

SMART CITY PLANNING TO CREATE GOOD AND CLEAN GOVERNMENT IN TERNATE CITY

Rahmat Guret¹, Muhammad Ridha Albaar², Abjan Samad³

¹Manajemen Informatika-Akademi Ilmu Komputer Ternate,

²Manajemen Informatika-Akademi Ilmu Komputer Ternate,

³Teknik Komputer-Akademi Ilmu Komputer Ternate,

Email: rahmat.guretafo@gmail.com

Abstract

In the journey towards a Smart City, efforts to make it a bridge that connects people's expectations of appropriate, effective, and efficient government services by utilizing Information and Communication Technology (ICT) is of the essence. The Smart Governance concept is the main key, where the Ternate City Government as executor of government duties is expected to be able to provide quality services following Standard Operating Procedures (SOP) and the principles of law, humanity, justice, democracy, participation, transparency, accountability, and commitment to the welfare of its citizens. To realize the Smart City vision in Ternate, there needs to be a mutual understanding regarding the true Smart City paradigm. "In addition to supporting regulations, good cooperation between various parties who are committed to implementing Smart City as a form of public service to the community is very important.

Keywords: *Smart City, Planning, Government*

INTRODUCTION

In the era of bureaucratic reform, the Regional Government prioritizes the development of an integrated electronic government system as an acceleration step. Electronic Government, which is the result of developments in information and communication technology, is the main focus for improving the quality of government. This concept is realized in the implementation of smart cities, where smart cities are expected to be a bridge between community needs and effective services from the city government, supported by the use of ICT. Definitions of smart cities vary, but in general, smart cities are identified as solutions to various urban problems, from infrastructure to disasters. By utilizing ICT and data, smart cities are expected to provide efficient services to their citizens. Implementation

of the smart city policy refers to Law Number 25 of 2004 concerning the National Development Planning System, with the aim of planning areas intelligently. Big cities in the world, including in Indonesia, have started implementing smart city policies with all their advantages and disadvantages. Building a smart city aims to improve the quality of life through the use of urban information and technology for service efficiency and meeting the needs of citizens. Information and communication technology allows Ternate city ASN to interact directly with the community, monitor urban infrastructure, and create a better quality of life through collecting and analyzing data from integrated sensors with real-time monitoring systems. The information and knowledge gathered is

considered key to overcoming inefficiencies in urban services.

LITERATURE REVIEW

In the framework of the Smart City concept, according to Deakin, it is not enough just to adopt Information and Communication technology (ICT) in an area. Furthermore, this concept emphasizes intelligence in the implementation and use of technology to meet market needs, especially city residents. Active participation from the community is considered a key element to achieve the smart city vision. In addition, the definition given by Cohen adds an environmental dimension, where a Smart City is defined as a city that uses ICT efficiently to manage resources, create cost and energy savings, and support innovation and an environmentally friendly economy. (Ikbali, 2021)

Giffinger, through his understanding, highlights aspects of human and social capital investment, modern transportation infrastructure, and wise management of natural resources through governance based on community participation. Overall, the experts' definitions describe a Smart City as an entity that not only adopts digital technology, but also integrates it holistically to achieve sustainable economic growth and a high quality of life, by involving active community participation in the entire process of city development and management.

METHODOLOGY/MATERIALS

Within the framework of this research, the method applied is a qualitative approach through a descriptive approach. The focus of this research lies in descriptive planning regarding the

development and management process of the city of Ternate with the aim of achieving Smart City status.

RESULTS AND FINDINGS

Let's explore the ambitious vision to transform Ternate City into a smart city that uses information technology as its main pillar. In this effort towards transformation, we will focus on three main aspects. 1. First, maximize the use of physical infrastructure through artificial intelligence and data analysis to support strong and healthy cultural and socio-economic development. 2. Effectively involve local communities in governance and decision-making using open innovation and e-participation, enhancing the collective intelligence of city institutions through e-governance, with an emphasis on citizen participation and co-design. 3. Learn, adapt and innovate so that cities can respond to changing situations more effectively and immediately by increasing city intelligence. To achieve this ambition, each Ternate City Government must build a strong foundation through establishing a vision, mission, strategy, goals and development programs that reflect the transformation into a Competitive, Comfortable, Caring and Prosperous Metropolitan City. This means that this city will become the center of government administration, political life, growth of trade and services, community activities, arts, culture and advanced settlements. All of this will be marked by the integration of socio-economic activities, the creation of order, comfort, and the availability of advanced, quality and integrated infrastructure and facilities. Competitiveness in this context refers to regional, national and global city

excellence, including high productivity of human resources, industrial development, trade, financial services, complete socio-economic infrastructure, security, social and political stability, professional governance and development. science and technology. Let's explore together the components that shape Ternate City's future view as a smart city.



Figure 1. Smart City Components

1. In initiating strategic steps towards economic progress, the Ternate City Government is firmly facing the challenges of globalization and advances in information technology. Awareness of the importance of building a Smart Economy is the main basis for increasing the growth of the economic sector. By utilizing technology and information as the main tools, the Ternate City Government is designing innovative steps aimed at marketing the results of residents' MSMEs more effectively. The main focus of this effort is to explore the potential of Ternate City's unique products, with the hope that it will not only encourage economic growth, but also make a real contribution to improving the welfare of the local community. Let's together carry out further exploration regarding the implementation of Smart Economy as the key to success in driving the

economic sector of Ternate City through the use of technology and information.



Figure 2. Smart Economy

2. With a progressive spirit and awareness of the need for efficient transportation, the Ternate City Government is looking to the future through the Smart Mobility concept. Recognizing global challenges in the field of transportation, the local government is preparing to create a transportation system that is not only environmentally friendly but also utilizes technology as a key to competitiveness. In an effort to enable Ternate City residents to compete with other cities that have adopted advanced technology in their transportation systems, Smart Mobility is the main pillar in designing innovative local transportation solutions. Let's explore further how the implementation of Smart Mobility can bring positive changes in supporting the transportation needs of the people of Ternate City.



Figure 3. Transport Model

3. With a commitment to creating a comfortable and beautiful environment

4. In an era of rapid technological change, the Ternate City Government views Smart Society as a key foundation for increasing community creativity and competitiveness. Realizing the importance of community empowerment, the local government is committed to providing the necessary training and assistance, especially in developing SMEs and utilizing information technology. By providing citizens with access and knowledge related to technology, the Ternate City Government aims to enable society to adapt and compete effectively with technological developments. Let's

The diagram illustrates a 'Smart Society' at its center, connected to various smart infrastructure components. The components are arranged in a circular fashion around the central 'Smart Society' hub, which is represented by a house icon. The components include:

- Smart School**: Represented by a school building icon.
- Smart Building**: Represented by a tall office building icon.
- Books Maps/Navigation Movie**: Represented by icons of a book, a map, and a movie camera.
- Internet**: Represented by a globe icon.
- Smart Car**: Represented by a car icon.
- Smart Parking**: Represented by a 'P' parking sign and a car icon.
- ITS** (Intelligent Transportation System): Represented by a car icon.
- Smart Transportation**: Represented by a train icon.
- Next-generation Service Station**: Represented by a gas pump icon.
- Smart Grid**: Represented by a power line icon.
- Energy Management**: Represented by a sun and wind turbine icon.
- Solar/Wind Generation**: Represented by a sun and wind turbine icon.
- Power Grid**: Represented by a power line icon.
- Smart Meter**: Represented by a meter icon.
- Nuclear/Thermal Power Generation**: Represented by a power plant icon.
- Smart Factory**: Represented by a factory icon.
- Smart Store**: Represented by a store icon.

The components are interconnected by lines, indicating a networked system. The central 'Smart Society' hub is connected to all these components, which are also interconnected with each other, forming a comprehensive smart infrastructure network.

5. On the journey towards Smart Living, the Ternate City Government is taking proactive steps with the aim of improving the cultural quality inherent in the city area. With great determination, the main focus is given to highlighting the unique culture of Ternate, accompanied by a strong commitment to improving the quality of education and technology. These steps are designed not only to create a better society, but also to gain recognition nationally and internationally. Let's dig deeper together into the Ternate City Government's efforts to realize Smart Living, which not only empowers local culture but also has a positive impact on the level of education and technology in this city.



6. In an era of demands for effective and responsive government, the Ternate City Government is embracing the Smart Governance concept with strong

determination. Realizing the need for transformation, local governments consider it essential to provide services that are transparent, accountable and humane. Through an increased commitment to the welfare of the people of Ternate City, the government is trying to create a good and clean governance structure. Let us further examine how these steps create the foundation for Smart Governance, which is not only efficient but also supports the overall well-being of society.



Figure 7. Smart Government

7. In designing a roadmap to a smart city, four main components need to be carefully considered. First, is a precise definition of community needs, ensuring that this definition can condition subsequent steps and includes aspects such as geography, connections between cities and villages, and the flow of people between the two. Second, it is important to understand the community deeply before starting smart city development. This involves understanding the benefits of the initiative, studying residents' business needs, and identifying unique community attributes such as residents' ages, education levels, hobbies, and city attractions. Third, develop a clear smart city policy, including the definition of roles, responsibilities, goals and strategies for achieving goals. Fourth,

community engagement is key by leveraging e-Government initiatives, open data, sporting events, and others to ensure active citizen participation in smart city planning and development.

8. In viewing the government paradigm as determining the direction of development of the Smart City pillar, the current paradigm promotes an open system with several key aspects. First, inclusive institutions that emphasize an open attitude in healthy governance. Second, Collaborative Governance which involves deliberation forums to reach consensus regarding public issues. Third, Integrated Governance which reflects the structure of formal and informal relationships between government institutions, the business world and society. Fourth, Open Governance as an initiative for service integration, open access to information, and community involvement in government policies. In the Smart City context, the bridging concept can also be connoted with the maturity of Information Technology (IT) governance, from ad-hoc to smart level, including real-time process management and effective and efficient service integration. Smart city development requires these pillars, along with governance paradigms and IT governance metrics, as important steps to realize the smart city concept. Therefore, an alignment strategy is needed to integrate the Smart City concept into the mission framework of city and regional governments. Failure to align these concepts can be the cause of undirected and difficult to measure Smart City development.



Figure 8. Smart City

CONCLUSION

On the journey towards a Smart City in Ternate, it is essential to achieve a common paradigm regarding the true nature of the Smart City concept. The existence of regulations that are directly related to Smart City is an urgent need, while ensuring the realization of close cooperation between various parties who have the desire to encourage the Smart City concept as a form of public service to the community. The study of Regional Development Directions by the Central Government is also directed at completing the Smart City concept as an addition to the existing central government plans. Considering that the Smart City concept is still relatively new in the context of spatial studies in Indonesia, only a few regions or cities, such as Jakarta, Bandung, and Surabaya, have adopted this concept. "However, problems related to governance and the environment in Ternate City have not received serious attention, so significant changes have not occurred.

RECOMMENDATION

1. Development of knowledge based on local wisdom and research so as to support the improvement of quality and good human resource skills, so as to create innovation and creativity from the community.
2. Make improvements to technology-based systems, facilities and services. Local Governments must build a lot of technology and information-based urban infrastructure and provide adequate technology facilities in the field of public, business and economic services. These technologies will facilitate the public to carry out various activities without having to carry out many activities without having to make physical contact (face to face) with certain parties and finally there will be active interactive from the Government to the people.
3. To formulate smart governance to support the development of Smart City, a deeper study is needed regarding the readiness of the local government. To measure this readiness, it can be done by conducting FGDs or distributing questionnaires to all stakeholders.

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