

PUSKESOS Information System to Support Poverty Management in South Pekon Wates Based on Pringsewu Regent Regulation Number 25 of 2020

Asep Tauzih¹, Iis Mardeli²

¹Prodi Sistem Informasi, Institut Bakti Nusantara, Lampung

¹Jalan Wisma Rini, No.09 Pringsewu, Lampung, Indonesia

²Prodi Manajemen, Sekolah Tinggi Ilmu Ekonomi Trisna Negara

²Jl. MP Bangsa Raja Gumalang 27, Kabupaten OKU Timur, Sumatera Selatan

*aseptauzih8@gmail.com

Article	Abstract
<p>Keywords: PUSKESOS Information System; DTKS; e-Government; Social Welfare; Web Mobile.</p> <p>Article History Received: July 12, 2024; Reviewed: August 16, 2024; Accepted: August 28, 2024; Published: Sept 30, 2024.</p>	<p>This study aims to examine the implementation of Regent Regulation of Pringsewu No. 25 of 2020 on the Social Welfare Center (PUSKESOS) and to develop a web-mobile-based Puskesmas Information System to enhance the effectiveness of social welfare services in Pekon Wates Selatan, Gadingrejo District, Pringsewu Regency. The system is designed to facilitate the verification and validation of the Integrated Social Welfare Data (DTKS) and to improve transparency in managing beneficiary information. The research employs observation, discussion, and village deliberation (Musdes) methods, using the waterfall model for system development. The results indicate that the developed system functions well, is user-friendly, and is well accepted by users. Its implementation contributes to improving data accuracy, operational efficiency, and the overall quality of public services while supporting the application of e-Government at the village level for effective and sustainable social welfare management.</p>

©2024; This is an Open Acces Research distributed under the term of the Creative Commons Attribution Licencee (<https://creativecommons.org/licences/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original works is properly cited.

INTRODUCTION

Based on the Regulation of the Regent of Pringsewu Number 25 of 2020, the Social Welfare Center (Puskesos) plays a role in handling poverty at the Pekon/Village level by providing basic social services such as education, health, economy, and population. Based on the 2024 Integrated Social Welfare Data (DTKS), South Pekon Wates, Gadingrejo District, was recorded to have 1,039 people from 353 families, with 60 people needing data correction due to anomalies such as inconsistencies in NIK, names, dates of birth, and duplicate data and did not match the Dukcapil database, which required further handling and validation.

The Public Service Law regulates the principles of government so that government functions run effectively. Public services strengthen democracy and human rights, improve economic welfare and social cohesion, reduce poverty, increase environmental protection, use natural resources wisely, and increase trust in the government (Muhamad Muslihudin, Suyono,

2022). (Indrajit, 2005) (Shomad, 2018; Siregar & Sundari, 2016; Widiyanto, 2014) In Presidential Instruction Number 3 of 2003, it is stated that the purpose of e-Government development is an effort to develop electronic-based government implementation to improve the quality of public services effectively and efficiently, Technology utilization training for Pekon in Pringsewu Regency will provide additional knowledge about the features and benefits of e-Government implementation (Suryana et al., 2021). The South Pekon Wates Social Welfare Center (PUSKESOS) still uses stationery and paper forms in verifying aid recipient data and in making reports, To design the South Pekon Wates Social Welfare Information System (PUSKESOS), researchers use a *waterfall* approach in their design (Bonowati & Kurniawati, 2023). The research conducted at the South Pekon Wates Health Center is expected to produce a mobile web-based Social Welfare Center Information (PUSKESOS) application, this application is expected to help and facilitate the South Pekon Wates Health Center Management in managing Social Assistance data in South Pekon Wates (Lestari et al., 2020).

This research focuses on the development of a mobile-based Social Welfare Center Information System (PUSKESOS) as an effort to improve services for beneficiary families in South Pekon Wates, Gadingrejo District, Pringsewu Regency. In contrast to previous research that highlighted aspects of poverty and social vulnerability, this study focuses on the process of verification and validation of Integrated Social Welfare Data (DTKS) comprehensively. (McLeod, 2004; Muhamad Muslihudin, Fauzi, 2021; Muhammad Muslihudin, 2016; Philip Kotler, 2009; Susanto, 2020; Zarella, 2014) The system was developed using the waterfall method, with the support of technologies such as PHP, MySQL, Visual Studio Code, JQuery Mobile Framework, and Apache. The selection of this technology is based on its flexibility, reliability, and ability to support data integration efficiently to support modern and transparent public services.

The implementation of the PUSKESOS program in South Pekon Wates has been considered not optimal due to limited information and operational budget, even though the human resources involved are quite good. By utilizing internet technology and the concept of e-Government, this research aims to create an information system that can improve the quality of public services, especially in handling poverty. This system is expected to be able to minimize anomalous data errors in DTKS, strengthen transparency in the management of social assistance, and enable real-time monitoring and evaluation. Overall, this research not only contributes to the development of information technology, but also to improving the social welfare of the community through more efficient, accurate, and sustainable services.

METHOD

Data Collection Methods

1. Observation Method

The observation method in this study was carried out to gain a deep understanding of how social welfare services are managed and how the interaction between Puskessos, service recipients, and existing systems. Observations were carried out in South Pekon Wates, Gadingrejo District, Pringsewu Regency, with the main focus on the work process and service flow at the Health Center.

Observations in South Pekon Wates provide a real picture of the work flow of the Puskessos and the challenges faced in data and service management. It was found that there is a significant need to improve efficiency through the use of mobile web-based information systems. Observations also show that although there are several information systems used, there are still limitations in data accessibility and integration. Therefore, the

findings of this observation are a strong basis for designing and developing a mobile web-based information system which is expected to increase the effectiveness and efficiency of social welfare services in the South Pekon Wates area. Observation also helps in ensuring that the developed system is completely in accordance with the needs of the user and the field conditions.

2. Interview

In order to develop a mobile web-based Social Welfare Center Information System (PUSKESOS) in South Pekon Wates, Gadingrejo District, Pringsewu Regency, the researcher plans to conduct interviews to collect the necessary information. This interview involved the manager of the Puskesmas, and the recipient of the service. The following is a narrative plan from the interview that the researcher will conduct. This interview provides insight into the needs and expectations of various parties related to the development of a web-based mobile web-based Social Welfare Center Information System (Puskesmas). Puskesmas managers need an efficient and accurate information system, service recipients want easier and faster access. By combining these insights, it is hoped that the developed system can improve social welfare services in South Pekon Wates, Gadingrejo District, Pringsewu Regency.

3. Literature Study

It is a critical first step in the research process that allows researchers to gain a comprehensive understanding of the research topic, as well as ensuring that the research conducted has a solid foundation in the relevant literature and theories.

System Development Methods

(Pressman, 2001) The method used in the creation of this information system is the *Linear Sequential* (Waterfall) system development model. Sequential Liner is one of the methods in data processing that is often used to search or manipulate data in a linear or sequential order. This method involves searching or processing data one by one, from start to finish, without skipping or selecting a specific part of the data to be processed. The linear sequential model encompasses the following activities:

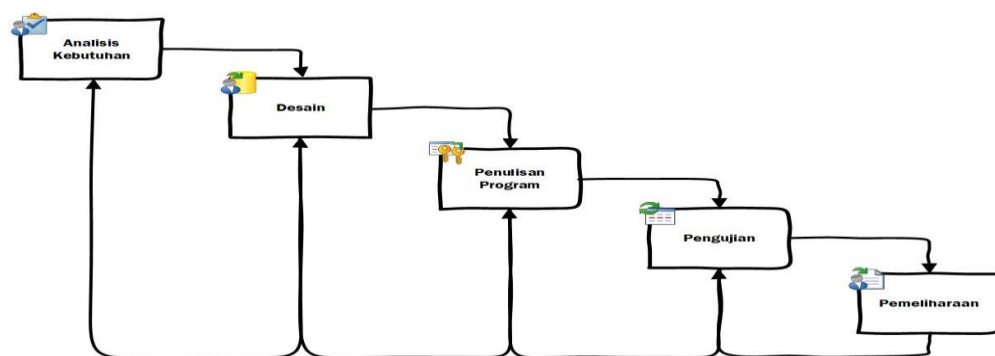


Figure 1. System Development Methods

1. Needs Analysis

It is a process that is carried out to identify, understand, and document the needs that must be met by a system or project. The main goal is to ensure that the solution developed or implemented can meet the user's goals and expectations and solve existing problems.

2. Design

It is the process of planning, depicting, and developing a concept or plan that will be implemented in a product, system, or work of art. In the context of software or information technology development.

3. Program Writing

It is the process of designing, creating, and implementing a series of computer instructions or code that aims to perform a task or achieve a specific goal. Overall, program writing involves a systematic and structured process to create an effective, efficient, and reliable software solution.

4. Testing

It is an ongoing and iterative process in the software development cycle that aims to ensure that the resulting product is of high quality, reliable, and meets the needs of users.

5. Maintenance

It is part of the software lifecycle and often requires resources from software developers. By performing regular and systematic maintenance, the software can continue to run well in the face of challenges and changes in its operational environment.

RESULTS AND DISCUSSION

System Implementation

The implementation of a web-based mobile social welfare system (Puskesmas) in South Pekon Wates, Gadingrejo District, Pringsewu Regency, aims to increase efficiency and transparency in the management of social assistance. The system is designed to facilitate the administration and distribution of aid to the beneficiary community with key features that include data management of beneficiaries whose interface is user-friendly and responsive. The implementation of this system is expected to have a positive impact in accelerating the aid distribution process, improving the accuracy of recipient data, and facilitating the monitoring and evaluation of social welfare programs in the South Pekon Wates area. Here is a picture of the system implementation.

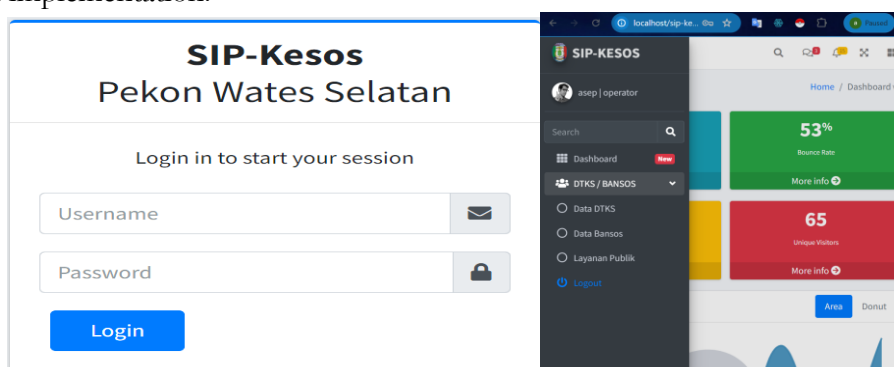


Figure 2. System Implementation

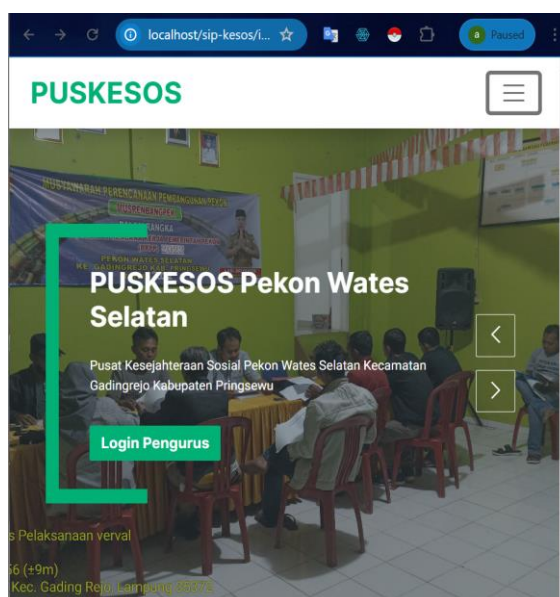


Figure 3. Main Page System Implementation

Analysis of Research Results

This research successfully developed and implemented a mobile-based Social Welfare Center Information System (PUSKESOS) in South Pekon Wates, Gadingrejo District, Pringsewu Regency. This system is designed to simplify the process of managing social welfare data, both for Puskesos administrators and beneficiary communities. With a user-friendly interface that is compatible on various mobile devices, the system is able to improve the efficiency of public services and speed up the verification and validation process of welfare data. Through more structured data integration, the management of information of aid recipients becomes more transparent, accurate, and easily accessible to related parties.

The test results show that the system works well and is accepted by users. Puskesos administrators feel helped by the online data input and update feature, while the community gets easier access to information about their social assistance status. This is in line with research by Suryani et al. (2021) which states that the application of web-based information systems is able to increase the speed of public services at the village level. In addition, research by Pratama and Nugroho (2020) shows that web-based social information systems can minimize errors in the data of aid recipients. Meanwhile, Fitriani et al. (2022) found that mobile-based systems provide easy access and increase user satisfaction with social services.

This research is also in line with the findings of Saputra and Hidayat (2021) who explain that the integration of information systems with MySQL databases and the use of mobile frameworks can support effective e-Government implementation at the local level. On the other hand, research by Wahyuni et al. (2023) confirms that the development of mobile web-based applications can strengthen the transparency and accountability of social institutions in the management of community assistance. Thus, the results of this study make a real contribution to strengthening social welfare governance in South Pekon Wates through information technology. The implementation of this system is expected to be a model for the development of digital social services in other regions that have similar characteristics.

The implications of the Pringsewu Regent Regulation Number 25 of 2020 concerning the Social Welfare Center (PUSKESOS) for Poverty Management have a significant impact on improving the governance of social welfare services at the Pekon/Kelurahan level. This regulation is a strong legal basis for the establishment and implementation of the function of the Puskesos as an integrated social service center in the community. With this regulation, each Pekon/Village has the responsibility to provide an integrated service forum in the fields of education, health, population, social, economic, and other basic needs. This encourages the

village government to be more active in collecting data, verifying, and distributing social assistance in a targeted manner.

This regulation provides a clear policy direction for strengthening the social welfare information system, including the development of digital innovations such as mobile web-based information systems. The implementation of this regulation also has an impact on improving coordination between agencies, both at the district and village levels, in handling poverty and social services. With this legal umbrella, Puskesmas programs can run more directed, transparent, and accountable. Indirectly, this regulation also encourages community participation in supervision and decision-making related to social welfare, so as to create more effective, inclusive, and sustainable public services in Pringsewu Regency.

CONCLUSION

This research succeeded in developing and implementing a mobile web-based health center information system designed to improve social welfare services in South Pekon Wates, Gadingrejo District, Pringsewu Regency. This system is designed to facilitate access and management of social welfare data for the community or health center administrators. Through the tests carried out, this system has been proven to run well. Based on the analysis of the implementation of the Pringsewu Regent Regulation Number 25 of 2020 concerning the Social Welfare Center (PUSKESOS) for Poverty Management, it can be concluded that this policy has an important role in strengthening the social welfare service system at the Pekon/Kelurahan level. The regulation provides a legal basis for the implementation of Puskesmas as a social service institution that functions to coordinate various basic needs of the community, such as education, health, economy, population, and social assistance. The existence of the Puskesmas is the spearhead in handling poverty because it is able to bring services closer to the community and increase the effectiveness of local government programs. The implementation of this regulation also has a positive impact on the transparency and accountability of social welfare data management, especially through integration with Integrated Social Welfare Data (DTKS). With the support of information technology, public services can be carried out more quickly, precisely, and measurably. However, the effectiveness of the implementation of this regulation still depends on the capacity of human resources, budget support, and coordination between agencies. Overall, the implementation of this Regent Regulation is a strategic step in strengthening the implementation of e-Government in the field of social welfare, as well as a foundation for the development of digital innovation in supporting sustainable poverty alleviation efforts in Pringsewu Regency.

REFERENCES

- Abdul Hamid, Salamun, Wiwin Windayanti, Moh. Masrur, D. R. M. (2023). *Kepemimpinan Pendidikan Dan Perilaku Organisasi Kependidikan* (M. M. Fauzi (ed.)). Penerbit Adab.
- Bonowati, L., & Kurniawati, R. (2023). Membangun Sistem Informasi Pusat Kesejahteraan Sosial Dalam Memverifikasi Data Penerima Bantuan. *Jurnal Teknik Informatika Dan Sistem Informasi*, 10(4), 116–125.
- Fauzi, R. I. (2018). *Pengantar Manajemen Edisi Revisi* (Putri Chistian (ed.)). Andi Offset.
- Indrajit, R. E. (2005). *E Government In Action*. Andi Offset.
- Jonathan P. Allen. (2019). *Digital Entrepreneurship*. Routledge.
- Lestari, K., Yusuf, A. H., Muslihudin, M., & Pratomo, P. A. (2020). Implementasi Aplikasi Android untuk Meningkatkan Layanan Promosi di Smk Multazam Gisting. *Jurnal Ilmu Komputer Dan Teknologi*, 1(1), 5–11. <https://doi.org/10.35960/ikomti.v1i1.503>
- McLeod, R. J. G. S. (2004). *Sistem Informasi Manajemen*.
- Muhamad Muslihudin, Fauzi, S. A. (2021). *Metode Desain & Analisis Sistem Informasi Membangun Aplikasi Dengan UML Dan Model Terstruktur*. Andi Offset.
- Muhamad Muslihudin, Suyono, R. R. (2022). *Pengabdian Kepada Masyarakat Pelatihan*

- Pemanfaatan Website Desa Dan Internet Dasar Pada Pekon Bumi Ayu Kecamatan Pagelaran. *Jurnal PkM Pemberdayaan Masyarakat*, 3(3), 91–98.
- Muhammad Muslihudin, O. (2016). *Analisis Dan Perancangan Sistem Informasi Menggunakan Model Terstruktur Dan UML*. Andi Offset.
- Philip Kotler, K. L. K. (2009). *Manajemen Pemasaran (Jilid 1) (Edisi 13)*. Erlangga.
- Pressman, R. S. (2001). *Software Engineering A Practitioner's Approach*. Thomas Casson.
- Shomad, A. (2018). Implementasi Sistem Informasi Desa di Kabupaten Bekasi. *Jurnal AKP*, 8(2), 62–80.
- Siregar, S. R. S., & Sundari, P. (2016). Rancangan Sistem Informasi Pengelolaan Data Kependudukan Desa (Studi Kasus di Kantor Desa Sangiang Kecamatan Sepatan Timur). *Sisfotek Global*, 6(1), 76–82.
- Suryana, A., Andoyo, A., Muslihudin, M., & Publik, I. (2021). *Pemanfaatan Teknologi Informasi Internet Dan*. 2(1), 23–28.
- Susanto, F. (2020). *Pengenalan Sistem Pendukung Keputusan*. Deepublish. https://www.google.co.id/books/edition/Pengenalan_Sistem_Pendukung_Keputusan/YcMXEAAAQBAJ?hl=id&gbpv=1&dq=pengertian+Sistem&pg=PR13&printsec=frontcover
- Widianto. (2014). Sistem Informasi Potensi Desa (Study Kasus Desa Wayngison - Pagelaran). *Proseding KMSI*, 2(1), 36–43.
- Zarella, D. (2014). Social Media Marketing. In *Igarss 2014* (Issue 1). <https://doi.org/10.1007/s13398-014-0173-7.2>