eISSN: 2621-4970 pISSN: 2621-4962

Volume 7 | No 2 **Juli** | **2024** 

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

# Rahmat Guret<sup>1</sup>, Muhammad Ridha Albaar<sup>2</sup>, Abjan Samad<sup>3</sup>

<sup>1</sup>Manajemen Informatika-Akademi Ilmu Komputer Ternate, <sup>2</sup>Manajemen Informatika-Akademi Ilmu Komputer Ternate, <sup>3</sup>Teknik 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 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, the aim of planning intelligently. Big cities in the world, including in Indonesia, have started implementing smart city policies with all 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 concept Furthermore, this area. intelligence emphasizes in the implementation and use of technology to market needs, especially 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 energy savings, and and support innovation environmentally and an friendly economy. (Ikbal, 2021)

Giffinger, through his understanding, highlights aspects of human and social capital investment, modern transportation infrastructure, and wise management of natural resources through governance community based on participation. Overall, the experts' definitions describe a Smart City as an entity that not only digital technology, adopts but 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 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. 1In 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 socioeconomic development. 2. Effectively involve local communities in governance and decision-making using innovation and e-participation, enhancing collective intelligence the institutions through e-governance, with an emphasis on citizen participation and codesign. 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 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. and integrated quality infrastructure and facilities. Competitiveness in this context refers to regional, national and global

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.

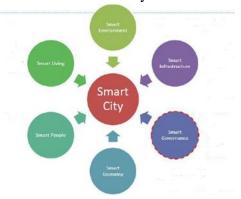


Figure 1. Smart City Components

1. In initiating strategic steps towards economic progress, the Ternate City Government is firmly facing the globalization challenges of and advances in information technology. Awareness of the importance of building a Smart Economy is the main basis for increasing the growth of the sector. economic Bvutilizing 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 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 utilizes technology as a key 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

physically and non-physically, Ternate City Government views Smart Environment as the main foundation for improving the quality of life of the community. Awareness of the importance of visual and non-visual beauty is the basis for designing a clean and stable environment. Starting from the Neighborhood Unit, Community Unity, Village level, to the sub-district level, the application of the smart environment concept is integrated with the aim of actively involving residents and the community. Let's explore further Ternate how the City Government's steps in creating a Smart Environment can create a clean, beautiful and stable environment for shared prosperity.

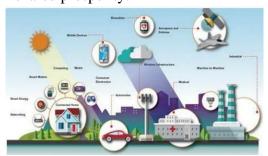


Figure 4. Smart Environment

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 of importance community empowerment, the local government is committed to providing the necessary training and assistance, especially in **SMEs** utilizing developing and 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

explore further how these steps can form a Smart Society that is creative and responsive to changing times.

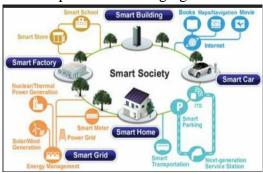


Figure 5. Smart Society

5. On the journey towards Smart Living, the Ternate City Government is taking proactive steps with the aim improving the cultural quality inherent the city area. With 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.



Figure 6. Smart Living

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 increased an 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. this definition ensuring that 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 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 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 issues. Third, Integrated Governance which reflects the structure of formal and informal relationships between government institutions, the business world and society. Fourth, Governance as an initiative for service integration, open access to information, and community involvement 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 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 serious not received attention, 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 technologybased systems, facilities and services. Local Governments must build a lot of technology information-based and urban infrastructure and provide adequate technology facilities in the field of public, business and economic services. These technologies 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.

#### REFERENCES

Amalia Dini, Nanda Nesya, Maulanan Tyrta. *Implementation of a Smart City in the City of Surabaya*. Journal of Bureaucracy & Regional Government. Volume 5. No. February 1, 2023.

Andri Abdul Raziq. Application of Smart City in Developing Urban Areas in Indonesia.

https://www.researchgate.net/publication.2018

Bappenas. (2015). *Indonesian Smart City Concept*. Cobit, M. F. (n.d.). No Titles,1–14.

Happold, B. 2020. *Designing smart cities*. [Online] Available at: https://www.designingbuildings. co.uk/wiki/Designing\_smart\_cities IEEE. 2020. Smart Cities [Online] Available at: http://smartcities.ieee.org/about [Accessed 10 Juli 2020].

- Hasibuan Abdurrozzaq, Oris Krianto Sulaiman. Smart City, Smart City Concept as an Alternative for Resolving District/City Urban Problems, in Big Cities of North Sumatra Province. Main Engineering Bulletin Vol. 14, no. 2, January 2019.
- Instructions for Realizing a Smart City According to the Cohen Diagram. (2017). JSC. https://smartcity.jakarta.go.id.
- Shah, M. N., et al., 2017, Assessment of Ahmedabad (India) and Shanghai (China) on Smart City Parameters Applying the Boyd Cohen Smart City Wheel. Proceedings of the 20th International Symposium on Advancement of Construction Management and Real Estate.Y. Wu, S. Zheng, J. Luo et al. Singapore, Springer Singapore: 111-127.
- Sukmatama Wahyu Putri, Ashadi, Lutfi Prayogi. Application of the Smart City Concept in Regional Design in Cibubur. PURWARUPA Architectural Journal Volume 3 No 1 March 2019: 1-6
- The Smartest in Indonesia, Bandung City is in the Top 50 Smart Cities in the World. (2021). Bandung City Public Relations.
  - https://humas.bandung.go.id/besarsmart-city-dunia
- Widiyastuti Inasari, Daru Nupikso, Novian Anata Putra, Vieka Aprilya Intanny. Smart Sustainable City Framework: The Sustainable And Integrative Smart City Proposed Model, Journal PIKOM, Vol. 22 No.1 Juni 2021