

IMPLEMENTATION OF BUREAUCRACY REFORM THROUGH THE DEVELOPMENT AND IMPLEMENTATION OF SMART CITY IN CIMAHI CITY

Titin Rohayatin¹

Zaenal Abidin²

Harky Ristala³

Universitas Jenderal Achmad Yani^{1,2,3}

*Jalan Terusan Jend. Sudirman, Cibeber, Kecamatan Cimahi Selatan, Kota
Cimahi, Jawa Barat 40531*

Correspondence email: titin.rsantoso@gmail.com

ABSTRACT

The reform of the government bureaucracy marks a change in the government structure to a decentralized pattern. Consequently, the implementation of regional autonomy has changed the entire structure and function of the bureaucracy and the implementation of public services. Bureaucratic reform and public services are two important elements in governance management in the era of globalization. Bureaucratic reform is the government's commitment to implementing good governance to be able to have high competitiveness through the application of the concept of e-Government, one of which is the implementation and development of Smart Cities. Smart City is a city that combines information and communication technology (ICT) with the aim of improving the performance of government services. Smart cities in the era of globalization and digitalization can have a big impact on changing the lives of individuals and government organizations. Information technology in the era of globalization is the main means of improving human resources as implementers of government organizational systems. The implementation and development of Smart City aims to develop smart solutions for dealing with the challenges of urbanization, globalization, and the use of sophisticated information technology based on e-government.

Keywords: *bureaucratic reform, information and communication technology, smart city, and e-government.*

INTRODUCTION

Background of the Study

Reforming the government bureaucracy is a fundamental shift in the new paradigm of government. According to Samin (2000:172-182), reform is

a movement to change the shape and behavior of the government's organizational structure because it is no longer functional and is inefficient, dirty, and undemocratic. Government bureaucracy is a crucial factor in deciding the direction of successful government administration. Thoha (2012:245-255) says that bureaucracy is written, planned, and well-documented management of a government or community by educated and civilized people.

The government's role in bureaucratic reform is to respond to challenges, not merely to simplify or fix the bureaucratic structure, but also to alter the mindset and bureaucratic culture in various roles in government management, which leads to management organizations, human resources, and accountable public service delivery. According to Asrofi (2008: 246-255), culture has a significant impact on the effectiveness of regional government bureaucratic reform. In the age of globalization, the government bureaucratic reform strategy is needed to change the structure and culture of the bureaucracy. It is also used to figure out the basic direction of policy when making programs at the government level, like the Cimahi City Regional Government, which is currently implementing and developing the Smart City concept (*smart governance, smart economy, smart branding, smart living, smart environment, dan smart society*).

A smart city is a city that utilizes information and communication technology (ICT) to enhance the performance of urban services such as energy, transportation, and utilities to reduce resource consumption and waste. Widodo (2016:227-235) explains that the objective of a smart city is to enhance the quality of life of its residents by enhancing performance and service quality. Arafah (2020: 27-40) emphasized that a smart city aspires to enhance the competence of a city through technological infrastructure, particularly ICT in its region, the development of software applications, and collaboration with the business sector.

Occasionally, the journey of a smart city demonstrates the requirements of government strategy and the necessity for community participation to realize a better smart city. In the future, "smart city" will become a concept that provides the government and the people with an excellent opportunity to become aware of the difficulties they confront. Widodo (2016:227–235) states that the availability of information that is easily available, quick, exact, and accurate is one of the fundamentals for advancing the use of technology in the government environment, which is a significant requirement in the public services sector. Suhendra (2018:185–195) said that the regional government coordinates the use of information and communication technology in a sustainable manner to offer the people access to information. One example of bureaucratic reform is the use of information technology and telecommunications to improve the way the government works.

Talking about the implementation of the smart city concept in Cimahi City, it has been implemented, and various government strategies have been developed; however, in their implementation, many government strategies have not gone as planned, for example: 1) Almost every OPD (Optical Distribution Point) Server has an error that makes it difficult to log in; 2) application usage frequently exhibits a rather heavy loading interface; for instance, population data is difficult to download; 3) The server for attendance requirements also has an error, such as the name ACI being changed to SIKONCI. From the perspective of human resources as system implementers, the system is challenging to implement due to its frequent modifications and errors, which interfere with work operations. It can be claimed that the implementation and development of Smart City in Cimahi City were not maximized due to the absence of public education regarding systems that are accessible to the public. Because of this, the development and implementation of Smart City in Cimahi City were not at their best.

Formulation of Study

The research question is as follows: (1) How to use and improve the Smart City idea to reform the Cimahi City Government Bureaucracy. (2) How is the level of public participation in the application and development of the smart city concept in realizing the bureaucratic reform of the Cimahi City Government?

Objective of Study

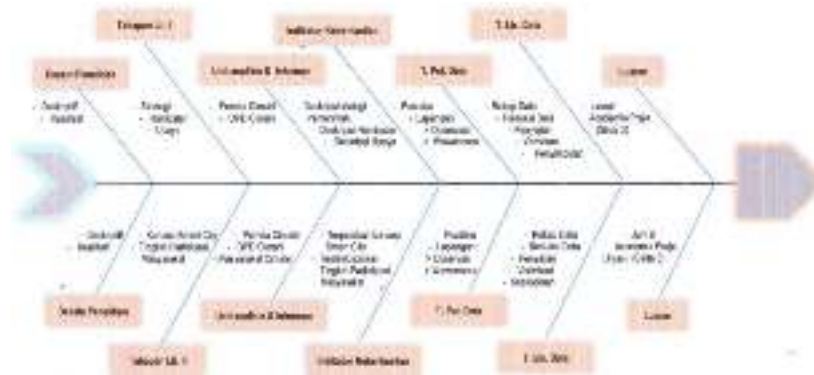
The aims of this study are as follows: (1) to describe and assess the implementation and development of the smart city idea in achieving the bureaucratic reform of the Cimahi City Government. (2) to describe and evaluate the level of community participation in the implementation and development of the Smart City concept in realizing the Bureaucratic Reform of the Cimahi City Government's plan.

The Importance of Study

The importance of the study are as follows: to describe and analyze the implementation and development of the Smart City concept, to describe and analyze the level of community participation in the implementation and development of the Smart City concept in realizing the Bureaucratic Reform of the Cimahi City Government.

RESEARCH METHOD

Research on the application and development of smart city in realizing the bureaucratic reform of the Cimahi City Government was carried out in several Cimahi City Regional Apparatus Organizations. The time of the study was carried out for 8 months. The research method which contains research design, research stages, data collection techniques, data analysis techniques, unit of analysis, informants and research outputs can be seen in the following figure:



Flowchart of Research on Application and Development of Smart City in Realizing Bureaucratic Reform of the Cimahi City Government (In the Form of Fishbone Diagram)

THEORETICAL FRAMEWORK

Bureaucratic Reform

In the era of globalization, bureaucratic reform and public services are two essential components of governance management to achieve quality and exceptional public services and good governance. The government's commitment to creating good governance is to reform the bureaucracy. According to Komarudin (2011:148), the objective of bureaucratic reform in governance is to increase the quality of public services, institutional effectiveness and efficiency, and fight corruption. To prevent corruption, it is the government's obligation to create a clean government. If bureaucracy wants to be a competitive executor or manager of local government, according to Rajab (2012), good governance concepts must be applied.

By implementing changes to government management, it will be possible to map and characterize the governance of government management, institutions, management, performance of the bureaucratic apparatus, bureaucratic structure, and culture. According to Wasistiono (2001:21), the style of government management varies in accordance with the government's role, the vision and mission of government organizations, management functions, organizational forms, and leadership. Wasistiono

(2001:20) also asserts that there are five ways to reform the government: the core strategy, the consequences strategy, the customer strategy, the control strategy, and the culture strategy.

In the context of government bureaucracy connected to public affairs, Samin (2000:172-182) says that, in the context of building a government administration system, bureaucratic reform must put democracy and empowerment, service delivery, transparency, participation, cooperation, decentralization, policy consistency, and legal clarity at the top of the list.

The Concept of Smart City

Smart City is a city that employs information and communication technology (ICT) to enhance the efficiency of government services. According to Wibowo (2019:44–53), the primary objective of a smart city is the development of a region or city that employs information and communication technology (ICT) to enhance urban performance and services. A smart city can be created by employing smart technology to transform the nature of the economy and the surrounding infrastructure. In addition, Widodo (2016:227–235) explains that the Smart City's goals are consistent and encompass smart living, smart people, smart environment, smart mobility, smart economy, smart governance, smart services, and smart infrastructure.

In the era of globalization and digitalization, the Smart City concept has had a significant impact on the lives of both citizens and government institutions. In the era of globalization, information technology serves as the primary method for strengthening human resources (HR) in government organizations. Asropi (2008:246-255) explains that Smart City seeks to provide solutions to the issues of urbanization, globalization, and climate change. Arafah (2020:27–40) added several reasons that support the development of a smart city: (1) the widespread use of technological devices such as mobile phones and the internet by the community, (2) the increasing

urban dimension, and (3) the need to protect the environment from pollution and energy consumption. Moreover, according to Winarso (2020:27–40), the Smart City concept has three phases: (1) beginning with a focus on hardware, or Smart City as a digital city; (2) focusing on software, or Smart City as a socially inclusive city; and (3) focusing on the hardware and software that comprise Smart City as a high-quality of life city (Smart City as a city with high quality of life).

Smart City as a city with a high quality of life demonstrates the necessity for synergy between the government and community participation at this stage of development. At this stage, the notion has centered on hard infrastructure and soft infrastructure; nevertheless, technology alone will not suffice because it is susceptible to imitation and modification. Soft infrastructure is gaining importance due to its human-centric nature. Using ICT to improve awareness, intelligence, welfare, and community engagement, the desired outcome can be accomplished in the form of a higher quality of life. The evolution of the Smart City concept demonstrates the community's involvement and participation to create a better Smart City in collaboration with the government.

Compared to the manual technique, the development of information and communication technology has several advantages, as seen by the faster rate at which individuals obtain information through various information and communication technologies. Widodo (2016:227–235) stated that the administration of the government should use information technology and telecommunication services to improve the government's performance and to meet the public's need for transparency and accountability of government financial information to achieve good governance. The Smart City concept is described as the transformation of a city into a smart city with the goal of providing exceptional community service and fostering community openness via the use of advanced

information and communication technologies. The smart city concept contains six indicators, according to Widodo (2016:227–235): (1) smart government, (2) smart economy, (3) smart living, (4) smart living, (5) smart people, and (6) smart mobility.

A smart city is a city that operates well in the economic, population, government, mobility, and environmental sectors and that integrates and regulates all infrastructure. Smart cities are also able to connect physical infrastructure, IT infrastructure, social infrastructure, and commercial infrastructure to boost city intelligence, as well as making cities more efficient and livable using smart computing.

DISCUSSION

Implementation and Development of Smart City in Realizing the Bureaucratic Reform of the Cimahi City Government

The government uses Smart City technologies to communicate directly with the community and city infrastructure and to monitor what is occurring in the city and its growth. ICTs are used to improve the quality, performance, and interactivity of urban services, to cut costs and reduce resource use, and to improve communication between citizens and the government.

The Smart City application was created to manage urban flows as a response to several issues faced by conventional cities with transactional interactions with their residents. A smart city is a city that leverages ICT to meet market demands, and community involvement in the process of governance is essential. Connecting a city's public infrastructure with its application systems, then using the data to make smarter judgments while controlling the various city infrastructures, is how smart cities are constructed. Smart Governance, Smart Branding, Smart Economy, Smart

Environment, Smart Living, and Smart Society are all part of Cimahi's smart city implementation and development.

The concept of a Smart City must incorporate digitally or online-delivered public services. The objective is to improve the speed, convenience, and efficacy of community services. The Cimahi City Government continues to show that it is committed to building the Cimahi Smart City by having 71 Smart City solutions in 2019 and building a Public Service Mall to improve the quality of services for the community.

Living Lab Smart City Nusantara was established to materialize Cimahi Smart City alongside Account Manager Telkom Regional 3. This area was constructed by the Telkom Group to serve as a resource for all stakeholders of Smart City Indonesia, including the government, industry, universities, media, and society. ICT infrastructure, environment, transportation, health, education, and governance are the focal points of smart city development in Cimahi.

Smart City Cimahi is a plan for urban growth that uses ICT and IoT to keep track of city assets in a safe way. These assets consist of information systems for local government agencies, schools, libraries, transportation systems, hospitals, power plants, water distribution networks, trash management, and other community services. Cimahi City uses the concept of a "smart city" with the intention to use information technology and urban technology to make the community's services more efficient.

The implementation and development of Smart City is an endeavor by the government to facilitate and speed the community's access to services, such as those in the domains of economy, housing, governance, and the environment, among others. Smart city implementation is a trend toward transitioning to more current technology. The Work Unit of the Cimahi City Government has introduced technology-based services. For instance, in the North Cimahi District, they have made *Sasarengan Lengkapi Persyaratan*

(Sapakat) service applications and *Surat Pelayanan Terpadu* (Super) into an online Integrated Service Letter. It is also being constructed and tested at the RT/RW level at the Cibabat Hospital in the Cimahi City Region. The subdistricts of Central and South Cimahi are developing in comparable ways.

Cimahi City continues to create application-based services towards "Smart City," such as the transformation of manual public services into integrated technology-based services. There have been 66 applications and other improvements from the Regional Work Units (*Satuan Kerja Perangkat Daerah/SKPD*), Regional Leadership Coordination Forum (*Forkopimda/Forum Koordinasi Pimpinan Daerah*), and the community under the New Cimahi slogan. Infrastructure-wise, the City of Cimahi is already qualified for the implementation of technology-based services. This is evidenced by the fiber-optic data and is a historical notion for the growth of Cimahi Cyber City. One of CCC's icons is the fact that Baros Information Technology and Creative (BITC) has become a symbol and a center for business development in the creative industry, especially in the field of telematics.

For its implementation, socialization of the SKPD comes first, followed by technical guidance and the development of the Cimahi Smart City master plan, as well as the formation of institutions such as the Smart City Council and the Cimahi City Smart City Implementation Team. For the City of Cimahi to realize its goal of becoming a smart city, the government must be able to increase its role as a protector and service provider to the community, as well as increase community participation as a development objective in the implementation and development of smart cities. The government can make the most of its potential and get rid of problems or obstacles. It can also find out what local knowledge it has and see how well it runs itself.

The Cimahi City Government's smart city master plan outlines the concept of smart governance, smart economics, smart branding, smart living, smart environment, and smart society, as well as a smart city road map. The Cimahi City Smart City Road Map includes a one-year development plan, a five-year medium-term development plan, and a ten-year long-term development plan. The successful implementation and development of the Smart City initiative must be supported by all parties; SKPD, academic institutions, and community organizations have developed numerous innovations. The government of Cimahi wants to keep supporting the innovations that come out of this, including through the Cimahi Motekar Award (Chima) competition.

As evidence of Cimahi City's commitment to adopting and expanding the Smart City program, it won the "Smart City" or "Smart Region" award and gained Asia City's praise. The SKPD uses a system that speeds up public services like the science and technology system, the reporting system, and the financial system, among others. This system also helps the facilities. Cimahi City is now a pilot city for the Smart City idea, indicating that it is one of the best cities to establish an electronic-based government system (SPBE). The development and implementation of the Smart City program is an example of how technology is becoming more modern and must be used in government as well.

The Smart City concept promotes a city's use of information technology and much more. In this situation, IT is merely "enabling" or supportive. Its purpose is to facilitate service delivery, particularly in the public sector. such as the employment of information technology in the North Cimahi District, which facilitates online administration. Cimahi is one of the probable candidate cities for the Smart City Program's implementation and development. This is evidenced by the fact that Cimahi was the city with the best e-government deployment in 2015.

The government's determination to adopt and enhance the Smart City program in Cimahi contributes to readiness. However, Cimahi still has a substantial amount of homework to perform. Cimahi must also determine what attributes can be highlighted as a brand for the city. For the Smart City Program to work and grow, it's important that people are educated and know how to use technology, and that they work with the government.

The implementation of smart cities should be applicable to all levels of society, not just those living in the center of the city. The adoption of e-government in Cimahi City is generally effective, but have all levels of society in the Cimahi City region been educated on the various systems and applications? This must be answered first to avoid situations where the community's current systems and applications cause operational problems that make it hard to provide services.

The execution and development of the Smart City flagship program in Cimahi City by means of government innovations in the COVID-19 era are as follows:

1. Smart Government, a three-in-one, same-day service program from the population and civil registration services, is essentially a population service package consisting of the provision of three population documents simultaneously on a single application made by the community.
2. Smart Branding, the Cireundeu 3600 program from the development planning agency, namely, a virtual tour package to an area of the Cireundeu traditional village by using videos that can show views from an angle of 3600 in a sustainable manner so that visitors can view videos from a variety of angles.
3. Smart Economy, a "hi-park caterpillar program" (collaboration between pillars at CIMAHI Technopark) from the trade, cooperatives, small and medium enterprises, and industry offices, namely a "quadruple helix"

collaboration program that is permanent and synergistic among academics, business, government, and community actors in creating innovative services for SMEs actors as well as in the process of creating new technology-based entrepreneurs to increase the local economy's output.

4. Smart Environment, a collaborative program (Cimahi Together Reduce Trash) from the environmental service, specifically a program that cares and is accountable for the waste created by actively incorporating all levels of society to achieve a clean environment.
5. Smart Living, a housing program from the housing and residential area service, namely a development program for the social rehabilitation of uninhabitable homes by adding repairs or construction of family bathrooms along with domestic wastewater treatment facilities so that they can transform community houses that are classified as *rutilahu* (social rehabilitation of uninhabitable homes) into houses that are not only livable but can also make the inhabitants healthy.
6. Smart Society, the Cimahi reading habit program from the communication, informatics, archives, and library services, which is a movement to get elementary and middle school students used to reading by giving them reading challenges and showing appreciation for students who have finished reading, and which currently has loan facilities and the ability to read books online by using digital books accessible through the eLib application (e-library).

Community Participation in the Implementation and Development of Smart City in Realizing Local Government Bureaucratic Reform in Cimahi City

At the level of the Cimahi City Regional Government, the community is considered to play a crucial role in the development of Smart City. Without community involvement in the planning and development of a smart city,

the procedure will undoubtedly not be optimal. One goal of the Smart City of Cimahi City is to make government and public services more open, accountable, and inclusive by using integrated technology and information support and improving institutional systems and procedures based on what the people need.

The community made the following contributions to making the Smart City Program and putting it into place:

1) Expressing their aspirations

The community has helped building a smart city by giving ideas that can be used and expanded.

2) Utilize new technical breakthroughs.

There must be a balance between the government's knowledge and comprehension of technology as the service provider and the community's mastery and comprehension of technology as the service consumer to actualize a smart city. Individuals are accustomed to incorporating technology into their daily lives. And anything pertaining to community services must be technology-based as well. The community must be able to use the service once it has been developed, as the aim of technology is to make it easier to offer services, not more difficult. In this situation, government and community must collaborate.

3) The community's commitment

To carry it out and ensure that the smart city operates in accordance with its vision and mission, a communal rule is enacted.

CONCLUSION

Based on the results of the analysis and discussion, it can be concluded as follows:

- 1) "Smart City" in Cimahi City is a sustainable development program that aims to provide easier access to information faster.

- 2) Smart City Development and Implementation in Realizing the Cimahi City Government's Bureaucratic Reform as Follows:
 - a. Smart Government, a 3-in-1 one-day service program, namely a population service package.
 - b. Smart Branding, the Cireundeu 3,600 Program, which is a virtual tour package (virtual tourism) for the Cireundeu traditional village tourist area.
 - c. Smart Economy, a hi-park pillar program (collaboration between pillars at Cimahi Technopark), is a permanent and synergistic quadruple helix collaboration program that creates innovative services for SMEs.
 - d. Smart Environment, Collaborative Program (Cimahi work together to reduce waste).
 - e. Smart Living, a Housing Plus program, namely the RUTILAHU Development Program.
 - f. Smart Society, the Cimahi Reading Habit Program, which is a movement to get students used to reading in the e-library application,
- 3) Community Participation in Smart City Implementation and Development in Realizing Regional Government Bureaucratic Reform in Cimahi City:
 - a. Delivering aspirations, ideas, and innovations in the implementation and development of smart city programs.
 - b. Using and getting benefit from new technologies by putting into place and using applications from the Smart City component.
 - c. Commitment from the community; there is an agreement built between the government and the community in the implementation of the Smart City Program.

- d. The community in Cimahi City is said to be sufficiently involved in the development and implementation of Smart City programs. About 70% of the people in the city use applications that are part of Smart City's different parts or pillars.

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