



Smart City Development Policies in Tangerang City

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Abstract

This study aims to comprehensively assess the progress of smart city development in Tangerang City, Indonesia, and evaluate the effectiveness of the local government's implemented policies. It seeks to identify prevailing challenges and obstacles, as well as provide recommendations to foster enhanced stakeholder cooperation. The research employs a qualitative method with a descriptive approach. Data collection techniques include interviews, observations, and documentation. The data analysis process involves reducing the data and presenting the obtained information to draw conclusions. The research findings provide a comprehensive overview of smart city development in Tangerang City, highlighting both the positive impacts and challenges faced. The study identifies infrastructure limitations, low digital literacy, and insufficient stakeholder collaboration as key obstacles. This research contributes to the existing literature by providing a detailed analysis of smart city development in Tangerang City, specifically focusing on the effectiveness of local government policies and the challenges hindering its progress.

Keywords: Smart City, Policy, Tangerang City, Stakeholder Collaboration, Digital Literacy

1. Introduction

The rapid development of information and communication technology (ICT) has significantly impacted various aspects of human life, including governance and urban development. One concept that has emerged as a response to the global challenges of urbanization and the needs of modern society is the smart city. According to Giffinger et al. (2007), a smart city refers to a city that uses digital technology to improve the quality of life for its citizens through more efficient and sustainable resource management. In this context, digital technology plays a crucial role in improving public services such as transportation, energy, health, and education.



Figure 1. Depicts Smart City



Indonesia, with its rapid urbanization, has started to adopt the Smart City concept in several cities, including Tangerang City. As a satellite city of the capital, Tangerang faces various complex urban challenges, such as population growth, high population mobility, and the need for more efficient public services. The Tangerang City Government responded by launching the Tangerang Live program, which is an effort to integrate digital technology into various aspects of public services, such as transportation, health, education, and security. Through the Tangerang Live application, the government aims to create more efficient, transparent, and participatory governance (Tangerang City Government, 2023).



Figure 2. Depicts Tangerang Live

Tangerang Siaga 112 is an integrated emergency call service that allows people to report emergencies such as fires or accidents quickly. Additionally, through Tangerang Live Health, residents can access digital health services, make appointments with doctors, and get online consultations. The transportation system has also experienced increased efficiency with the implementation of smart traffic lights and CCTV-based traffic monitoring.

Despite the various initiatives implemented, Tangerang City still faces a number of challenges in developing a smart city. One of the main obstacles is the limited technology infrastructure, especially the uneven access to the internet throughout the city, which impacts the suboptimal use of digital services by the public. Additionally, the low level of digital literacy among the public, especially among the elderly and residents in the outskirts of the city, poses a significant challenge in maximizing the utilization of technology. Some residents find it difficult to understand and use the applications provided by the government.

This research aims to describe the extent to which Smart City development in Tangerang City has progressed, evaluate the policies implemented by the local government, and provide policy recommendations that can strengthen the role of stakeholders in supporting the success of Smart City. Given the importance of cooperation among various actors in developing a smart city, this research is expected to contribute scientifically to the development of more effective and sustainable policies in Tangerang City.



2. Research Method

Based on the research problem, the researcher undertakes various steps to generate valid data and achieve the desired conclusions. Accurate and comprehensive information is sought in alignment with the main objectives of this study. The research approach used is descriptive qualitative, which aims to explore phenomena through the analysis of secondary data. Descriptive qualitative research is a form of scientific inquiry grounded in existing theories and empirical data.

As Nazir (2014, p. 26) states, the scientific method is a pursuit of truth guided by logical reasoning. Therefore, each step in this research is conducted systematically and logically, from data collection to analysis, to ensure that the conclusions drawn are based on accurate data and can be scientifically justified.

In this study, the researcher employs several techniques to collect secondary data, including literature reviews, research reports, policy documents, and relevant statistical data. Secondary data is gathered from various sources, such as:

1. Documents from the community satisfaction survey related to the Tangerang Live application conducted in 2023.
2. The Tangerang Live application.
3. The Regional Medium-Term Development Plan (RPJMD) 2019–2023.

Data collection is carried out by reviewing official documents, reports, and relevant publications that provide an overview of the smart city development policies in Tangerang City. The researcher then analyzes the secondary data through data reduction, sorting, and classification of relevant data from the collected sources. The data is presented in a structured and systematic manner for further understanding and analysis. This approach is expected to offer insights into the level of smart city development policies in Tangerang City and identify public services that align with the needs of the city's residents.

3. Results and Discussions

Smart City Policy in Tangerang City

Tangerang City has established a smart city policy as part of its Regional Medium-Term Development Plan (RPJMD) 2019 - 2023, aimed at improving the quality of public services through innovation and technology. To achieve this goal, the local government has launched several strategic programs, one of which is the Tangerang Live application. This application is designed to make it easier for citizens to access government services online. According to data from the Tangerang City Department of Communication and Informatics, Tangerang Live has been downloaded by 1,158,331 accounts, with 455,072 verified users. It has also achieved first place in the Public Service Innovation Competition in Banten, and the application has been replicated by 49 cities/regencies across the region. (Website Tangerangkota.go.id, 2024).

Tangerang LIVE Super App is an application that caters to the daily needs of the residents of Tangerang City within an innovative platform. Launched in 2016, each user can access 14 services and 35 menus that can be utilized anytime and anywhere.

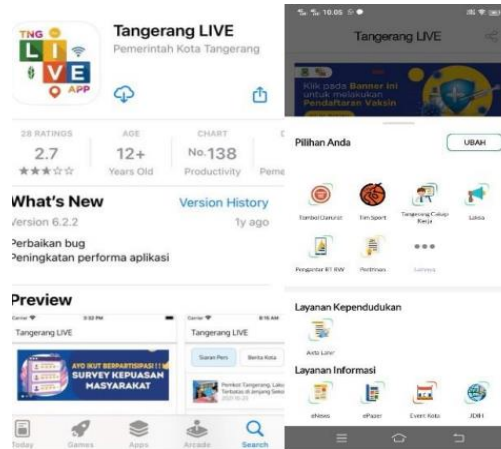


Figure 2. Depicts Tangerang Live

Based on the data presented, it can be observed that the most frequently used application among respondents is Tangerang Cakap Kerja, utilized by 80 individuals (20%). This is followed by the Birth Certificate application with 60 users (15%), and the Service application with 44 users (11%). The Licensing application is used by 33 individuals (8%), while the Taxes and Retributions application is utilized by 25 users (6%).

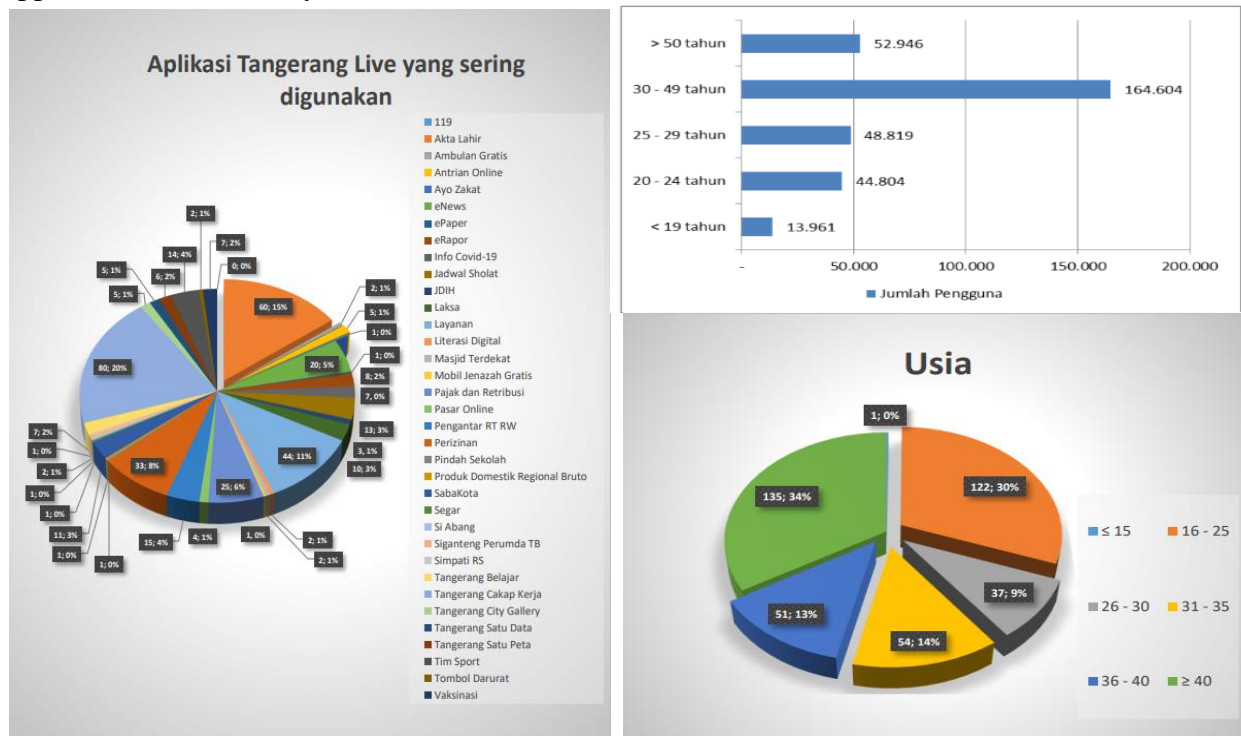


Figure 2. Depicts Tangerang Live



Explanation of the Average Users of the Tangerang Live Application in 2022

The first group includes respondents aged over 50 years, totaling 52,946 users. The majority of respondents fall within the 30-49 year age range, comprising 164,604 users. The next age group is 25-29 years, with 48,819 users. Following this, there are 44,804 users in the 20-24 year age range. Lastly, there is a small group of 13,961 users aged 15 years or younger. This distribution highlights that the 30-49 year age group represents the largest portion of users, indicating a strong engagement from this demographic with the application.

Explanation of the Average Users of the Tangerang Live Application in 2023

Based on the data presented, the representation of Tangerang Live Application Users in 2023 is dominated by respondents aged 40 years and older, totaling 135 individuals (34%). This is followed by respondents in the 16-25 year age range, with 122 individuals (30%). The 31-35 year age group accounts for 54 individuals (14%), while those aged 36-40 years number 51 individuals (13%). Additionally, respondents aged 26-30 years total 30 individuals (9%), and there is 1 individual (0%) in the ≤ 15 year age range.

Impact of Policies on Society

The impact of the smart city policy in Tangerang City can be observed in several aspects. First, there has been an increase in transparency and accountability in the management of public services. Data from the Regional Government Performance Report indicates a 30% decrease in public complaints related to public services following the launch of the Tangerang Live application (Regional Government Performance Report, Tangerang City, 2023). This suggests that the community feels it is easier to report issues and receive prompt responses from the government.

Second, there has been an improvement in the government's response speed to public complaints. Prior to the application's implementation, the average response time for complaints could reach 72 hours. However, after the launch of Tangerang Live, the average response time has decreased to 24 hours. This not only enhances public satisfaction but also strengthens trust in the government.

Despite these advancements, the study results indicate that the community still expects improvements in service quality and training on technology use. A survey conducted by the Department of Communication and Information noted that 70% of respondents want training on how to use the Tangerang Live application to optimally utilize its features (Department of Communication and Information, Tangerang City, 2023). This indicates that while the policy has been implemented, there remains room for improvement.



4. Conclusions

The smart city development policy in Tangerang City has shown significant progress; however, there are still many challenges that need to be addressed. Improved collaboration between the government, the community, and the private sector is essential to achieving optimal smart city goals. Through a deep understanding of the policies and their implementation, it is hoped that Tangerang City can continue to evolve as a sustainable smart city.

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