

STRATEGY FOR IMPLEMENTING AND DEVELOPING SMART CITY IN ORDER TO REFORM LOCAL GOVERNMENT BUREAUCRACY IN CIMAHY CITY

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ABSTRAK

A Smart City is a concept for urban development that incorporates information and communication technology (ICT) and Internet of Things (IoT) technologies. A smart city aims to maximize service efficiency via the use of informatics and technology. Data gathered from people and devices is then processed and evaluated using sensors that are coupled with a real-time monitoring system. This data is gathered as critical data to help the community overcome the inefficiencies of bureaucratic services. The rapid advancement of information and communication technology, combined with the development of an increasingly reliant society on the performance of the government bureaucracy, generally requires the government's strategy for implementing and developing Smart Cities. because it has the potential to significantly influence lives, both personally and collectively, including those of government agencies.

However, several difficulties remain in its implementation, preventing the government's strategy from being executed properly. The government's strategy for implementing and developing the E-government idea, as well as for applying and developing the Smart City concept to achieve bureaucratic reform, is highly suitable for use as a form of assistance for the development of high-quality community services. The Smart City idea is being implemented in Cimahi City using the following six indicators: (1) smart government, (2) smart economy, (3) smart environment, (4) smart living, (5) smart people, and (6) smart mobility are all examples of smart concepts.

Keywords: Strategy, Smart City, Government Bureaucratic Reform

INTRODUCTION

Background of the Study

In the age of globalization and digitalization, smart cities have had a significant impact on the lives of both individuals and organizations, including government agencies. Wibowo (2019: 44-53) asserted that the quick growth of technology has the potential to alter and have a substantial impact on changing patterns of living. Changes that become more effective, efficient, practical, and fast-paced because of a union between humans and technology that occurs at an amazing rate (human technology).

Information and communication technology (ICT) can be used to improve the quality-of-service performance in industries such as energy, transportation, and utilities, as well as to reduce resource consumption and cost wastage. As stated by Widodo (2016: 227-235), the goal of a smart city is to improve the quality of life of its residents as well as the performance and service quality of the city. Also highlighted in Arafah (2020: 27-40), Smart City aspires to improve the quality of the city by utilizing technological infrastructure, particularly information and communications technology (ICT), by developing software applications, and by partnering with private parties.

At times, the path of smart cities demonstrates the government's plan requirements and the vital role of community engagement in establishing a better smart city. Widodo (2016:227-235) believes that one of the critical requirements for advancing the use of technology in the government environment, which is a necessary condition for providing public services, is the provision of conveniently accessible, timely, exact, and accurate information. Suhendra (2018: 185-195) argues that local governments exert control over the sustainable use of information and communication technology through assisting in the dissemination of knowledge to the general community. One component of bureaucratic reform is the administration of government with information technology and telecommunications to improve government

performance. Reforming the government bureaucracy is a critical component of the new government paradigm.

According to Samin (2000:172-182) "Reformation" refers to a movement to modify the shape and behavior of an order because it is no longer in conformity with the demands of the moment, inefficient, unsanitary, or undemocratic. It is imperative that the direction of government bureaucracy be determined to achieve success in governance. Organizational (institutional) management, human resources, public service delivery, and accountability are all improved through bureaucratic reform. The role of government is to respond to challenges, not only to simplify or improve the bureaucratic structure, but also to change the mindset and bureaucratic culture for various roles in governance management.

In an era of globalization, government bureaucratic reform strategies are required to serve as a foundation for reforming the bureaucracy's structure and culture and to serve as a guide for developing policies and programs at the Cimahi City government level, which is currently implementing the Smart City concept. Numerous Cimahi government strategies have been developed, but many have failed to materialize. As a result of the assessment, server errors, difficulty logging in, applications frequently loading, and a heavy interface remain. For example, population data is difficult to download, and some CSV buttons are unresponsive when clicked. Thus, understanding the innovation system presents a challenge.

As a result, the absent server also has an error, and as a result, its name has been changed from ACI to SIKONCI. However, it is still not working well, as seen from the HR perspective, as the system implementer finds it difficult to implement the system because it frequently changes and frequently fails, interfering with work activities and the lack of public awareness of systems that can be accessed by the public.

Sources obtained from Litbang (Research and Development) of BAPPEDA Cimahi (Regional Development Planning Board, Cimahi) as initial data even the Local Government of Cimahi City has participated in various competitions related to innovation including:

- (1) Kemenpan Public Service Innovation Competition (SINOVIK). RB. Top 99 of 2016 E-reporting in the Development Administration section.
- (2) Sinovik Kemenpan. RB. Top 99 and 45 of 2018 Katerpillar Hi-Park Menpan. RB (Disdagkoperin),
- (3) Sinovik Kemenpan. RB. Top 99 and Top 45 2019 Gastrodiplomacy Cireundeu (BAPPEDA),
- (4) Sinovik Top 5 The Best of The Best in 2020 Katerilah Hi-Park (Disdagkoperin),
- (5) 1st and 3rd place Budhipraja Kemenristek/BRIN in 2019 and 2020 (BAPPEDA),
- (6) Innovative Government Award (IGA) Ministry of Home Affairs ranked 5th and 12th National in 2019 and BAPPEDA Cimahi City CORPU 2020 (BAPPEDA),
- (7) Kemenkomimfo Smart City which always gets positive and exceptionally satisfactory results in 2019 and 2020.

On this basis, the researchers saw that there was an imbalance between the actual implementation in the field and the existing system documents in government organizations, for those researchers were interested in conducting further research.

The Importance of Research

The research's primary objectives are to (1) determine how the government's approach to implementing and promoting smart cities contributes to local government bureaucratic reform; (2) identify impediments to the government's strategy for implementing and developing smart cities to achieve local

government bureaucratic reform; and (3) identify government efforts for implementing and developing smart cities to achieve regional government bureaucratic reform in Cimahi City.

The Aims of Research

The goal of this study is (1) to define and assess the government's plan for implementing and developing Smart Cities in order to achieve local government bureaucratic reform, (2) identify and assess impediments to the government's strategy for implementing and developing smart cities in order to achieve local government bureaucratic reform (3) describe and assess the government's strategic attempts to implement and promote smart cities as a means of achieving regional government bureaucratic reform.

RESEARCH METHOD

The research on smart city implementation and development strategies for local government bureaucratic reform in Cimahi City was conducted in collaboration with different regional apparatus organizations in the city. The research took eight months to complete. The following figure illustrates the research methodology, which covers the research design, research stages, data collection procedures, data analysis techniques, units of analysis, informants, and research outputs:

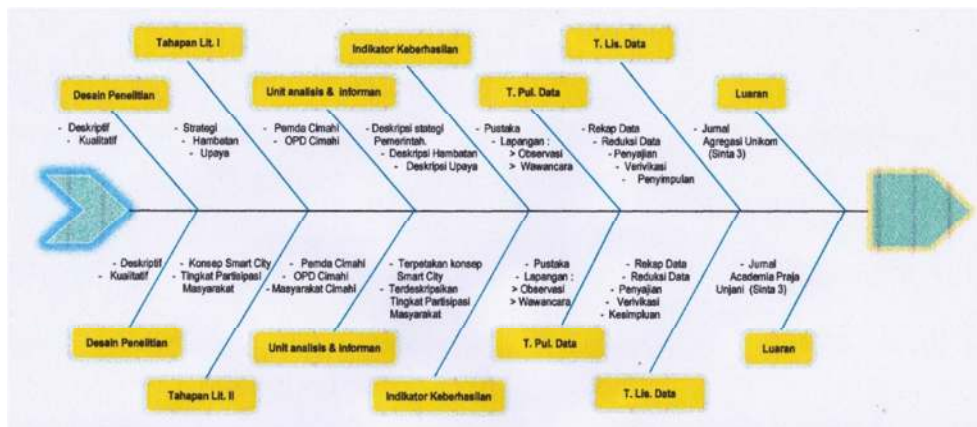


Image of Research Flowchart

Smart City Implementation and Development Strategy in Order to Realize Local Government Bureaucratic Reform in Cimahi City (In the Form of Fishbone Diagram)

Theoretical Framework

Concept of Strategy

A strategy can be developed as a means of accomplishing a goal or as an attempt to communicate a job. According to David (2011: 53), strategy in the context of an organization is the process of identifying various long-term goals and objectives that are critical to the organization's success, followed by the development of activity plans and the allocation of resources necessary to accomplish those goals.

Heene (2010: 72) also defines strategy in organizations as the following: (1) planning to further clarify the rational direction taken by the organization in achieving long-term goals; (2) references to the consistency or inconsistency of organizational actions; (3) the organization's chosen point of view; (4) the perspective of an integrated vision between the organization and its environment; and (5) the specifics of the organization's tactical steps. Thus, strategies are methods that are consistently organized and planned to accomplish a long-term, dynamic, and adaptable goal, particularly in the human resource element, which requires the capacity and willingness to innovate and be technologically literate.

Concept of Smart City

A smart city is a concept that refers to a city that leverages information and communication technology (ICT) to enhance the performance of government services. According to Wibowo (2019: 44-53), the primary objective of a Smart City is to revitalize a region or city via the use of information and communication technology (ICT) to enhance urban performance and services. A

smart city can be built when smart technology is employed to alter the economic and infrastructure landscape.

As technology advancements are the primary tool for assisting in the improvement of human resources (HR) as the system's implementer in government organizations, it follows that in an era of globalization, human resource factors cannot be divorced from technology advancements. According to Widodo (2016:227–235), Smart City strives to provide intelligent solutions to urbanization, globalization, and climate change challenges.

According to Arafah (2020:27–40), several factors contribute to the development of smart cities: (1) widespread use of technological devices such as mobile phones and the internet by the community; (2) the urban dimension is increasing; and (3) the need to protect the environment from pollution and energy consumption. Additionally, Winarso (2020:27–40) stated that the Smart City concept is divided into three phases, namely (1) focusing exclusively on hardware, also known as Smart City as a digital city; (2) focusing exclusively on software, also known as Smart City as a socially inclusive city; and (3) focusing exclusively on the hardware and software that comprise Smart City as a city with a high quality of life.

The advancement of information and communication technology is extremely useful in comparison to manual techniques, as seen by the increased speed with which individuals obtain information via various information and communication technologies. Widodo (2016:227–235) asserts that government administration may be improved using information technology and telecommunications by meeting the public's need for transparency and accountability regarding government financial information with the goal of establishing good governance. The Smart City concept can be defined as the transformation of a city into a smart city with the goal of providing outstanding service to the community and increasing community openness via the use of sophisticated information and communication technologies. Widodo (2016:227-

235) identifies six indications for the Smart City concept: (1) smart government, (2) smart economy, (3) smart environment, (4) smart living, (5) smart people, and (6) smart mobility.

Bureaucratic Reform

The reform of the government bureaucracy signifies a shift away from centralization in the governing structure. As a result, implementing regional autonomy altered the bureaucracy's form and function, as well as the way public services are administered. Changes in governance and management during the reform era are necessary to maintain democracy. When it comes to the bureaucracy and public affairs, if the bureaucracy performs well, it can demonstrate signs of bureaucratic behavior. According to Samin (2000:172–182), bureaucratic reform must prioritize democracy and empowerment, service delivery, transparency, participation, cooperation, decentralization, policy consistency, and legal clarity while building a government administration system.

In this era of globalization, bureaucratic reform and public services are two critical components of governance management that contribute to the implementation of high-quality and exceptional public services and good governance. Administrative reform demonstrates the government's commitment to good governance. According to Komarudin (2011:148), administrative reform and governance efforts are aimed at enhancing the quality of public services, institutional effectiveness, and efficiency. The government's role is to establish a clean government. Rajab (2012:14) further confirms that "Bureaucracy as executor or manager in local government management must adhere to the principles of good governance in order to maintain a high level of competitiveness."

DISCUSSION**Smart City Implementation and Development Strategy in Realizing Local Government Bureaucratic Reform in Cimahi City**

In the context of government organizations, strategy is the definition of several fundamental aims and objectives, followed by the formulation of a plan or the selection of a program, activity, or resource allocation necessary to accomplish these goals. A strategy is a proposed course of action that necessitates a decision on the management of the business and its resources on a wide scale. A strategy is defined as a desired outcome and a means of communicating an action conducted and formulated within an organization.

Globalization is causing a major change in government organizations, requiring the government to transition from traditional models to e-government. Naturally, this is not easy or instantaneous since it takes a planned, controlled, systematic, and large approach. It undoubtedly faces obstacles during implementation, for example, due to a lack of human resources (HR), which is the primary factor and primary implementer in the process of administering government.

Apart from human resource issues, Cimahi City is also confronted with natural resource issues (SDA). The constraints of the City of Cimahi's natural resources undoubtedly have a significant impact on the governing process; the City of Cimahi must truly be able to harness and optimize these natural resources with full strategy and innovation. Cimahi City Government's early measures, one of which begins with maximizing the Cimahi Region's tourism potential, Cimahi City has a lot of potential in the tourist industry. For example, Cimahi City is a Military Education City, Cimahi City has several historical treasures, and Cimahi City has a unique culture, such as Cireundeu, which can serve as a tourist icon in Cimahi City.

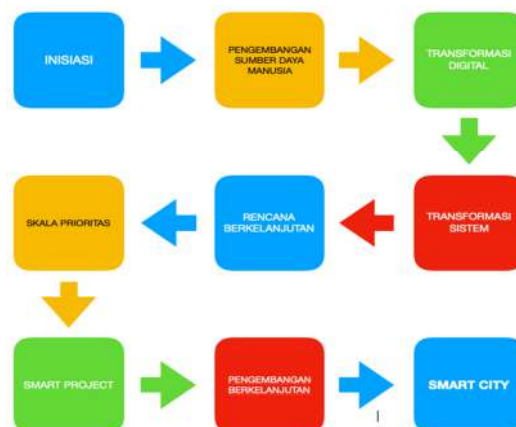
The Cimahi City Government must continue to socialize and market the city's potential to boost local revenue. Apart from its tourism potential, Cimahi

City also offers gastronomic qualities, such as Cimahi batik. More significantly, the City of Cimahi is also designated as a Cyber City. The application of the notion of information technology through the BIAF (Baros International Animation Festival) program, in which Cimahi has partnered with other countries in the field of information technology, Naturally, Cimahi City must be capable of overcoming obstacles in this period of globalization, particularly those associated with the creation and implementation of e-government projects. Implementing and implementing the e-government concept is one of the initiatives and attempts toward improving the Cimahi City government bureaucracy. The direction of government policies and strategies in the application and development of the E-government concept, as well as the implementation and development of the Smart City concept, with the goal of achieving bureaucratic reform as a means of assisting in the development of high-quality public services, The following are six government strategies for e-government implementation:

- a. Create a dependable, dependable, and cost-effective community service system. It is accomplished, among other things, through an equitable distribution of communication networks, both in terms of area and quality, as well as the construction of easily accessible government information portals.
- b. Holistically organize the Cimahi City Government's system and work operations. This entails preparing the government's human resources to adapt to the system's use of information and communication technologies.
- c. Make the best possible use of information and communication technology. Apart from providing accurate information, the security of public service transactions is a primary concern in the Cimahi City government organization's use of information and communication technology.

- d. Increase business participation and growth in the telecommunications and information technology industries. The business community frequently participates in the usage of e-government to the detriment of the government's ability to provide comprehensive public services.
- e. Strengthen human resource capacity at all levels of government, accompanied by a rise in community e-literacy.
- f. Develop information technology in government organizations in a methodical and quantifiable manner, specifically through the stages of preparation, maturation, consolidation, and utilization of information technology.

The stages for implementing and developing Smart City are as follows



This stage progresses from the inception of the Smart City to the stage of human resource preparation (government & community). This can begin with digital transformation, which can be accomplished through smart governance and smart people. The following describes the trajectory of the Smart City-based Cimahi City policy in 2012–2032 via RT (Neighborhood Association) and RW (Community Association) in Cimahi City:

1. Technopark development, an area in the southern Cimahi region that serves as the focal point for one of the economic sector's initiatives.

2. Development of other economic activity centers, such as the Ciseupan area as a water recreation area and enhancing Cimahi City's role in the Greater Bandung Basin Special Area's development as the PKN's core city (National Activity Center)
3. Cireundeu development, where Cireudeu, like Cimahi indigenous wisdom, has its own charm and uniqueness.
4. In the sphere of commerce and creative services, high-tech creative industries and non-polluting industries provide at least 30% of the Cimahi City area with green open space through the development of industrial strategic zones in the area surrounding the major urban village (Cimahi Selatan). Enhancing the quality and reach of integrated and equitable regional amenities and infrastructure services throughout the city through structuring and expanding regional infrastructure.
5. Strengthening the protective role in the area of water recharge (buffer zone)
6. Establishment of the KBU (North Bandung Area) strategic area in Cimahi City's northern section for the purpose of monitoring and controlling green building pollution.

Cimahi City's Smart City concept, which is used for internal services and public services to the community, is based on six pillars: smart governance, smart branding, smart economy, smart living, smart society, and smart environment, which are developed through applications owned by the Local Government of Cimahi City. This application has the following features:

1. Cimahi City news information that is integrated with the Cimahi City Government's official website (<https://cimahikota.go.id>).
2. Access to CCTV traffic monitoring facilities in real time
3. Information and application access for public services
4. A map of public service facility locations

5. Provisions for the administration of all current applications within the Cimahi City Government

Obstacles to Implementing and Developing Smart City Strategies in Cimahi City in Order to Achieve Local Government Bureaucratic Reform

Numerous obstacles have been encountered in implementing the Smart City Implementation and Development Strategy in order to achieve Regional Government Bureaucratic Reform in Cimahi City, including the following: (1) insufficient infrastructure; (2) insufficient government readiness to implement Smart City programs; (3) capacity technical human resources remain low; (4) ICT infrastructure is not evenly distributed; (5) there is an assumption that Smart City is synonymous with an ICT project rather than a smart city, and (6) There are still a significant number of people who have not been able to fully exploit digital technologies.

Efforts to Implement and Develop Smart City Strategies in Support of Cimahi City's Local Government Bureaucratic Reforms.

As a supporter of the Smart City program, the Cimahi City Government has made the following efforts in the Smart City Implementation and Development Strategy in Order to Realize Government Bureaucratic Reform:

1. Encouraging implementation and development to integrate information systems into the process of administering government affairs, including planning, implementation, and budgeting.
2. Advocating for the establishment of a Regional Development Information System (SIPD) or Regional Information System (SIDA).
3. Developing several regional regulations to serve as the foundation for regional development plans.

4. Promoting development planning so that during the planning process, the development plan document can undergo a thorough review based on current and reliable facts and information to be fully realized.
5. Preparing and prioritizing spatial planning laws to expedite the deployment of Smart Cities.
6. Determining the strategic initiatives necessary to assist in the implementation of smart cities.
7. Carrying out numerous inventions and creations in government administration, regardless of how tiny the innovations are, if they are for the community's advantage.
8. Smart City programs are intended to motivate other regions to pursue the same aim of creating a smart city and transforming it into a city of achievement.
9. Coordinating, cooperating, and cooperating with other regional governments.
10. Conducting comparative research on other regional governments that have made progress and encourage one another to participate in the Smart City initiative to level the playing field in terms of perceptions of what it means to be a smart city.
11. Creating regulations that allow for unrestricted innovation.

CONCLUSION

Cimahi City is seen as having great potential and is prepared to adopt the Smart City concept in its entirety. This readiness is bolstered by the determination of the Cimahi City Government to execute Smart City initiatives and encourage citizen involvement. A clear indication of this is demonstrated by leadership's commitment, as well as the performance of the State Civil Apparatus and community participation. In addition, Cimahi has demonstrated its readiness by being named City Number 1 (one) with the best

implementation of e-Government, a distinction that has been earned by no other city. The Smart City program in Cimahi City is a long-term development initiative that attempts to make information more accessible and accessible more quickly. The readiness of human resources serves as a guideline for beginning the implementation and development of Smart City projects in Cimahi City as part of the realization of bureaucratic reform. This will be used to select where to begin implementing the smart city initiative.

While Cimahi City has six pillars for the development of a smart city, the term of "Smart People" must receive a greater amount of attention from the city's local government for the city to function properly in all aspects of smart city development. There are nine processes or stages that the Cimahi City Government must go through to begin the implementation and growth of the Smart City initiative. Cimahi City must be aware of the potential that exists and that may be promoted as part of the city's branding strategy. Because of today's sophisticated information technology and globalization, the most important factor in implementing Smart Cities is that an educated society can synergize with the government, become accustomed to and familiar with the system. This means that both the government and the public must be technologically literate to successfully implement Smart Cities

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