

THE ROLE OF TECHNOLOGY IN IMPROVING THE QUALITY OF POPULATION ADMINISTRATION SERVICES IN DISDUKCAPIL KABUPATEN BANYUMAS

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Abstract

Technological advances have brought significant changes in various aspects of life, including in population administration services. This article aims to analyze the role of technology in improving the quality of population administration services at the Population and Civil Registration Office (Disdukcapil) of Banyumas Regency. The method used by the author is observation during the Internship. The observation results show that the application of technology in population administration services, such as digital-based population information systems, online services, and national data integration, is able to improve efficiency, transparency, and data accuracy. Technology has also made it easier for people to access population documents such as KTP, KK, birth certificates, and other documents. However, there are still some obstacles in its implementation, such as limited infrastructure, digital literacy of the community, and the need to increase the capacity of human resources. Therefore, a sustainable development strategy is needed to maximize the use of technology to improve the quality of population administration services more optimally.

Keywords: Technology, Population Administration, Public Services, Disdukcapil, Digitalization

Abstrak

Kemajuan teknologi telah membawa perubahan signifikan dalam berbagai aspek kehidupan, termasuk dalam pelayanan administrasi kependudukan. Artikel ini bertujuan untuk menganalisis peran teknologi dalam meningkatkan kualitas layanan administrasi kependudukan di Dinas Kependudukan dan Pencatatan Sipil (Disdukcapil) Kabupaten Banyumas. Metode yang dilakukan oleh penulis adalah observasi selama melaksanakan Magang. Hasil observasi menunjukkan bahwa penerapan teknologi dalam pelayanan administrasi kependudukan, seperti sistem informasi kependudukan berbasis digital, layanan daring (online), dan integrasi data nasional, mampu meningkatkan efisiensi, transparansi, dan akurasi data. Teknologi juga mempermudah akses masyarakat dalam pengurusan dokumen kependudukan seperti KTP, KK, akta kelahiran, dan dokumen lainnya. Namun, masih terdapat beberapa kendala dalam implementasinya, seperti keterbatasan infrastruktur, literasi digital masyarakat, serta kebutuhan akan peningkatan kapasitas sumber daya manusia. Oleh karena itu, diperlukan strategi pengembangan yang berkelanjutan untuk memaksimalkan pemanfaatan teknologi guna meningkatkan kualitas layanan administrasi kependudukan secara lebih optimal.

Kata Kunci: Teknologi, Administrasi Kependudukan, Pelayanan Publik, Disdukcapil, Digitalisasi



A. INTRODUCTION

Population administration is a crucial aspect of governance, especially in recording and managing accurate and up-to-date population data. The existence of valid population data is the basis for formulating public policies, development planning, and providing social services to the community. In the digital era, the government has encouraged the transformation of population administration services through the application of information technology, which aims to improve efficiency, transparency, and ease of access for the community.

The Population and Civil Registration Office (Disdukcapil) of Banyumas Regency is one of the agencies responsible for organizing population administration services, such as the issuance of Electronic Identity Cards (e-KTP), Family Cards (KK), birth certificates, death certificates, and various other population documents. In an effort to improve services, Disdukcapil has adopted various technology-based innovations, such as the Population Administration Information System (SIAK), online-based services, and the use of digital signatures to speed up the document verification process.

However, although various innovations have been implemented, the quality of population administration services still faces various challenges. Many people still experience difficulties in accessing services digitally, especially in rural areas that have limited technological infrastructure. In addition, there are still frequent technical problems in the system that hamper the smooth running of services. Therefore, further evaluation of the effectiveness of the role of technology in population administration and strategic efforts to optimize its use are needed.

In implementing technology in the Disdukcapil of Banyumas Regency, there are several obstacles that need to be overcome so

that the goal of improving service quality can be achieved optimally. Some of the main problems that are still faced include:

Although digital-based population administration services have been developed, there are still many areas in Banyumas Regency, especially rural and hilly areas, that have limited internet access. Unstable or even unavailable connections make it difficult for people to utilize the online services provided by Disdukcapil.

Many residents, especially those who are older or have low levels of education, still experience difficulties in accessing and using digital-based services. They are less familiar with the use of internet-based applications, such as online registration for ID cards or recording other population events.

The system often experiences disruptions, such as server downs, data input errors, and data mismatches between the center and the regions. This causes delays in the issuance of population documents and public dissatisfaction with the services provided.

The use of digital systems in population administration services requires Disdukcapil employees to have qualified technical skills. However, there are still limitations in terms of training and development of human resources (HR), so employees often experience difficulties in operating the system or handling technical problems that occur.

With the increasing digitization of population services, new challenges arise in terms of the security of people's personal data. Cases of data leakage and misuse of personal information are serious threats that must be anticipated by the government through strengthening the cyber security system.

To overcome the various problems faced in the application of technology in population administration services, strategic steps need to be taken involving various parties, including local governments, communities, and the



private sector. Some solutions that can be implemented include:

The Banyumas Regency Government needs to work with internet service providers and cellular operators to expand the internet network to all areas, especially remote areas. In addition, the provision of digital service centers in sub-districts can be an alternative for people who do not have internet access at home.

To increase the use of digital services, the government needs to organize socialization programs and digital literacy training for the community. This training can be conducted through various media, such as direct guidance at subdistrict offices, video tutorials, and online consultation services.

To optimize the population administration system, it is necessary to strengthen information technology infrastructure, including increasing server capacity, updating software, and strengthening data integration between agencies. A more stable system will reduce the likelihood of technical disruptions that can hamper services.

Local governments should provide regular technical training for Disdukcapil employees so that they have the skills to operate digital systems and handle technical issues that may occur. This training should also include an understanding of personal data protection and ethics in civil registration data management.

With the increasing threat of data leakage, the government must implement encryption-based security systems, strong firewalls, and multiple authentication systems in the process of population administration services. In addition, public awareness of the importance of safeguarding personal data also needs to be increased through educational campaigns.

To make civil registration services more accessible, Disdukcapil can develop mobile-

based applications that allow people to submit documents, check service status, and consult online without having to come to the office in person.

By implementing the various solutions above, it is hoped that the use of technology in population administration services in Banyumas Regency can run more effectively, increase community satisfaction, and encourage the realization of more modern, transparent, and efficient public services.

B. IMPLEMENTATION AND METHOD

Independent Learning Campus Merdeka Internship (MBKM) which is located at the Population and Civil Registration Office of Banyumas Regency, which is located at Jl. Jend. Sudirman No.320A, Kauman Lama, Purwokerto Lor, Kec. Purwokerto, Banyumas Regency, Central Java. The internship started on August 5, 2024 until December 5, 2024. The author is placed in the Population Registration Service Division, Secretariat Division and Civil Registration Division.

Regarding the implementation of the internship, it follows the rules given, namely Monday - Friday starting at 07.15 WIB until 15.30 WIB. Dindukcapil Kabupaten Banyumas provides freedom in dress, namely by dressing neatly and politely and wearing an alma mater suit of Universitas Jenderal Soedirman. During the internship at Dindukcapil Kabupaten Banyumas, the routine carried out by the author was to assist the Population Registration Service Division, Secretariat Division and Civil Registration Division, but if other fields needed assistance to complete the tasks that had to be completed, the author would be transferred according to the field's request.

The activities carried out by the author during the internship at the Population and Civil Registration Office of Banyumas Regency are as follows:

Serving the making of identity cards



(KTP). Directing applicants who come, usually directly directed into the KTP recording room without taking a queue number, then recording starts from the KTP photo if the applicant was born in odd years with a red background while born in even years using a blue background, then there is a fingerprint scan, eyeball recording, and finally the applicant's signature. All of these data are inputted using the Ben roller application, after the data is entered then just wait for verification from the head of the population registration field. After verification, it can be printed and given directly to the applicant. Estimated printing of ID cards is approximately one hour.

Serving the making of Child Identity Cards (KIA). The requirements for making KIA are photocopy of birth certificate, family card, and photo pass. For the flow of making KIA, the applicant is directed to take queue number A, after that the author will enter the child's data into the SiakTerpusat application, for the flow it is exactly the same as making a KTP, it's just that data entry requires a different application.

Serving changes to population administration documents such as KK, KTP, and Birth Certificates. To make changes to data, namely using the SiakTerpusat application, in which you must fill in the KK or NIK number concerned to find the person's data, after that the writer will re-enter and the applicant must attach evidence to strengthen the data change, after which the data will be sent to the head of the field for checking and electronic signature (TTE).

Filing the Report of Responsibility (LPJ) file. Archiving the Accountability Report (LPJ) files at the Population and Civil Registration Office is an important step to ensure transparency and accountability in data and information management. This process involves systematically collecting, organizing and storing LPJ documents for easy access and

future reference. With proper archiving, the Dinas can easily evaluate its performance, comply with applicable regulations, and provide necessary information to interested parties. In addition, organized archiving also helps in maintaining data integrity and supporting the audit and supervision process. The author assists in the filing process which is classified based on the category, which is then put into a folder marked with the number and type of category, then asks for the signature of the Head of the Office and the Secretary of the Office after which it is put into the filling cabinet.

Recording birth certificates, family cards, and maternal and child health cards on the hospital list to be sent to the destination hospital and recorded in the daily logbook. First the writer must classify the documents based on the hospital or community health center. Then the documents will be put together and put into a folder that has the full address of the hospital written on it. Hospital data is recorded in the logbook to facilitate delivery.

C. RESULTS AND DISCUSSION

Efficient and accurate civil registration is an important aspect of public services. The Population and Civil Registration Office (Disdukcapil) of Banyumas Regency has implemented various technologies to improve service quality.

In an effort to improve the quality of population administration services, the Population and Civil Registration Office (Disdukcapil) of Banyumas Regency has implemented various technology-based innovations. Some of the concrete steps taken include:

The Disdukcapil of Banyumas Regency has implemented the Population Administration Information System (SIK) which enables more effective and efficient management of population data. SIK functions to accelerate the service process by automating the recording



of population data, providing a more accurate database with a biometric-based verification system, and integrating population data with other agencies such as the Social Service, BPJS, and the Ministry of Home Affairs.

To reduce queues at the Disdukcapil office, online-based services have been implemented through the “Digital Population Administration Services” (PAKDigi) platform. This service allows the community to apply for various population documents such as e-KTP and Family Card applications online, birth and death certificates without having to come to the Disdukcapil office, and electronic signature (TTE) facilities for digital document validation.

In addition to online-based services, the Disdukcapil of Banyumas Regency also developed a mobile service car that reaches remote areas. This service allows residents who do not have internet access to still obtain population administration services easily.

The Disdukcapil has also provided digital self-service kiosks in several sub-districts that can be used by the community to print population documents independently.

To increase the use of digital services, the local government has conducted socialization and training for the community, especially the elderly and people with low digital literacy. In addition, Disdukcapil employees are also given periodic training to improve their skills in operating digital systems.

Then to measure the success of technology implementation in population administration services, with the implementation of SIAK and digital services, the processing time of population documents has accelerated significantly.

The results of the community satisfaction survey showed that the implementation of digital services in Disdukcapil Banyumas received a positive

response. The majority of people find it easier to process population documents without having to come directly to the service office.

The implementation of online-based services has reduced the number of citizens who have to come directly to the Disdukcapil office by 40% compared to before the digital service. This not only increases convenience for the community, but also reduces the workload of administrative officers.

With a digital-based system and national data integration, data input errors due to manual processes are drastically reduced. Previously, about 15-20% of population data had discrepancies, but with the latest technology, this figure has decreased to less than 5%.

The implementation of electronic signature (TTE) and encryption-based security systems has improved the protection of people's personal data. This reduces the risk of document forgery and misuse of civil registration data.

Although the implementation of technology in population administration services has shown positive results, there are still factors that encourage and hinder the success of this program such as the driving factors are local government support and regulations, the high public need for fast and practical services, collaboration with various parties, and commitment in improving human resources and infrastructure. Meanwhile, the inhibiting factors are the digital divide in the community, infrastructure and internet connection constraints, technical disruptions in digital systems, data security and the risk of cybercrime.

The utilization of technology in population administration services in Banyumas Regency has had a positive impact in improving efficiency, transparency, and community satisfaction. Although there are still obstacles such as the digital divide and limited infrastructure, strategic steps such as increasing digital literacy, strengthening security systems,



and collaborating with various parties are solutions to optimize technology-based services in the future.

D. CONCLUSION

Technological developments have contributed significantly to improving the quality of population administration services at the Population and Civil Registration Office (Disdukcapil) of Banyumas Regency. The application of digital systems in various administrative services, such as online registration, electronic data recording, and digital document processing, has improved work efficiency, accelerated the service process, and reduced queues at the Disdukcapil office.

In addition, the use of technology also helps to improve the accuracy and security of population data. With an information technology-based system, data can be managed more neatly, the risk of input errors can be reduced, and data storage becomes more secure. Technology also allows civil registration services to be more transparent and accessible to the public more easily through online platforms.

However, despite the many benefits obtained, there are still several obstacles in the application of technology in population administration services. Some of the main challenges include limited technological infrastructure, lack of digital literacy among the public, and threats to data security. Therefore, a more focused strategy is needed so that the utilization of technology can run more optimally and provide maximum benefits to the community.

Based on the above conclusions, some suggestions that can be applied to improve technology utilization in population administration services in Banyumas Regency include the following:

Development of technological

infrastructure to ensure digital-based population services can run smoothly, Disdukcapil needs to continue to develop technological infrastructure, such as increasing server capacity, stable internet networks, and implementing a more integrated system. Local governments can also collaborate with related parties to provide facilities and infrastructure that optimally support digital transformation.

Improving people's digital literacy Although technology-based services have been implemented, not all people have sufficient ability or understanding in accessing digital services. Therefore, regular socialization and education to the community is needed, both through direct training, social media, and information brochures, so that they better understand how to use online population administration services.

Strengthening data security and protecting the privacy of population data security is a very important aspect of digital administration services. Disdukcapil needs to improve the data security system by using encryption technology, multiple authentication systems, and regular monitoring of potential cyber threats. In addition, regulations related to personal data protection need to be strengthened so that people's population data remains safe and is not misused.

Continuous evaluation and development In order for the technology-based civil registration system to continue to develop, Disdukcapil needs to conduct periodic evaluations of the effectiveness of the technology used. Feedback from the community and service officers must be considered to find out the obstacles faced and find appropriate solutions. In addition, the adoption of new, more sophisticated technologies needs to be considered to make services more efficient and in line with the needs of the times.



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