table 2: Development of Digital Ecosystem in Ciamis Regency from 2018 – 2023

Year	Initiative/Program	Description	Performance Indicators
2018	Launch of E-Samsat Application	Introducing an online vehicle tax payment system	Initial utilization: 239 units
2019	Increased Use of E-Samsat	Better socialization increased application users to 2,540 units	User increase: over 2000 units
2020	Addition of Digital Facilities	Improved infrastructure to support e-Samsat application and other digital services	Service affordability improved
2021	Galuh Digital Festival	An annual event to promote digital technology and local culture.	Increased community participation
2022	Implementation of Smart Society 5.0	Digital literacy program to improve people's understanding of technology	Digital literacy index: 3,49
2023	SPBE Maturity Index Improvement	Focus on strengthening electronic-based government systems and transparency.	Maturity index: 3.09 (106.55% of target)

Source: Processed by Researchers, 2024

Community resistance to technological change and limited digital literacy are the main challenges affecting the success of smart city implementation in Ciamis Regency. By understanding the level of community readiness and acceptance of technological innovation, urban planners can design strategies that are more adaptive and oriented to local needs. This will not only improve efficiency, as investments are better targeted, but also effectiveness, as the technology implemented is more aligned with local culture and social conditions.

An approach to governance that integrates cultural and historical elements is not just an academic or nostalgic exercise, but can also be a social force that supports sustainable development. Understanding and appreciating a region's cultural heritage and history provides a strong foundation for building a more cohesive and competitive community identity. (Allam & Newman, 2018). As stated by Ali Farazmand, rapid social changes due to globalization require governments to be responsive and adaptive. (Farazmand, 2012). Thus, knowledge of culture and history is important to formulate relevant and effective policies (Safitri et al., 2018). (Safitri et al., 2017).. The integration of cultural knowledge in public policy not only enriches the social context but also creates synergies between local values and technological developments.

The link between this approach and the concept of *sound governance* makes clear the importance of governance that is responsive to the local context. Sound governance emphasizes that changes in the reality of society due to globalization must be addressed quickly by governance. (Mandasari, 2023; Nilawati, 2016; Setyadiharja et al., 2017).. There are three basic understandings in sound governance, namely the importance of including dominant international power factors in formulating the concept of governance, including local culture as a potential for developing governance practices, and the importance of looking at constitutional aspects in governance management (Farazmand, 2004). (Farazmand, 2004).

According to Farazmand, the government must be able to moderate the communication process through responsive and adaptive institutions in order to manage the changes that occur well. This is closely related to the discussion in the article on culture and technology, where the Ciamis Regency government developed a digital ecosystem strategy that takes into account local cultural values. In this context, sound governance becomes very important to ensure that the development of digital technology does not only pursue innovation, but also considers the social and cultural readiness of the community.

The process of technology acceptance and cultural adaptation should also be done simultaneously, not sequentially. Traditional approaches that often separate the two aspects have shown shortcomings in facing modern digital challenges. In this regard, Ciamis Regency can be an interesting example. The local government has recognized the importance of integrating culture and technology in developing an inclusive digital ecosystem. The government is not only focusing on launching applications and technological infrastructure, but also on preserving and developing local culture. For example, the Galuh Digital Festival 2024 is not only a digitization event, but also a platform to promote Sundanese culture and traditions, and strengthen regional cultural identity.

Thus, the process of technology acceptance and cultural adaptation in Ciamis Regency must be carried out simultaneously, creating a sustainable digital ecosystem that integrates with local culture. This will not only

improve government efficiency, but also ensure that technological developments provide real benefits for all levels of society, including traditional communities that still uphold local wisdom values.

The results show that collaboration between the government, local communities and the private sector plays an important role in the implementation of digital technologies that are aligned with local cultural values. This collaboration allows for synergy between stakeholders. The government acts as a policy director, local communities provide input related to local wisdom and specific community needs, and the private sector provides the necessary technology and infrastructure. In the context of sound governance, good governance emphasizes the importance of cross-sector collaboration to create policies that are adaptive and responsive to social, economic and technological changes. This approach emphasizes that the government must be able to balance the complexity of changes brought about by globalization and technological developments while maintaining local values.

In addition, the role of technology in enhancing community participation and public service delivery is a key player in the success of this digital strategy. Technology not only facilitates people's access to services, but also enables wider participation in the decision-making process. This creates a more transparent and inclusive government. From a sound governance perspective, active citizen participation is an important component in creating accountable and sustainable governance. Farazmand argues that a responsive government must be able to modernize the changing realities of society due to globalization. This includes through providing access to technology that is relevant to local culture.

As such, sound governance serves as a framework that can assist local governments in managing change and ensuring that implemented technologies are not only operationally effective, but also aligned with the needs and aspirations of local communities. This creates a conducive environment for the acceptance of new technologies and strengthens the legitimacy of government institutions in the eyes of the community.

With this approach, Ciamis Regency can be an effective model in dealing with digital challenges in the modern era. The government in this case, acts as a moderator that regulates change in an inclusive and sustainable manner, ensuring that technological globalization does not cause social dislocation or inequality. Strategies that integrate local culture into technological development reflect a proactive response to the challenges of globalization as suggested by Farazmand.

This finding has important implications for other regions with similar characteristics, where multi-stakeholder collaboration and emphasis on community participation can be the key to success in digital policy development. Digital policy implementation that takes into account local socio-cultural needs will be more effective in creating sustainable and inclusive solutions. Thus, the collaborative model found in Ciamis Regency can be an example for other regions that are developing their digital ecosystems.

4. Conclusion

Collaboration between the government, local communities, and the private sector has successfully created a digital ecosystem that is aligned with cultural values. It is also able to increase community participation in public services through the application of inclusive technology. However, the digital infrastructure aspect is still a major obstacle. Especially internet access that has not been evenly distributed in some areas due to geographical factors and limited investment. This limitation hinders the optimization of the application of digital technology in all areas of Ciamis Regency, so there needs to be concrete steps to improve digital infrastructure to support the sustainability of the smart city program in the future.

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