Implementation of e-OPEN Application as a Strategic Innovation of Public Services in the Pandemic COVID-19 Era in Bekasi

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ABSTRACT

The COVID-19 pandemic that has hit almost the entire world, including Indonesia, has affected all aspects of life, one of which is public services. The government has issued a policy for the whole community so that every activity is carried out online or online to prevent the spread of COVID-19 cases. All parties, especially the government, must innovate to encourage more effective and efficient public services by keeping up with the times and advancing technology. This prompted the Bekasi City Disdukcapil to create an application-based innovation called e-OPEN. This study discusses how to implement the implementation of e-Open in population services in Bekasi City. The method used in this research is the descriptive qualitative method. Data collection is done by observation and literature study. Based on the research results, the e-Open application belonging to the Bekasi City Disdukcapil is considered quite effective and easily accepted by the public. This application allows busy people to manage and access their population data anytime and anywhere easily. Through the Halo Pamor menu, people with limitations in using the application also feel helped by the presence of the prestige task force.

Keywords: innovation, pandemic, COVID-19, e-open, public services

INTRODUCTION

Public service is the government’s obligation to run the government bureaucracy. The implementation of public services has been regulated and stipulated in law No.25/2009 that public services are all activities in the context of fulfilling basic needs by the basic rights of every citizen and resident of an item, service, or administrative service provided by the organizer service related to the public interest.

Implementing public services still needs to be more effective and efficient. The reason is that every time you deal with government activities, there will be complicated, convoluted services, slow services, the existence of corruption, collusion, and nepotism, and the low quality of government human resources. The poor quality of public services gives the government a bad image and can damage the value of public trust. In providing services, every government agency should apply the general principles and principles of governance. Public services must be carried out properly,
indiscriminately, and without discriminating in the affairs of the public interest to create fair and equitable public services.

To encourage better public services, the government creates government innovations based on information and communication technology known as e-government. E-government is government administration through an electronic-based information system to build a relationship between the government and the community in an effective, efficient, transparent, accountable, and responsive manner in government administration activities. Information technology in government administration allows transparency and disclosure of information supporting democratic governance.

Innovation is urgently needed to change, evaluate, and update a flawed government system for the better. The innovation aims to increase competitiveness between regions and institutions and improve public service quality and public participation in government administration. Some experts argue that innovation is carried out because of the desire to make changes that positively impact society and organizations. Government innovations must be carried out evenly throughout all regions in Indonesia so each region can later complete and create the latest superior and quality innovations. As evidenced by the many innovations that have been made and implemented, making the area more forward in all fields is not only for people who are getting smarter with the times but also has an effect on other sectors of life such as the economy, culture, and politics.

Bekasi City is known as one of the metropolitan in Jabodetabek\(^1\). This is because Bekasi City is the area with the third largest population after DKI Jakarta due to urbanization or the movement of people from villages to cities. The soaring rate of population movement and the death and birth rate also affect the population growth rate in Bekasi city. The existence of a population explosion will cause a new problem, namely the uneven distribution of the population and rapid population growth will affect the limited residential land, employment opportunities, lack of adequate facilities, and uneven and low health levels so that the impact is that the government will find it challenging to ensure the fulfillment of the needs of the community.

Of course, to find out the distribution and rate of population growth, it is necessary to collect population data so that the community is legally registered and can participate in government administration in the area. In addition, population data is essential for all citizens because it will make it easier for the public to access various public services interests. The Disdukcapil carries out population data collection\(^2\). Based on Permendagri No.14/2020 concerning the guidelines for the nomenclature of the Disdukcapil in provinces and districts/cities, it is explained that the population and civil registry service, hereinafter referred to as Disdukcapil is a regional apparatus in charge of population administration affairs in a province or districts/city.

The current outbreak of the COVID-19 virus in Indonesia, with cases that continue to increase, affects all aspects of life, including public services. The government has issued a policy for the entire community so that every activity is
carried out online to prevent the spread of COVID-19 cases. All parties, especially the government, must innovate to encourage more effective and efficient public services by keeping up with the times and advancing technological progress. This prompted the Disdukcapil of Bekasi City to create an application-based innovation called e-OPEN. The application is an innovation development to replace the SIMPADUK online service application or an ineffective population service information system. The e-OPEN application aims to make it easier for the public to manage population data and civil records in Bekasi city. This application was formed in mid-2020 amid the COVID-19 virus outbreak in Bekasi. In addition to updating the application-based service system, e-OPEN is intended to limit direct public contact with population service officers to prevent the spread of the COVID-19 virus that can be contagious. Based on the problem description, this study will discuss the use of e-OPEN applications in its application in the Bekasi City Disdukcapil.

**LITERATURE REVIEW**

Several previous studies discuss government service innovations in public services at Disdukcapil. First, a study entitled “Typology of Public Services Innovation of The Population and Civil Registration Services (Disdukcapil) of South Tangerang City During The Pandemic” by Nila Kurnia Wati (2021). This study aims to determine and analyze the typology of innovations carried out by the Disdukcapil during the COVID-19 pandemic using the theory from Halvorsen et al. The research results are in the form of 3O innovations (online, offline, and online motorcycle taxis) as innovations in providing service to the public during the COVID-19 pandemic and improving public service towards digital administrative services.

Second, the research titled “Analysis of The Application of Innovation Programs at The Disdukcapil of Magelang City in 2020” by Yoshandi Rendra Prasetya and Suci Nasehati Sunaningsih (2020). This study aims to find out and research more deeply about the SI BULAN program (action for mothers to return with a birth certificate) and SI SAKTI (action ready to deliver those certificates) with the pick-up method so that it is easier for people to get birth certificates and death certificates. Disdukcapil cooperates with relevant agencies in its program so that its implementation runs effectively and efficiently.

Third, the research entitled “Analysis of 6 in 1 Service Innovation (Electronic Birth, Death, Transfer, Arrival) at the Disdukcapil Surabaya” by Gayuh Nurfadilah and Maesaroh (2020). The research aims to examine the implementation of 6 in 1 or e-Lampid. The results obtained from the study indicate an economic advantage in terms of cost and time so that the public and Disdukcapil feel the benefits of using e-Lampid on the website.

There is a difference with previous research: the location used for research has never been the Bekasi City Disdukcapil. The e-OPEN application is also an innovation during the COVID-19 pandemic created by the Bekasi City Disdukcapil to provide
convenience for the people of Bekasi City in managing population documents. The study conducted by Nila Kurnia Wati used a typology of innovation to assess the new Disdukcapil program for the city of South Tangerang. The research undertaken by Yoshandi Rendra Prasetya and Suci Nasehati Sunaningsih at the Disdukcapil of Magelang City, although the SI BULAN and SI SAKTI programs are almost similar to the Jebol Dukcapil and Halo Pamor menus belonging to the Bekasi City Disdukcapil, this can be seen when the programs run. While the SI BULAN and SI SAKTI programs only use one of the staff to send the document when needed, the Halo Pamor program is an innovation that provides a special task force to help the community in the field and is available at all times.

1. Innovation of government

Innovation of government is defined as a form of renewal of government administration to create relations and increase public trust in the government. Innovation is here to change and improve a system to keep up with the times, and the benefits and uses can be felt by the community, especially in public services. Simon (2018) argued that innovation is a new finding that has changes, such as new ideas and thoughts that can be developed, applied, and felt the benefits. Innovation can be successful and valuable if it has productivity when applied to produce relevant improvements in quality, efficiency, and effectiveness (Yogi Suwarno, 2008). Fathur and Janwan (2020) defined the characteristics of public service innovation as follows:

(a) There are prominent characteristics in the form of ideas, programs, systems, and arrangements that will produce changes as expected;
(b) Has an element of novelty as a unique feature to show its authenticity and novelty;
(c) Innovation programs must be planned so that their implementation can be carried out correctly and directed;
(d) The existence of goals and strategies to be achieved from the implementation of innovation.

Innovation will run well if there is cooperation between the government, the public, and the private sector. According to Rogers in Hutagalung and Hermawan (2018), four factors determine the success of government innovation:

a. Innovation Characteristics

The public can easily accept a product if it has a relative advantage. This means that the level of innovation or new product ideas is considered better than before. Second, compatibility that is a product must have conformity with the values, needs, and desires of the community. Third, the complexity of innovation must make it easier for the community. Because the more difficult the product is to use, the less attractive it is to the public. Innovation is created to update and make it easier for someone in every way not to complicate the situation. Fourth, trialability is an innovative product’s ability to attract people’s attention. Fifth, observability is the ability to be seen by consumers and communicated to others: the more known consumers or the public, the more attractive the innovative product.

b. Communication channel
An innovative product can easily spread to the outer layer (society) if the agency properly utilizes communication channels such as mass media.

c. Change efforts from agents
Companies or agencies must involve traditional consumers (communities) and service users. The goal is to introduce innovation, influence it, and relate it to the purpose of the change or product of the innovation.

d. Social system
Rogers (1996) defines a social system as a set of interrelated units to solve problems and achieve common goals. Social systems in modern society will facilitate innovation because people tend to accept change compared to traditional social systems.

2. Public services
In law No.25/2009 concerning public services, it is explained that public services are all activities in the context of fulfilling basic needs by the basic rights of every citizen and resident of an item, service, or administrative service provided by a service provider that offers services related to the public interest. Hardiyansyah (2018) states that public service is providing services to the community or organizations interested in following the rules and regulations that have been set, which are intended to provide satisfaction values. According to Pararusman (in Nurdin, 2019: 20), there are five indicators to measure the level of community satisfaction with public services, as follows:

a. Tangibles are the quality of public services in the form of physical facilities or supporting facilities such as information places, waiting rooms, computerized administration, and so on, which are intended to support the smooth running of the service process and provide comfort for the people served
b. Reliability is the ability and proficiency in providing services
c. Responsiveness is the ability to help and provide services quickly, accurately, and responsively to the wishes of the community
d. Assurance in the quality of service shown by officers in ensuring public trust
e. Emphaty is a firm and attentive attitude of officers in providing services to the community

RESEARCH METHOD
This research was conducted at the population and civil registration office (Disdukcapil) of Bekasi City. This is because e-OPEN is a government innovation created by the Bekasi City Disdukcapil to make it easier for the public to manage population data through an online system. The time used in this study was one month by direct observation of the location. The method used in this research is descriptive qualitative, which is shown to explain and explore phenomena in depth by collecting relevant data related to the topic and object of research. Data collection techniques in this study were carried out by collecting secondary data, namely by making
RESULTS AND DISCUSSION

Innovation of government is a breakthrough by the government by updating or creating a product that can facilitate the community in implementing government administration. Albury in Yogi Suwarno (2008) stated that successful innovation is an innovation that has new creations and applications both in the product process, service, and other methods so that it will impact quality results effectively and efficiently.

e-OPEN or electronic online population service, is an innovation at the Disdukcapil of Bekasi City. It was created to make it easier for the people of Bekasi City to manage population files. This application can be accessed anytime and anywhere, making it easier for people to update or update their identity, such as residential address, status, blood type, citizenship, name, religion, and gender. In the application, there are nine types of population service innovation menus: e-KTP application that is given one day after completion (Motekar Bersahaja), reporting to become residents of Bekasi City (PERMISI), service assistance through the prestige task force (Halo Pamor), population administration service pick-up (Jebol Dukcapil), Disdukcapil complaints serving the community (Duduk Mesra), reports of residents outside the city of Bekasi who have lost their e-KTP (Petak Ludo), requests to replace their photo ID cards (Moto KTP), information system for foreigners (SIP ORA), data services that have not been updated on other service institutions (Data Consolidation) and e-KTP services, child identity cards (KIA), birth certificate, death certificate, Indonesian citizen transfer certificate (SKPWNI) and Indonesian citizen arrival certificate (SKDWN).  

1. Halo Pamor

The Halo Pamor menu is an innovation utilizing the monitoring and monitoring task force or Satgas Pamor, which is intended to assist and facilitate people with limited use of technology and limited tools to access the e-OPEN application. The Pamor task force can also help people with little time to process population data. Also, prestige officers have a role and function as a communication liaison between the community and the urban village. They are tasked with socializing each program with local neighborhood and hamlet administrators and inviting the community participation to participate in the program actively. The Pamor Satgas have been placed at every hamlet point in the Bekasi City area.

Socialization related to using e-OPEN applications is carried out by guiding officers monitoring both at the neighborhood and hamlet levels. In the socialization activity, the Pamor Satgas were given direction and guidance regarding the procedures and procedures for submitting population administration documents to be given to the community.
The public can contact the officer through the Halo Pamor menu in the e-OPEN application by accessing the available WhatsApp number. It will connect to the Pamor officer in the local neighborhood, who will visit the applicant’s house later. The Halo Pamor menu provides assistance starting from managing e-KTP\(^3\), family card (KK), child identity card (KIA), birth certificate, and death certificate, which SKPWN\(^4\) and SKDWN\(^5\) can be completed within three days according to services standards. In its duties, the pamor satgas will assist in managing community population data by retrieving and processing these documents through the e-OPEN application. After the data is complete, the pamor officer will return it to the resident’s house.

2. **Jebol Dukcapil (Pick-up Service)**

Jebol Dukcapil, or population administration service pick-up, is one of the service menus in the e-OPEN application that can be used by the people of the city of Bekasi in carrying out population registration. Through the Jebol Dukcapil menu, the public can apply to record e-KTP in the nearest neighborhood and hamlet. This Jebol Dukcapil activity is carried out in rotation in each sub-district up to the local RW point. The Jebol Dukcapil menu is intended for vulnerable groups such as people with disabilities, people with mental disorders (ODGJ), disaster-affected communities, indigenous people, etc. For people with mental disorders, disabilities, and neglected people whom the social foundation accommodates, data collection will be carried out and will cooperate with the Bekasi City social service.

The Bekasi City Disdukcapil will reconcile and mix and match with integrated data on social welfare (DTKS), recipients of APBD contribution assistance (PBI APBD), clean population data (DKB), and vaccination data in collaboration with the social service, health office, and BPJS. Through the e-OPEN application, the public can periodically monitor the data submission process through the status menu available on the e-OPEN application. On the status menu, the public can monitor starting from file verification, file processing, file completion, file retrieval, rejected files, and failed data transmission processes.

Documents such as birth certificates, death certificates, family cards (KK)\(^6\), and other population documents other than e-KTP, child identity cards (KIA)\(^7\), certifications, and side notes for civil registration can be printed independently and don’t need to be legalized because the data is easily identified through the QR code on each document. The Bekasi City Disdukcapil implements an electronic signature (TTE) system to serve the population document service process quickly and more efficiently. The paper with the electronic signature will be sent to the applicant via an active registered e-mail.

3. **Duduk Mesra (Disdukcapil complaints serving the community)**

All population services in Bekasi City are currently online using the e-OPEN application. This is intended to make it easier for the public to manage population data without coming to the Disdukcapil. In addition, e-OPEN application innovation aims
to avoid extortion and brokering in public service matters. *Disdukcapil* Bekasi City also provides online complaints and consultation services through the duduk mesra menu service in the e-OPEN application. This service menu will be connected to the official *WhatsApp* call center of the *Disdukcapil*.

In this menu, three types of services are available: two complaints related to population registration and civil registration and one population service, which will later be connected to three *WhatsApp* channels belonging to the *Disdukcapil*. Service time will be provided for five working days within predetermined working hours. However, using the Duduk Mesra menu is still not running optimally. The reason is that many people still complain by commenting on social media accounts such as Instagram and Twitter belonging to the *Disdukcapil*, and it is feared that irresponsible people will use this.

The number of public data leakage cases makes Indonesia's security system unsafe. The article is that there are still many cases of people's population data being used for online loans and hacking websites or official government applications that are hacked and data taken for sale. Bekasi City public registration guarantees that the confidentiality of Bekasi City people's data will be safe because e-OPEN websites and applications use VPN networks and firewalls and are connected to PT. Telkom's local network. Bekasi City public registration also ensures that each application is separated into different servers to ensure the confidentiality and security of public data.

**Analysis of Innovation Attributes on e-OPEN**

Rogers (1996) states that innovation has five interrelated characteristics: relative advantage, compatibility, complexity, trialability, and observability. Each of the characteristics will be comprehensively explained as follows:

1. **Relative Advantage**

   Relative advantage is the degree to which an innovation or new idea is considered better than before. The result of the innovations is to modify and improve the old system so that it can be carried out continuously to ensure that the agency can provide a sense of satisfaction to the community. Relative advantage is measured through work performance, productivity level, effectiveness, and benefits. The use of the e-OPEN application is a new object given by the population and civil registration office of Bekasi City as an update to the previous application, namely SIMPADUK or a population service information system that is less effective and lacks public interest in trying it.

   E-OPEN applications make population services run effectively and efficiently. With the presence of this application, people don’t need to queue long and wait a long time because all population services can be done online through the application. People only need to wait three days to get a file validated by the *Disdukcapil*.

   One menu with considerable influence is the Halo Pamor menu. With prestige officers available at every point in the neighborhood environment, it is easier for
people with limitations in using applications and limited tools to access e-OPEN applications. The community can also use the Halo Pamor menu if they have little time to process population documents; the officer will pick up the documents and take care of them according to the procedure. Through the Halo Pamor menu, the Bekasi City Disdukcapil party received an award and appreciation from the West Java provincial government for the innovation of this program.

2. Compatibility

Compatibility is the suitability of the innovative product with the old product. This is intended so that people can easily adjust the use of the application because it is not much different from the previous application, namely SIMPADUK.

3. Complexity

Complexity is the level of complexity of an innovative product to be understood by the public. In this case, innovation is influenced by the resources that can be implemented and the available budget. An innovation will be easily understood by individuals who are familiar with its use. However, it will look complicated and take a long time to be understood by individuals who don’t understand and master it. For example, millennials are accustomed to using gadgets and social media. With the e-OPEN application, it doesn’t take long for them to understand and understand how to use it. In contrast, older people who don’t understand the use of technology will find it challenging to use this e-OPEN application.

4. Trialability

Trialability is an experiment on new innovative products to attract people’s interest. The community will accept an innovation if it has more value and is felt to have benefits for its users. In using the e-OPEN application, there are still many problems. Such as the complexity of the community to access the available service menu and the time the server responds to user requests to the server being down when accessed by the public. The head of the Bekasi City Disdukcapil said that his party would continue to evaluate and improve the e-OPEN application so that the public gets easy, effective, and quality services.

5. Observability

Observability is then innovation to be observed through the results obtained. In this case, an innovation can be easily accepted by the community when they know the benefits of using the innovation. The e-OPEN application is made to make it easier for the public to manage population data. Based on a smartphone application, this innovation is designed so all people in Bekasi can easily manage population data through the available menus without coming to the Disdukcapil office.

Through various menus in the application, document processing and other population data can be done anywhere and anytime without waiting long and waiting in long queues at the population and civil registration of Bekasi City. In addition to easy service, public results or files don’t take long, so it can be said
that using e-OPEN applications is very effective and efficient and reduces costs in public services.

Supporting and inhibiting factors of e-OPEN

The e-OPEN application is integrated with data belonging to the Ministry of Home Affairs, making it easier to manage population data and civil registration. This is also needed to assist the government in registering the people classified as beneficiaries so that later, it can be right on target and assist the government in registering the community in permanent voter data when the election arrives.

Utilizing the Population Administration Information System (SIAK), the Bekasi City government also consolidates net population data every semester at the Ministry of Home Affairs. It provides guidance SIAK operators who are responsible for the population database. This database is used for development planning, public services, budget allocation, law enforcement, and crime prevention in Bekasi. In addition, the Bekasi City Disdukcapil also disseminates the use of e-OPEN applications through mass media such as Instagram, Youtube channels, and the official Disdukcapil website so that the public knows the latest innovations from the Bekasi City Disdukcapil.

Regardless, there are some inhibiting factors. In its use, many people still don’t know and understand the e-OPEN application. This is likely due to the lack of socialization of the use of the application to the public. Then, the application server is still weak, so many people complain about the difficulty of accessing the menu in the application and the lack of dates for government officials to make public complaints.

CONCLUSION

Based on the research results, the e-OPEN application belonging to the population and civil registration office (Disdukcapil) of Bekasi City is considered quite effective and easily accepted by the public. With this application, busy people can easily manage their population data and be accessed anytime and anywhere. Through the Halo Pamor menu, people with limitations in using the application also feel helped by the presence of the prestige task force; this needs to be maintained and improved to improve the quality of service.

The community still needs to utilize the Duduk Mesra menu because they tend to choose to comment on social media. Whereas if the public submit a complaint through the Duduk Mesra menu, the confidentiality of their data will be guaranteed. But this happened because of the need for more response from officers to community complaints. People who have submitted and consulted through the Duduk Mesra menu often also comment on the social media of the Bekasi City Disdukcapil so that the Disdukcapil admin can reply to their complaints.

In using e-OPEN applications, some obstacles still occur, so people often need a long time to process population data. This problem needs to be evaluated so that services through the online system have a good level of quality and are by the
principles of public service delivery. Of course, the Bekasi City *Disdukcapil* must continue disseminating information regarding this application so that everyone can know and understand how to use it. At the same time, this is a step to encourage the Bekasi City *Disdukcapil* services to be more effective and efficient and to support clean and free public services from corruption, collusion, and nepotism (KKN).

**REFERENCES**


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1 Jabodetabek is a special term for Jakarta, Bogor, Depok, Tangerang and Bekasi.
Disdukcapil or the population and civil registration service is the implementing element that carries out government affairs in the field of population and civil registration.

Electronic Resident Identity Card or e-KTP is a Resident Identity Card equipped with a chip that is the official identity of the Resident as proof of self-issued by the Department.

The Certificate of Moving Indonesian Citizens (SKPWN) is a type of population document that explains the move of a resident to a new area of domicile for more than one year or less than one year.

Indonesian Citizenship Certificates of Arrival (SKDWN) were issued due to events that have consequences for the issuance or change of Family Cards and Resident Identity Cards.

Family Card is a family identity card that contains data about the name, structure, and relationships within the family and the identity of family members.

Child Identity Card, hereinafter abbreviated as KIA, is an official child identity as proof of the child who is less than seventeen years old and unmarried.