

EFFECTIVENESS OF THE APPLICATION OF THE INTEGRATED POPULATION INFORMATION SYSTEM (SINTREN) IN THE ISSUANCE OF DEATH CERTIFICATES AT THE POPULATION AND CIVIL REGISTRATION OFFICE OF CIREBON REGENCY

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Abstract

The Integrated Population Information System (SINTREN) is a collection of actions to organize and distribute death certificate documents and population data electronically or via the internet using existing technology, communication, and information facilities. The SINTREN system is used with the aim of providing convenience in population administration services related to death certificates in Cirebon Regency. This research aims to review whether the management of the application or website is able to cut the distance and time of users to be more efficient. The research employs a qualitative approach through observation, documentation, and observations, with a particular focus on informants who were directly involved in the application of the SINTEREN application for issuing death certificates. Data analysis was conducted using Budiani's theory of effectiveness, which includes evaluating the accuracy of program goals, the effectiveness of program socialization, the achievement of program objectives, and the monitoring mechanisms in place. The study contributes by analyzing and interpreting data collected from various sources, providing insights into its implementation, functionality, and impact on improving population and civil registration services. This study could help identify areas for improvement, enhance system efficiency, and inform future policy decisions regarding population information management in the region.

Keywords: effectiveness, Sintren, death certificate

INTRODUCTION

Technology development refers to the continuous advancement and innovation in tools, machines, and systems that improve the way we live, work, and interact with the world (Autor et al., 2023; Harahap et al., 2023; Novakova, 2020; Pereira et al., 2020; Russ, 2021). Over the past few decades, rapid technological progress has transformed industries and societies, driving significant changes in communication, healthcare, transportation, and manufacturing. The development of digital technologies, such as the internet, smartphones, and cloud computing, has revolutionized how people access information, connect with others, and conduct business (Haji et al., 2020; Imamov & Semenikhina, 2021; Matthew et al., 2018; Pencarelli, 2020; Xia et al., 2024). These advancements have led to the creation of new industries, reshaped existing ones, and enabled global connectivity at an unprecedented scale.

Moreover, emerging technologies like artificial intelligence (AI), robotics, and biotechnology are pushing the boundaries of what is possible, offering solutions to complex problems and creating new opportunities for growth and development. AI, for instance, is being integrated into various sectors, from healthcare to finance, enhancing decision-making processes, improving efficiency, and personalizing user experiences. Robotics is transforming manufacturing and logistics, allowing for automation of tasks that were once labor-intensive (Parmar et al., 2022; Ritchie & Landis, 2021; Zhang, 2024).

Along with the development of the times and technological advances that are increasing, the increasingly high mobilization system of Cirebon Regency always

experiences many changes (Bharoto & Tireawati, 2018). This makes the local government have to overcome many problems that arise. One of them is the Cirebon Regency Government created a mobile system called SINTREN.

The Integrated Population Information System (SINTREN) is used with the aim of providing convenience in population administration services related to death certificates in Cirebon Regency. SINTREN in the process of its implementation is intended to be accessible to everyone who has registered through the website or application, so that SINTREN itself can be accessed in the morning, afternoon, afternoon, or night, meaning that in terms of access, it is very flexible because it does not have to be in a special place and time, but a stable network is quite necessary. The data input process by the population and civil registration office is carried out based on Cirebon Regent Regulation No. 68 of 2021 article 13, the uploaded documentation is guaranteed security and maintenance. The apparatus staff who are tasked with monitoring the website so that the verification carried out will run in both directions, considering that there are also those who take care of population files directly to the Population and Civil Registration Office. However, regarding the optimization of the use of the SINTREN website stipulated in the regulation, it is not enough to make the Integrated Population System (SINTREN) run effectively and efficiently (Rachmayanti & Susanto, 2022).

Reviewing from the research conducted by researchers related to the relationship between science and technology, the accuracy of the program is going well, it's just that the use of the website or the SINTREN application is generally residents who are used to using technology in their daily lives to save time in the management of death certificates. In contrast to residents who are not used to using technology, they will prefer to take care of it manually by coming directly to the Population and Civil Registration Office. The socialization carried out in the publication of the SINTREN system through Instagram or social media of the Cirebon Regency Disdukcapil, realizing that it seems that the socialization of the management of death certificates is not properly understood by the wider community considering that residents from the community who do not often use taxonomy do not understand using the SINTREN application or website. The implication of the desire for scientific and technological advances that can run effectively and efficiently is a sign that the solution to the lack of citizens who use the SINTREN application or website takes a lot of time, reminding some people that must be technologically literate.

This research aims to review whether the management of the SINTREN application or website is able to cut the distance and time of users to be more efficient. The level of proficiency and ability to react to new things related to technology is minimal, making the implications of the development of science and technology made on the SINTREN website or application not receive maximum evaluation from the application, only user evaluation. The existence of this system allows the public as users to clearly take care of death certificates with a short period of time can be taken care of at their respective homes, unfortunately many are lazy to take care of death certificates through the SINTREN website or application. The management of death certificates through the SINTREN website or application has a good influence in facilitating the provision of services for making death certificates or other population documents. By conducting a qualitative approach through observation, interviews, and detailed documentation, the research seeks to estimate progress related to the achievement of the goals of the SINTREN application or website in making death certificates to the community from the perspective of employees as supervisors and from the side of the community as users. Through a qualitative approach, the study is carried out thoroughly so that it can explain in detail the indicators of theoretical problems. Until the results of the findings have relevance to the official data because the source is from a supervisory employee himself.

Based on the explanation above, the research aims to study the effectiveness of the Application of the Integrated Population Information System (SINTREN) at the Cirebon Regency Population and Civil Registration Office. The research contributes by evaluating the effectiveness of the Integrated Population Information System (SINTREN) at the Cirebon Regency Population and Civil Registration Office, providing insights into its implementation, functionality, and impact on improving population and civil registration services. This study could help identify areas for improvement, enhance system efficiency, and inform future policy decisions regarding population information management in the region.

RESEARCH METHOD

This study employs a qualitative research method, conducted from February to May 2024 at the Cirebon Regency Population and Civil Registration Office. Using purposive sampling, the researchers selected informants who were most representative and useful for the study, including the Head of the Population and Civil Registration Office, staff responsible for issuing death certificates, and community members. Data were collected through interviews, documentation, and observations, with a particular focus on informants who were directly involved in the application of the Integrated Population Information System (SINTREN) for issuing death certificates.

The research also involves an in-depth evaluation of the SINTREN application, guided by Cirebon Regent Regulation Number 68 of 2021. This regulation defines the Integrated Population Information System and serves as a foundation for assessing the program. Data analysis was conducted using Budiani's theory of effectiveness, which includes evaluating the accuracy of program goals, the effectiveness of program socialization, the achievement of program objectives, and the monitoring mechanisms in place. The study's findings are based on the presentation and interpretation of data collected from various sources, providing a comprehensive understanding of the SINTREN system's effectiveness at the Cirebon Regency Population and Civil Registration Office.

RESULT AND DISCUSSION

The Effectiveness of the Application of the Integrated Population System (SINTREN) at the Cirebon Regency Civil Registration and Occupation Office.

The Integrated Population Information System (SINTREN) in Cirebon Regency is a collection of actions to organize and distribute death certificate documents and population data electronically or via the internet using existing technology, communication, and information facilities. Seeing the situation in the field, there are problems regarding the registration of death certificates at the Cirebon Regency Population and Civil Registration Office. Against this background, the Integrated Population Information System (SINTREN) at the Cirebon Regency Population and Civil Registration Office focuses on this research into the issuance of death certificates Cirebon Regent Regulation Number 68 of 2021 concerning the Integrated Population Information System in Cirebon Regency, Article 1 number 4 explains what is meant by the Integrated Population Information System, which is hereinafter referred to as SINTREN. However, the SINTREN system at the Cirebon Regency Population and Civil Registration Office is not functioning properly. As a result, several problems were found based on the researchers' observations.

This research focuses on four factors proposed by Budiani to define important elements, namely the accuracy of program goals, program socialization, program objectives, and program monitoring.

Accuracy of Program Goals

Regarding the extent to which program participants are right on the predetermined targets at the Cirebon Regency Population and Civil Registration Office. Based on the results of the researcher's interview regarding the Accuracy of the Program's Targets, it has been going well for the Sintren Target directly to its citizens through the internet or the public, and with the SOP 1x24 hours after the requirements are processed, the death certificate is issued.

Program Socialization

Related to the ability of program organizers to introduce planned programs so that information about programs can be conveyed to program targets.

Based on the results of the researcher's interview regarding Socialization at the Cirebon Regency Population and Civil Registration Office, the Sintren website was published through print media and through the Disdukcapil website, the Cirebon Regency Population and Civil Registration Office explained that almost all services of Sintren can be through the Sintren application.

Program Objectives

Regarding the conformity between the program objectives and the results of the implementation that have been previously determined. Based on the results of the researcher's interview with the Program Objectives, the main goal of the sintren program is to bring the community closer and open many service gates so that the service community is not limited by distance, time and also to emphasize the number of loans and educate the community that population documents are mandatory and the rights of every citizen

Program Monitoring

Related to activities carried out after a program is carried out as a form of attention to program participants. Based on the results of the researcher's interview regarding the Monitoring Program, this monitoring program is only sent per semester by the center, the syntren does not calculate the specifics of the deed that is made, this syntren people apply not as long as it can be accepted because of the factor that the document is not complete or the person who submitted it is not the person concerned and every day the monitoring is from the infographic.

Inhibiting and Supporting Factors in the Effectiveness of the Application of the Integrated Population System (SINTREN) at the Population and Civil Registration Office of Cirebon Regency

Inhibiting Factors

- 1) Human Resources Not Fulfilled: If human resources have been fulfilled, the process of making a death certificate is faster, the process can be 3 days, but if human resources are not enough or lacking, the process will be slow, up to 2 weeks.
- 2) Unstable Network: The network can also affect the slowness of uploading a document to the application, therefore the community network must be smooth and stable for the process of uploading documents.
- 3) Community Awareness to Make a Low Death Certificate: For deaths to be reported to the Disdukcapil by the village or sub-district government. Disdukcapil then issues a death certificate to validate population data, so that the deceased person is no longer entered into the population database.

Supporting factors

- 1) Human Resources Fulfilled: If human resources are fulfilled, they can issue a death certificate according to the SOP for a maximum of 3 days but it can be 1 day depending on the applicant, it is recommended that if there are few applications then the process can be faster, depending on the number of applicants. Therefore, the agency asks for 3 days, especially if the constraints in the network or human resources have not been met.
- 2) Stable Network: A smooth network is also one of the supporting factors for the process of making a death certificate.
- 3) Awareness of every citizen to make a death certificate.

Attempt

- 1) Maximizing human resources, in 2023 alone there will only be 2 additional p3k personnel while the agency has more than 100, and only 2 have been fulfilled, so in terms of human resources, efforts have been made, if the agency recruits itself can violate or not comply with the provisions, then the agency can only go through bksdm.
- 2) The network is unstable, so far the agency has been in accordance with the number, namely 512 kbps, which is from the Ministry of Home Affairs, the agency has also tried to ask for an addition, it's just that the Ministry of Home Affairs has determined, apart from the Ministry of Home Affairs, there is also a diskominfo agency has asked for it, but it turns out that it can't, so with the condition of 512 kbps, the agency maximizes the existing
- 3) Socializing or educating the public to further increase the making of death certificates because the benefits for residents Death Certificate documents include: determination of widow or widower status (especially for civil servants) as a condition for remarriage; requirements for managing the distribution of inheritance (Transfer of Land Rights), both for wives or husbands and children; requirements for managing bereavement money, accident benefits, taspen, insurance, banking, and pensions.

CONCLUSION

The Integrated Population Information System (SINTREN) was developed to expedite population administration services in Cirebon Regency, particularly for online applicants seeking residency documents. Despite its intentions, the system has faced challenges, including poor functionality, inadequate death certificate issuance services, low public awareness, and insufficient socialization efforts by the Regional Apparatus Organization (OPD). Efforts to address these issues include attempts to enhance human resources and improve network stability, although limitations remain. Future research could focus on evaluating the effectiveness of public awareness campaigns, assessing the impact of resource and infrastructure constraints on service delivery, and exploring the coordination between government levels in the implementation of e-Government systems like SINTREN to identify areas for improvement.

REFERENCES

- Autor, D. H., Mindell, D. A., Reynolds, E., & Solow, R. M. (2023). *The Work of the Future: Building Better Jobs in an Age of Intelligent Machines*. MIT Press.
<https://books.google.co.id/books?id=8iSIEAAAQBAJ>
- Bharoto, H., & Angriawati, M. (2018). Implementasi Kebijakan Kepala Dinas Perhubungan, Informatika Dan Komunikasi Dalam Meningkatkan Ketertiban Lahan Parkir Di Kota

- Cirebon (Studi Kasus Lahan Parkir Jalan Pekiringan). *Jurnal Ilmiah Indonesia*, 3(11), 61–74.
- Haji, L. M., Ahmad, O. M., Zeebaree, S. R. M., Dino, H. I., Zebari, R. R., & Shukur, H. M. (2020). Impact of cloud computing and internet of things on the future internet. *Technology Reports of Kansai University*, 62(5).
- Harahap, M. A. K., Wurarah, R. N., Fathurohman, A., Suroso, A., & Iskandar, Y. (2023). Globalization Substance And Industrial Revolution 4.0 And The Role Of Technological Innovation For Economic Development Towards Entrepreneurship. *Jurnal Bisnisman : Riset Bisnis Dan Manajemen*, 4(3). <https://doi.org/10.52005/bisnisman.v4i3.122>
- Imamov, M., & Semenikhina, N. (2021). The impact of the digital revolution on the global economy. *Linguistics and Culture Review*, 5(S4). <https://doi.org/10.21744/lingcure.v5ns4.1775>
- Matthew, U., Kazaure, J., & Okafor, N. (2018). Contemporary Development in E-Learning Education, Cloud Computing Technology & Internet of Things. *EAI Endorsed Transactions on Cloud Systems*. <https://doi.org/10.4108/eai.31-3-2021.169173>
- Novakova, L. (2020). The impact of technology development on the future of the labour market in the Slovak Republic. *Technology in Society*, 62. <https://doi.org/10.1016/j.techsoc.2020.101256>
- Parmar, H., Khan, T., Tucci, F., Umer, R., & Carlone, P. (2022). Advanced robotics and additive manufacturing of composites: towards a new era in Industry 4.0. *Materials and Manufacturing Processes*, 37(5). <https://doi.org/10.1080/10426914.2020.1866195>
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology and Tourism*, 22(3). <https://doi.org/10.1007/s40558-019-00160-3>
- Pereira, A. G., Lima, T. M., & Charrua-Santos, F. (2020). Industry 4.0 and Society 5.0: Opportunities and Threats. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(5), 3305–3308. <https://doi.org/10.35940/ijrte.D8764.018520>
- Rachmayanti, S. D., & Susanto, S. N. H. (2022). Penerapan Prinsip Efisiensi Dan Efektivitas Dalam Pendaftaran Penduduk Melalui Website Sintren Sebagai Perwujudan Prinsip Good Governance. *Administrative Law & Governance Journal*, 5(1), 75–89.
- Ritchie, E., & Landis, E. A. (2021). Industrial Robotics in Manufacturing. *Journal of Leadership, Accountability and Ethics*, 18(2). <https://doi.org/10.33423/jlae.v18i2.4258>
- Russ, M. (2021). Knowledge management for sustainable development in the era of continuously accelerating technological revolutions: A framework and models. *Sustainability (Switzerland)*, 13(6). <https://doi.org/10.3390/su13063353>
- Xia, L., Baghaie, S., & Mohammad Sajadi, S. (2024). The digital economy: Challenges and opportunities in the new era of technology and electronic communications. *Ain Shams Engineering Journal*, 15(2). <https://doi.org/10.1016/j.asej.2023.102411>
- Zhang, H. (2024). Optimization and Efficiency Improvement of Robot-based Industrial Production Process. *International Journal of New Developments in Engineering and Society*, 8(2). <https://doi.org/10.25236/IJNDES.2024.080214>

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