



RESEARCH ARTICLE

# Design of Information System for Poor Household Data Collection in Glumpang Tiga Subdistrict

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**Funding information**

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## Abstract

Managing Poor Household Data (RPM) remains a major challenge for local governments aiming to enhance social policies and improve community welfare. Traditional manual data collection methods often lead to inaccuracies, delays, and inefficiencies, which affect the effectiveness of social programs. This research focuses on designing an information system for RPM data collection in Glumpang Tiga Subdistrict. The system utilizes Microsoft Access for database management and Visual Basic for the user interface, replacing outdated manual methods. It simplifies data entry, searching, and report generation, thus improving workflow and decision-making. Key features include user authentication, a user-friendly interface, and real-time data access, which enhance administrative efficiency and support quicker, more accurate decisions. Transitioning to an automated system offers numerous benefits, including faster data processing and reduced errors. The system is expected to improve the targeting and timeliness of social assistance programs, aiding poverty reduction efforts. Additionally, the system can serve as a model for other regions facing similar data management challenges. By integrating technology, public services become more efficient, contributing to better governance and more effective poverty alleviation.

## Keywords

Poor Household Data (RPM); Information System; Data Collection; Social Assistance; Glumpang Tiga.

## 1 | INTRODUCTION

Managing data on Poor Households (RPM) is one of the main challenges faced by local governments in optimizing social policies and improving community welfare. Accuracy and easy access to data are crucial for supporting social assistance allocation, planning poverty alleviation programs, and making decisions based on the actual conditions of the community. In many areas, data collection for RPM is still conducted manually, which poses risks of inaccuracy, delays in information delivery, and potential errors in recording. These issues can hinder the effectiveness of social programs designed to assist those in need. To address these challenges, a more efficient and automated system for data management is necessary. Implementing an information system based on technology can enhance accuracy, speed up data processing, and facilitate access to information for authorities. With a more integrated system, the process of registering poor households is expected to be faster and more accurate, ultimately improving the effectiveness of social programs. The proper implementation of an information system will ensure that social assistance and other policies are targeted correctly and delivered on time. With the rapid development of information technology, the management of Poor Household Data (RPM) should shift from inefficient manual systems to more modern and automated systems. Manual systems have proven to have many shortcomings, especially in terms of data processing speed and information access, which can hinder efficiency in data management. Various studies have shown that implementing computer-based systems can improve administrative effectiveness and decision-making at the subdistrict level (Riansyah *et al.*, 2021). Properly applied information technology can reduce errors in data processing and speed up the process, providing more accurate and relevant information for social assistance management and development planning (Yuliadi *et al.*, 2021). The implementation of technology-based systems allows for more efficient data processing, reduces data duplication, and provides quicker and easier access to authorized parties. With more automated systems, the process of registering Poor Households can be completed faster and more accurately. The information obtained can then be directly used for making decisions that are appropriate to the community's needs. Therefore, information systems based on technology not only speed up administrative processes but also improve the quality of government services in supporting poverty alleviation programs.

The information system design to be developed for RPM in Glumpang Tiga Subdistrict is intended to replace the old method that still relies on manual data entry. By utilizing Microsoft Access for database management and Visual Basic for the user interface, this system is expected to simplify the processes of data collection, processing, and reporting. The use of this technology not only facilitates data processing but also reduces input errors, which are common in manual systems (Sanjaya *et al.*, 2023). Several studies have shown that the implementation of computer-based information systems can improve administrative management and performance efficiency in various government agencies (Riansyah *et al.*, 2021). Proper application of information technology enables faster, more accurate, and more efficient data management. With a more automated system, the entire process, from data input to report generation, can be carried out more effectively, reducing the manual workload and minimizing human errors. This will positively impact the management of data that is more accurate and timelier, ultimately enhancing the effectiveness of social policies implemented by the government at the subdistrict level. An integrated information system allows easier access to data for authorized parties, accelerating decision-making and ensuring more targeted and appropriate outcomes (Yuliadi *et al.*, 2021). One of the main advantages of the information system to be developed is its ability to integrate various processes, including data collection, verification, and reporting (Syaebani *et al.*, 2021). With a more automated structure, this system is expected to enhance the efficiency of government officials while providing quicker and easier access to the information needed by the subdistrict head (Camat) and relevant authorities (Hidayatuloh & Suharsono, 2023). The use of this system will allow for more structured data processing, reduce manual workload, and improve the accuracy of the data collected. Additionally, the user interface is designed to be simple and intuitive, ensuring that staff can easily understand and operate the system, minimizing the need for lengthy training (Wahyudi & Utomo, 2021). This user-friendly interface enables staff to immediately use the system without significant technical barriers. Therefore, this information system will not only improve performance and efficiency at the subdistrict government level but also support faster, data-driven decision-making. Implementing this system is expected to accelerate and simplify administrative processes related to poor households, ultimately improving the quality of service provided to the community.

The development of this system aims to create a model that can be applied by other regions facing similar challenges in managing social data. The integrated and automated system is expected to improve data processing efficiency and simplify administration at the subdistrict level. The implementation of this system also focuses on enhancing public service quality in Glumpang Tiga Subdistrict by providing faster and more accurate access to information for decision-makers involved in social programs. Additionally, the system is expected to be expanded and implemented across broader areas, contributing to the overall growth of digital governance. With advancements in technology, computer-based information systems can offer an effective solution for accelerating data management and

decision-making processes across various sectors. This solution can be applied in regions with similar challenges, enabling greater efficiency and transparency in managing social data. Therefore, the application and development of this system are expected to not only benefit Glumpang Tiga Subdistrict but also serve as a useful model for other areas in managing data in a more modern and efficient way (Ritonga *et al.*, 2021). This research is expected to make a significant impact on efforts to achieve equitable welfare and poverty alleviation by improving the efficiency of managing Poor Household Data. By adopting a more modern and technology-based approach, the data collection process, which was previously hindered by the limitations of manual methods, can now be optimized. This enables social programs to be more targeted and have a positive impact on the communities in need. The use of technology-based systems will speed up data processing, reduce human errors, and provide more accurate and timely information, which, in turn, will support more effective and efficient decision-making at the government level.

## 2 | BACKGROUND THEORY

The integration of information technology into government operations has significantly improved social data management practices, particularly in the collection of poor household data. Reliance on traditional manual methods for data collection can lead to substantial delays and inaccuracies, thereby reducing the effectiveness of poverty alleviation programs and government policies (Widiono *et al.*, 2024; Kusuma & Salomo, 2020). Effective data management is an essential foundation for decision-making and strategic planning in poverty alleviation initiatives (Purnawati *et al.*, 2023). In response, various regions have begun to shift to modern data collection techniques that utilize technology, thereby increasing accuracy and speeding up processing times (Didi, 2024). The Family Hope Program (PKH) in Indonesia illustrates the effectiveness of targeted social assistance programs in alleviating poverty by increasing data accuracy for beneficiary selection (Hia *et al.*, 2021; Mardi & Rahman, 2022). The design of programs that involve communities through social assistants is rooted in the application of technology for better tracking and support (Marom *et al.*, 2021). In addition, studies show that the success of poverty alleviation depends on an integrated approach that combines socio-economic and socio-ecological considerations (Kusuma & Salomo, 2020; Purwadi *et al.*, 2023). Technology not only functions as a facilitator for accurate data collection but also as a means of community empowerment through increased access to information and resources (Didi, 2024).

Recent frameworks have emphasized the importance of inter-ministerial coordination to implement effective poverty reduction strategies (Kusuma & Salomo, 2020; Sudipa & Nurjani, 2021). Such coordinated efforts encourage the establishment of contextually relevant programs and ensure that various government agencies align their resources and objectives for effective poverty alleviation (Hutahaeen, 2020). With the advancement of information technology, there is potential for significant improvements in the way data is processed and utilized, creating more efficient systems to address community needs (Firdasari & Hardjati, 2024). Overall, the transition from manual data collection methods to technology-based approaches has the potential to play a transformative role in future social administration and poverty management. These issues can hamper the effectiveness of government programs aimed at supporting communities in need (Wali, 2020). The application of appropriate technology to manage data is essential to improve data efficiency and accuracy. The shift from manual to automated systems enables faster data processing, reduces the possibility of human error, and ensures more reliable information for decision-making (Wijayanto *et al.*, 2022). Modern technology can streamline administrative tasks, resulting in more timely and targeted policy interventions. With the adoption of technology-based systems, governments can better manage social welfare programs and make data-driven decisions more effectively (Mahendra *et al.*, 2022). The shift towards such systems is critical to improving overall performance and achieving more impactful outcomes in addressing social problems.

In an increasingly complex world, information systems and information technology play a vital role in decision-making, especially in the government sector. An information system can be defined as a set of integrated components designed to collect, process, and present data to produce useful information for decision-makers (Anu, 2022). Especially in the context of collecting data on poor households, the implementation of information systems has proven to be efficient by increasing the speed of data processing and reducing the potential for human error (Mardinata *et al.*, 2023). This allows the government to design and implement more accurate and impactful policies (Wali, 2017). The use of information systems in government administration significantly increases the efficiency of data management. By automating and integrating various processes, information systems reduce manual workloads and ensure data is more reliable and up-to-date. As a result, the government is better equipped to make informed decisions, resulting in more effective poverty alleviation and social welfare programs (Wali, 2018). The shift towards automated data management systems is essential to improve the speed and accuracy of public services, which ultimately benefits citizens and society as a whole. Management Information Systems (MIS) are essential to support decision-making at the managerial level by providing relevant and accurate information (Afrianti, 2019). In the process of collecting data on poor households, MIS plays an important role in data collection, validation, and reporting for the allocation of social assistance (Hakim &

Sutrisno, 2023). With an integrated system, MIS ensures that the data collected is easily accessible and valid for informed decision-making (Wali, 2017). The use of MIS is essential to improve the efficiency of data management. In addition, the system ensures that the information presented is timely and in line with the needs of decision makers. By reducing errors that often occur in manual processes, MIS speeds up data processing and provides accurate reports quickly (Wali, 2018). By implementing MIS, the government can plan and implement social policies more effectively. Social assistance can be allocated more accurately because the information used has been verified and can be accessed at any time. The system plays an important role in improving administration, transparency, and supporting data-based decisions that produce better outcomes (Wali, 2020).

Structured data management plays a vital role in information systems, particularly through the implementation of Database Management Systems (DBMS). Systems such as Microsoft Access provide a robust framework for storing, retrieving, and managing data in an organized manner. DBMS improves data accessibility and accuracy, allowing relevant stakeholders to access critical information efficiently (Deng, 2024; Hartono & Masyhur, 2023). DBMS technology has evolved to meet the needs of various sectors such as corporate management, education, and government services. By utilizing optimized database strategies, these systems support effective decision-making processes and streamline business operations (Deng, 2024). The integration of cloud computing with database systems is also an emerging trend that facilitates improved performance and resource management, critical in modern applications where data volumes continue to increase (Deng, 2024). The performance of a database system is often measured by the speed of data processing, which directly affects the efficiency of the overall information system. Common operations in databases—including data insertion, update, and deletion—are tailored to optimize these processes, allowing the system to handle increasing data loads more effectively (Hartono & Masyhur, 2023). Furthermore, advancements in database technologies, such as the emergence of NoSQL databases alongside the traditional relational model, highlight the ongoing evolution of data management frameworks to address specific use cases and application requirements (Mumtahana, 2022). With the increasing importance of data security, database management also includes measures to safeguard data integrity and protect it from unauthorized access (Vishwakarma & Shukla, 2018). Organizations now emphasize not only the operational efficiency of DBMS but also the critical need for robust security protocols to maintain the confidentiality and reliability of information systems (Vishwakarma & Shukla, 2018). The ongoing development of database technologies and their integration into information management systems serve as the foundation for effective data utilization across domains. Their role in improving data accessibility, optimizing performance, and ensuring data security underscores their significance in today's data-driven landscape (Wadisman *et al.*, 2023). By using DBMS, stored data can be managed more efficiently, reducing the potential for errors in data processing and increasing the speed of information retrieval needed for timely decision making (Alfaris *et al.*, 2022). The implementation of DBMS in collecting poor household data offers several advantages, including reducing data duplication. This is very important because inconsistent data can hinder processing and decision making. In addition, increased access speed allows administrative processes to run faster, facilitates data verification and allows for faster decision making. In the context of public administration, the use of DBMS will increase operational efficiency and ensure that data used for social assistance allocation and policy planning is always accurate and up-to-date (Trisudarmo, 2022).

In developing applications for information systems, Visual Basic (VB) has become a commonly used programming language, especially for Windows-based systems with an intuitive user interface. The use of VB in information systems allows the creation of applications that are easy to use by a variety of users, including those who are not very familiar with technology (Siwi & Sulianta, 2022). With a simple and intuitive interface, users can perform tasks such as data entry, information retrieval, and report generation faster and more accurately (Muslimin, 2022). This is especially important in the context of information systems that require efficiency and accuracy, such as data collection on poor households (Wali, 2017). VB's ease of use helps ensure that applications can be operated by staff with varying levels of technological expertise. In addition, VB allows application development in less time, increasing productivity and efficiency in the development process (Alfaris *et al.*, 2022). Therefore, Visual Basic is an excellent choice for Windows-based applications designed for easy access and use. By enabling user-friendly design, VB contributes to faster adoption and smoother operation of information systems in various organizational environments. Collecting poor household data is an important step in efforts to reduce poverty in society. Complete and accurate data is essential for planning targeted social assistance programs (Purba *et al.*, 2019). An integrated information system allows for more efficient data verification and speeds up the reporting process. This contributes to the implementation of more effective social policies (Huda, 2022). By implementing the right information system in collecting poor household data, data processing can be done faster and more accurately (Mahendra *et al.*, 2022). Valid and verified data facilitates decision-making regarding the allocation of social assistance, ensuring that assistance reaches those in need. In addition, the system also supports easier monitoring and evaluation, ensuring that poverty alleviation programs are implemented effectively (Wali *et al.*, 2023). An integrated information system allows for more efficient and organized data management. This supports the goals of poverty reduction and improving the welfare of society as a whole. In addition to streamlining administration, the system helps in planning and implementing social policies in a more appropriate and efficient manner.

With a well-designed information system, poor household data can be collected, stored, and processed efficiently

(Wali, 2017). The system also allows the resulting reports to be accessed and used by sub-district or regional governments to make faster decisions based on valid data. The automation process in the system not only speeds up data processing but also reduces the possibility of errors that occur in manual systems (Mahendra *et al.*, 2022). With more accurate and organized data, the government can design more targeted social policies and ensure that social assistance is allocated more effectively (Wali, 2020). Database technology has advanced rapidly in recent decades, resulting in a variety of solutions tailored to the specific needs of organizations. These developments include increased storage capacity, processing speed, and more sophisticated security features (Mumtahana, 2022). In the context of social data management, advances in database technology allow the government to store and analyze larger volumes of data with a higher degree of precision. This is especially relevant for poverty alleviation programs that require multidimensional data analysis to identify target groups accurately (Trisudarmo, 2022). In addition to data storage and retrieval, modern DBMSs also offer analytical capabilities that enable organizations to extract valuable insights from the collected data. Such capabilities are particularly important in the context of social welfare programs, where patterns and trends in data can help identify areas that require immediate intervention or evaluate the effectiveness of ongoing programs (Wadisman *et al.*, 2023). By integrating analytical capabilities into poor household data management systems, governments can take a more proactive and evidence-based approach to poverty alleviation.

Data security is a major concern when managing sensitive information such as poor household data. Modern DBMSs offer a variety of security features, including data encryption, role-based access control, and audit trails, which help protect personal information from unauthorized access (Vishwakarma & Shukla, 2018). Implementing appropriate security measures not only protects individual privacy but also builds public trust in government systems. This is especially important in the context of social welfare programs, where public trust in the government can affect participation rates and the overall success of the program. Integration of DBMS with other technologies such as cloud computing and mobile applications further enhances the accessibility and functionality of data management systems. Field officers collecting poor household data can use mobile applications to directly enter data into the system, reducing the need for manual recording and double data entry (Deng, 2024). The collected data can then be stored in the cloud, allowing real-time access by authorized stakeholders from any location. Such integration not only improves the efficiency of data collection but also ensures that decision makers have access to up-to-date information whenever needed. Developing an intuitive user interface is another important aspect of an effective data management system. Visual Basic offers a powerful framework for developing user-friendly interfaces, enabling staff with varying levels of technological expertise to use the system effectively (Siwi & Sulianta, 2022). A well-designed interface reduces the learning curve for new users and minimizes user errors, thereby increasing the overall efficiency and effectiveness of the system. In the context of poor household data management, an intuitive interface ensures that staff can focus on data collection and analysis, rather than complex system navigation.

In addition to data collection and management, an effective information system must also support the generation of comprehensive and meaningful reports. These reports are essential for program monitoring, evaluation, and strategic planning (Wali *et al.*, 2023). Modern DBMSs offer a variety of reporting tools that allow users to generate reports tailored to their specific needs. In the context of social welfare programs, these reports may include the geographic distribution of poor households, demographic characteristics, and other socio-economic indicators relevant to evidence-based decision-making. The implementation of an information system for managing poor household data must also consider scalability and sustainability. The system must be able to accommodate increasing data volumes and users over time without sacrificing performance (Hartono & Masyhur, 2023). In addition, the system must be designed with long-term sustainability in mind, including maintenance, updates, and technical support. By considering these factors during the design phase, governments can ensure that their investments in information systems will continue to deliver value in the long term. The use of information technology in social data management also has broader implications for governance and transparency. By automating the process of data collection and management, information systems can reduce opportunities for data manipulation or abuse of power (Afrianti, 2019). This is especially important in the context of social welfare programs, where transparency in resource allocation is essential to building public trust and ensuring that assistance reaches those most in need. By increasing transparency and accountability, information systems contribute to better governance and more effective use of public resources. Implementing an effective information system for managing poor household data requires a holistic approach that considers technical, organizational, and social aspects. By leveraging technologies such as DBMS and Visual Basic, and considering factors such as data security, user interface, and scalability, governments can develop systems that are not only efficient in data management but also support evidence-based decision-making and good governance. Such systems ultimately contribute to increasing the effectiveness of social welfare programs and poverty alleviation overall.

### 3 | METHOD

In a study exploring the development and implementation of an information system for collecting poor household data in Glumpang Tiga District, a descriptive qualitative approach was used. This method is very effective in understanding complex processes and contexts, as it allows for detailed exploration of the challenges faced during implementation. The significance of using a qualitative approach has been well documented in the literature, especially regarding how it facilitates in-depth insights into social phenomena, which is crucial for public administration studies. For example, Bradshaw *et al.* demonstrated how qualitative descriptive research can produce rich, context-specific insights that enhance understanding of various managerial practices (Bradshaw *et al.*, 2017). Qualitative research designs, as outlined by Neergaard *et al.*, are instrumental in capturing the nuances of user experiences and the effectiveness of information systems in real-world settings (Neergaard *et al.*, 2009). In addition, this method supports the identification of key phases in the system development process while allowing researchers to understand the implications of various barriers, whether structural, behavioral, or technological (Kholisah *et al.*, 2024). The qualitative approach is complemented by the work of Mawadah and Marsudi, who emphasize that descriptive qualitative methodologies can reveal what happens and why in specific contexts, thereby enriching knowledge about implementation processes in public administration (Mawadah & Marsudi, 2023). In addition, the literature emphasizes that qualitative descriptive approaches can provide an important framework for analyzing phenomena such as poor household data collection, revealing critical insights into user engagement and system functionality. The study by Suryani and Suyatno reaffirms the value of inductive analysis in obtaining specific meanings for target communities and their unique contexts, facilitating better policy processes and decision-making (Suryani & Suyatno, 2023). Challenges faced during the implementation of information systems, especially in underprivileged areas, are often complex and related to social factors. This study recognizes that qualitative methods are very capable of uncovering these multifaceted relationships. By using a descriptive qualitative approach, researchers can uncover not only the visible problems but also their underlying causes, which ultimately leads to a more nuanced understanding of the challenges of public service delivery (Suratman & Suyitno, 2023). The use of descriptive qualitative research to study the information system for collecting data on poor households offers an in-depth understanding of the implementation process. The approach allows for a comprehensive examination of the dynamics that occur, which ultimately informs better practices in public administration and service delivery.

#### 3.1 Types of Research

The type of research used in this study is descriptive research, which aims to describe in detail each phase of the development and implementation of the information system. This descriptive research not only focuses on the technical process but also includes how the system is accepted and used by the parties involved, including the Sub-district Head and administrative staff. The main focus of this study is on the development and use of the system for collecting poor household data, which was previously done manually. The newly implemented information system is expected to improve the efficiency and accuracy of data processing and facilitate data-based decision making. Descriptive research has the advantage of providing a comprehensive picture of the phenomenon being studied. According to Creswell and Poth (2018), this approach allows researchers to explore and understand the meaning given by individuals or groups to social or humanitarian problems. In the context of information system implementation, descriptive research allows for an in-depth understanding of how technology interacts with human and organizational factors. The descriptive approach also allows researchers to identify patterns and themes that emerge during the system implementation process. As stated by Miles *et al.* (2014), qualitative data analysis involves identifying patterns, categories, and themes that emerge from the data. In this study, the approach allows researchers to identify factors that influence the success or failure of the implementation of the poor household data collection information system in Glumpang Tiga District. In addition, descriptive research allows flexibility in data collection and analysis. According to Patton (2015), a qualitative approach allows researchers to adapt data collection strategies based on field conditions and initial findings. This flexibility is especially important in research on information system implementation, where unexpected challenges and opportunities can arise during the research process.

#### 3.2 Data Collection Technique

Data collection was carried out through various techniques that were adjusted to the objectives and scope of the research. The first technique was interviews, which were conducted with individuals directly involved in managing and using the system, such as the Sub-district Head, administrative staff, and other system users. These interviews aimed to gather in-depth information about the processes involved in using the system, the challenges faced, and the benefits experienced after the implementation of the information system. In-depth interviews are a powerful data collection method in qualitative research. According to Kvale (2007), qualitative interviews allow researchers to understand the world from the perspective of the subjects, uncover the meaning of their experiences, and reveal their life worlds before scientific explanations. In the context of this research, in-depth interviews allow researchers to understand the

perceptions and experiences of information system users, which are critical to evaluating the success of the implementation. The interview protocol was developed based on the literature review and the research objectives. Interview questions were semi-structured, allowing flexibility to explore topics that emerged during the interview while remaining focused on the research objectives. Interviews were recorded with the participants' permission and transcribed for analysis. Interview participants were selected based on their involvement in the implementation and use of the information system, ensuring a diverse representation of perspectives.

Observation was also used to directly observe the process of collecting poor household data before and after the implementation of the information system. This observation provided a clear picture of the effectiveness of the newly implemented system and changes in data processing. The researcher observed the steps taken by officers in data input, information verification, and report generation required for social assistance allocation. By comparing manual and automated processes, the researcher was able to evaluate the extent to which the information system improved efficiency and accuracy in data management. Direct observation allows the researcher to understand the context in which the information system is implemented and used. According to Angrosino (2007), observation allows researchers to collect data on human behavior in their natural context, providing insights that may not be revealed through other data collection methods. In this study, observation allowed the researcher to see how users interact with the system in their daily work settings, identifying challenges that may not be revealed in interviews. An observation protocol was developed to ensure consistency and focus during the observation sessions. The protocol covered aspects such as workflow, user interactions with the system, and challenges encountered during system use. Detailed field notes were taken during the observations, recording both verbal and non-verbal behavior. Observations were conducted at various times and with various users to ensure a comprehensive representation of system usage.

Another data collection technique was documentation study, which involved collecting relevant documents related to the management of poor household data prior to system implementation, including reports and administrative records. The researcher also collected documentation related to the system design and implementation process, such as system flowcharts, database designs, and evaluation reports from parties involved in system development. This documentation study allowed the researcher to analyze the results obtained throughout the development and implementation process. Documentation study provided historical and organizational context for the study. According to Bowen (2009), document analysis is a systematic process of reviewing or evaluating documents, both printed and electronic. In this study, documentation study allowed the researcher to understand how poor household data was managed prior to the implementation of the information system and how the system was designed to address identified challenges. Documents collected included organizational policies and procedures, system technical documentation, evaluation reports, and meeting notes related to system implementation. These documents were analyzed to identify goals, expectations, and challenges associated with the implementation of the information system. Document analysis also allowed for triangulation with data collected through interviews and observations, increasing the validity of the study findings.

### 3.3 Data Analysis

The analysis was conducted using qualitative descriptive analysis. Data from interviews, observations, and documentation studies were analyzed to describe the system development process, challenges faced, and the impact of information system implementation on the efficiency of poor household data collection. The researchers identified patterns that emerged during the system implementation process and factors that influenced the success or failure of the system. This analysis also included an evaluation of the benefits experienced by users and provided recommendations for further system development. The data analysis approach used in this study follows the interactive model proposed by Miles *et al.* (2014), which involves three main components: data condensation, data presentation, and drawing/verifying conclusions. Data condensation involves the process of selecting, focusing, simplifying, abstracting, and transforming data that emerges from field notes, interview transcripts, and documents. In this study, data condensation was carried out through data coding based on themes that emerged from the literature review and the data itself. The coding process was carried out iteratively, with initial codes being revised and refined as the analysis progressed. The codes were then organized into broader categories and themes, allowing for the identification of patterns and relationships within the data. Qualitative data analysis software was used to facilitate the coding and analysis process, increasing efficiency and consistency.

Data presentation involves organizing and compressing information to enable conclusions to be drawn and actions to be taken. In this study, data were presented through rich narratives, tables, diagrams, and other visualizations that illustrate key findings. Data presentation was designed to communicate findings clearly and effectively, allowing readers to understand the complexities of information systems implementation. Drawing and verifying conclusions involves interpreting the meaning of the data presented and verifying those conclusions through reference back to the original data. In this study, conclusions were verified through triangulation of data from multiple sources, ensuring that interpretations were supported by strong evidence.

This study used triangulation, comparing the results of interviews, observations, and documentary studies. This

triangulation aimed to verify data obtained from multiple sources, ensuring the accuracy and reliability of the findings. By using this approach, a more comprehensive picture of the development and implementation of the poor household data collection system can be obtained, as well as its impact on the effectiveness of social policies and poverty alleviation efforts in Glumpang Tiga District. Triangulation is an important strategy to increase the validity and reliability of qualitative research. According to Denzin (1970), triangulation can involve the use of multiple methods, data sources, researchers, or theories. In this study, triangulation of methods and data sources was used to ensure that the findings accurately reflect the reality of information system implementation.

Method triangulation involves the use of multiple data collection methods to study the same phenomenon. By comparing data from interviews, observations, and documentation studies, researchers can identify consistencies and differences in findings. Consistency of findings from multiple methods increases confidence in the validity of the findings, while differences can lead to new insights and a deeper understanding of the complexities of information system implementation. Data source triangulation involves collecting data from multiple individuals and groups involved in the implementation and use of information systems. By comparing perspectives from various stakeholders, such as sub-district heads, administrative staff, and other system users, researchers can develop a more comprehensive and nuanced understanding of the challenges and benefits of information system implementation. In addition to triangulation, this study also used other strategies to increase trustworthiness, as proposed by Lincoln and Guba (1985). These strategies include member checking, where research participants are given the opportunity to review and provide feedback on the researcher's interpretations; audit trail, which involves detailed documentation of methodological and analytical decisions; and reflexivity, where researchers critically reflect on how their backgrounds, assumptions, and positions may have influenced the research. By using a rigorous data analysis approach and strategies to increase trustworthiness, this study aims to produce credible, transferable, dependable, and confirmable findings about the implementation of an information system for collecting poor household data in Glumpang Tiga District.

## 4 | RESULTS AND DISCUSSION

### 4.1 Results

#### 4.1.1 System Development

System development involves changing, replacing, or reorganizing an existing system into a new one, either partially or entirely, to improve the current system. In dynamic organizations, system development is a critical action, as it aims to improve the mechanisms or workflows within the organization, making all aspects more integrated into a unified system or set of regulations. The primary focus of this development is to replace the old, conventional system with a newer, more modern one that is integrated with computerized tools. These tools make data processing easier and produce high-quality information, which is vital for decision-making at the managerial level. The first phase in system development is the feasibility study. After collecting data and documenting facts, system analysts need to understand the current system's operation. The analyst then conducts a feasibility study to assess whether the organization or institution can proceed to the next stage of system development. This feasibility study serves as a preliminary review of the key factors that could affect the system's ability to achieve the desired objectives. Following the feasibility study, the next step is the preliminary planning phase, which involves an initial study of the system's type, scope, and general understanding. This phase produces the initial system design, cost estimates, and time requirements for development. The analysis phase focuses on the actual process of poor household data collection. There are three main processes involved: data input, data search, and report generation. These processes are interconnected, with each step feeding into the next, ultimately resulting in the creation of a report that will be submitted to the subdistrict head. The final stage is system implementation, where the system is put into operation. This phase involves replacing the old system with the new one. To ensure the successful replacement, it is necessary to adopt an appropriate approach and strategy, ensuring that the transition is smooth and the new system functions effectively.

#### 4.1.2 System Design

The designed information system includes features that allow for fast data collection, thus simplifying the workflow for the subdistrict head (Camat) of Glumpang Tiga. The system is designed with the aim of improving information systems in procedures involved in data processing. Additionally, the information system for poor households is designed with the help of computer tools such as Microsoft Access 2007 and Microsoft Visual Basic 6.0, replacing the previous use of Microsoft Excel 2007. The system development process involves several steps. First, the program folder is created by right-clicking on "Start," selecting "Explorer," and then choosing Drive "D." A new folder named "Aplikasi Rumah Penduduk Miskin" is created. Next, a project is created by opening Microsoft Visual Basic 6.0, selecting "New Project" from the dialog box, choosing "Standard Exe," and clicking "Open." For the database creation, the steps include selecting "Add Ins" in the menu, then choosing "Visual Data Manager." In

the new window, "New" is selected, followed by choosing "Microsoft Access Version 7.0 MDB," and the database is named "DBRumah Penduduk Miskin.mdb." After that, a new table is created, and relevant fields are added, including data related to the poor households. The system uses one database, two database tables, and five form objects. For the "Admin" data structure, the fields include the admin code (as the primary key), username, and password. The "Poor Household Data" structure includes fields for the number, name, village, family card number, identity card number, dependents, and remarks. The form design process includes creating a login form that functions as a protection for program users. If the username and password are correct, the main menu is unlocked, allowing the user to view and operate all the menus.

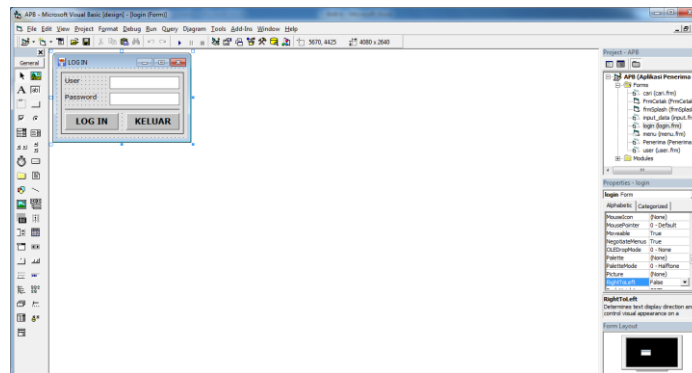


Figure 1. Login Form

The main menu form is designed to act as the entry point to access and utilize all the submenus within the program. This form includes several menu options that allow users to easily navigate through the system. The design incorporates various components such as the main window caption, image list, toolbar, and status bar, which are essential for the program's functionality. The main window caption provides a title for the form, while the image list helps display icons for different actions. The toolbar contains shortcuts to commonly used functions, and the status bar displays relevant information about the system's current state. Together, these elements organize and present the program's features in a user-friendly manner, enhancing the user experience. The layout is designed to make the application intuitive, enabling smooth interaction and efficient navigation.

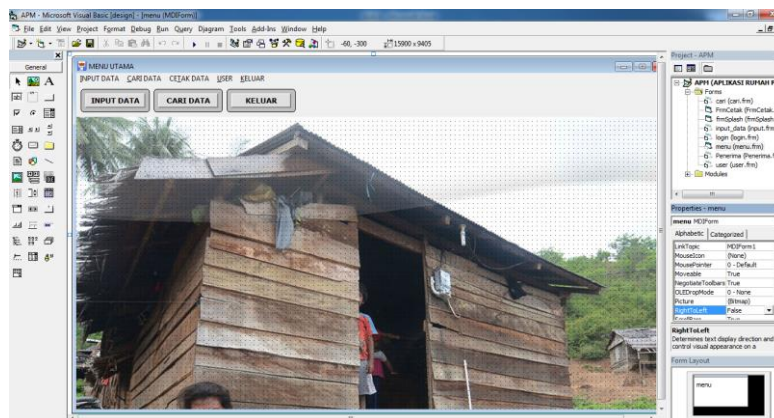


Figure 2. Main Menu Form

In the process of creating the user form, it is used to input data for users of the application system for low-income housing. This form consists of several elements, including labels for the user's name, password, and buttons for adding, saving, deleting, and exiting the form. Each element in this form is designed to facilitate data entry by the system's users. Next, the housing form for low-income residents is designed to input data about homes for low-income individuals. This form includes elements such as labels for house number, resident name, village, family card number (KK), identity card number (KTP), the number of dependents, and additional notes. There are also buttons that allow users to add new data, save, cancel, edit, delete, print, or exit the form. Other elements include a list for selecting the type of house, which enhances the form's functionality. For searching low-income housing data, the search form is designed to allow users to search by house number or the name of the house. In this form, users can clear the search fields, display the relevant data, or exit the form easily. This search function is designed to make the data search process more efficient and organized. Additionally, the report for

low-income housing utilizes a number of text objects to display information in an organized manner. This report design ensures that the necessary information is easily accessible and understandable, facilitating further analysis of the available low-income housing data.. Lastly, the design of the Poor Household Report Output utilizes 12 text objects.

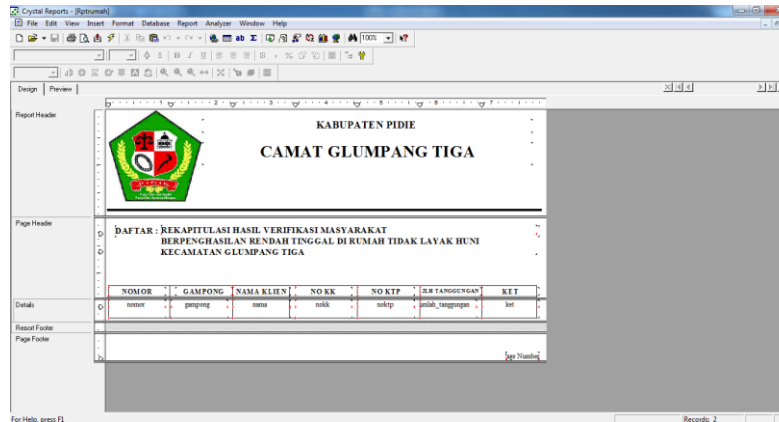


Figure 3. Report on Low-Income Housing Data

The image shows a report layout for low-income housing data verification in the Glumpang Tiga District of Pidie Regency. The header includes the district logo and the title, which translates to "List: Summary of Community Verification Results for Low-Income Housing in Glumpang Tiga District." Below the title, the report is organized into several columns, each representing specific data fields related to low-income housing conditions. These columns include "Number" (NO), "Village" (CAMPONG), "Name of Head of Household" (NAMA KLIN), "Family Card Number" (NO KK), "ID Card Number" (NO KTP), "Number of Dependents" (JUMLAH TANGGUNGAN), and "Remarks" (KETERANGAN). This structure is designed to provide a clear and organized presentation of data, which will assist in verifying which homes in the district are considered unfit for habitation. The report effectively consolidates and displays crucial information regarding the living conditions of low-income households in the area.

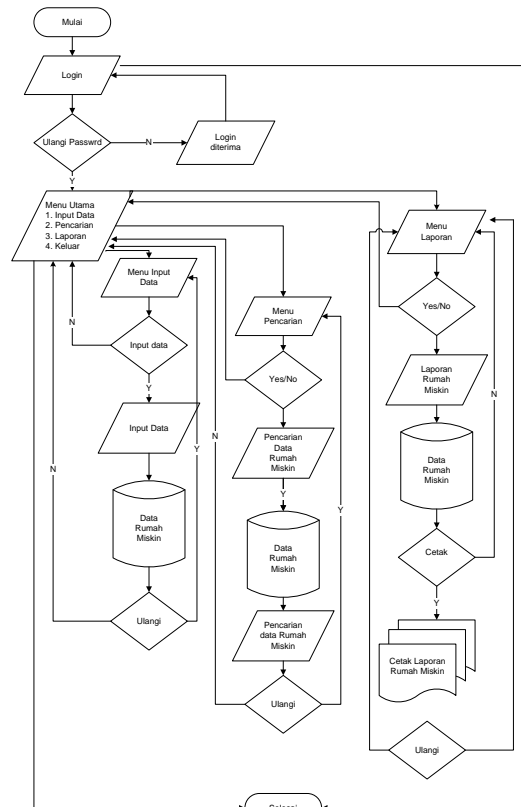


Figure 4. Flowchart

The flowchart represents the process of managing low-income housing data through a user interface. It begins with the login process, where the user must enter their credentials. Upon successful login, the user is directed to the main menu with four options: Input Data, Search, Report, and Exit. If "Input Data" is selected, the user is prompted to input housing data, which is then stored. If "Search" is chosen, the user can search for specific low-income housing data. The report menu allows the user to generate reports related to low-income housing data. Each step includes a confirmation process, ensuring the proper data flow, with an option to repeat or exit the process.

## 4.2 Discussion

The development and design of information systems are essential processes for organizations seeking to improve their operational efficiency and effectiveness. In the case of managing low-income housing data, system development involves replacing traditional methods with computerized systems that can streamline workflows and enhance decision-making. According to Anu (2022), the adoption of a structured approach in system development can help organizations improve both the integration of various systems and the ease of data processing. In dynamic organizations, particularly in government agencies or public service institutions, system development becomes critical to improving the functionality of existing systems, ensuring the efficient collection, processing, and analysis of data. The system development process typically begins with a feasibility study. This stage evaluates the practicality of implementing new systems and identifies any potential challenges that could arise during the development phase (Hakim & Sutrisno, 2023). Mardinata *et al.* (2023) highlight the importance of such studies in the context of public service delivery, as they ensure that the designed system can accommodate future growth and be adaptable to the needs of the community. The feasibility study also serves as a tool for assessing whether the institution is ready to proceed with the development process, which aligns with the early planning and analysis stages mentioned by Trisudarmo (2022).

Once the feasibility study is completed, the next stage is planning, where system analysts define the scope of the system, estimate costs, and determine timeframes. According to Anu (2022), this planning phase sets the groundwork for the actual system design and implementation. It is here that the technical specifications of the system are outlined, including the system architecture, database design, and user interface elements. The system for managing low-income housing, as mentioned by Mardinata *et al.* (2023), is specifically designed to assist the subdistrict head of Glumpang Tiga in handling housing data. The system facilitates quick data collection, improves the workflow of administrative tasks, and ensures that the housing data is properly categorized and accessible for decision-making. By utilizing tools like Microsoft Access 2007 and Microsoft Visual Basic 6.0, the design replaces older, less efficient tools such as Microsoft Excel 2007. This transition is in line with the broader trend in digital transformation as noted by Huda (2022), who emphasizes the need for better tools to support efficient governance and data management. The design includes important features such as user authentication, which protects the system from unauthorized access. This security feature is highlighted in the development process by Siwi and Sulianta (2022), who emphasize the importance of securing sensitive data in government applications. The login form ensures that only authorized personnel can access and modify the data, while the main menu form provides a clear and organized way to navigate through the system's functionalities. Data input, searching, and reporting are the core functionalities of the system, as pointed out by Wadisman *et al.* (2023). These processes are interconnected, allowing for a seamless flow of information from one stage to the next. The data input form enables users to enter key details about each household, such as the house number, name of the head of the household, family card number, and the number of dependents. This form is critical for ensuring that all relevant data is captured accurately and stored in a structured format. As mentioned by Trisudarmo (2022), designing forms that are easy to use and intuitive is a key aspect of system development, as it directly impacts the efficiency and effectiveness of the system.

The search functionality of the system, as described by Mardinata *et al.* (2023), allows users to retrieve specific housing data based on certain criteria such as house number or the name of the head of the household. This feature significantly reduces the time spent searching for records, enhancing the overall efficiency of the system. Moreover, the report generation functionality, as highlighted by Hakim and Sutrisno (2023), consolidates the data into comprehensive reports that can be used for further analysis and decision-making. The system ensures that these reports are well-organized and easy to interpret, making it easier for authorities to assess the conditions of low-income housing in their district. The implementation phase of the system, where the old system is replaced with the newly developed one, is crucial for ensuring that the new system operates effectively. As Afrianti (2019) suggests, successful system implementation requires careful planning and ongoing support to address any issues that may arise during the initial phases of operation. Training for users, testing, and troubleshooting are essential to ensure that the system functions as expected and that users are comfortable navigating the new interface. The successful implementation of the low-income housing management system is a significant step toward improving the efficiency of public services. It aligns with the goals of digital

transformation in public administration, as discussed by Muslimin (2022), who emphasizes the importance of such systems in enhancing governance and ensuring that public services meet the needs of the community. The system not only streamlines the process of managing low-income housing data but also contributes to more informed decision-making, enabling authorities to take timely action based on accurate data. System development and design are fundamental processes for improving the management of low-income housing data. By integrating modern tools and methodologies, such as Microsoft Access and Visual Basic, and focusing on user-friendly interfaces and data management capabilities, the system ensures that data is accurately collected, processed, and reported. This approach ultimately enhances the efficiency of public service delivery, contributing to better decision-making and improved governance.

## 5 | CONCLUSIONS AND FUTURE WORK

The development and implementation of the information system for Poor Household Data (RPM) in Glumpang Tiga Subdistrict have proven to be a significant step towards improving data management in public service administration. By transitioning from manual data collection to an automated system, the project has successfully addressed many of the inefficiencies and inaccuracies associated with traditional methods. The integration of Microsoft Access and Visual Basic has streamlined data input, searching, and report generation, reducing the manual workload and ensuring faster, more accurate processing of critical information. The system's user-friendly interface and real-time data access have enhanced administrative efficiency, enabling government officials to make better-informed decisions based on reliable and up-to-date data. These improvements are expected to positively impact the allocation of social assistance, ensuring that it is targeted more accurately and delivered on time to those in need. This shift towards automation also paves the way for more transparent governance, with easily accessible and verifiable data aiding in monitoring and evaluating social welfare programs. Despite these successes, there are areas for future development. One potential area for improvement is expanding the system's scalability to handle larger volumes of data as the region grows. Enhancements in data security could also be explored, ensuring that sensitive household information is protected from unauthorized access. Additionally, the system could be integrated with other local government services, creating a more comprehensive platform for managing community welfare. Future work should also focus on user training and ongoing system maintenance to ensure smooth operation and adoption across various levels of government. The RPM information system has the potential to serve as a model for other regions with similar challenges in managing social data. The application of modern information technology in public administration offers a promising solution to improve the efficiency and effectiveness of social assistance programs and ultimately contribute to poverty alleviation efforts.

## REFERENCES

- Afrianti, S. (2019). Penerapan sistem informasi manajemen dalam meningkatkan kualitas pelayanan pendidikan di sekolah.. <https://doi.org/10.31227/osf.io/9xjhp>
- Alfaris, L., Gustian, D., Setyorini, R., Romli, I., Putri, A. Y. P., Herjuna, S. A. S., Syamsiyah, N., Yuniansyah, Aziza, N., Muhammad, A. C., Umar, N., & Wali, M. (2022). *Riset Operasi*. Indie Press.
- Anu, S. (2022). Analisis dan perencanaan strategi sistem informasi menggunakan togaf adm di disdukcapil halmahera utara. *Jatisi (Jurnal Teknik Informatika Dan Sistem Informasi)*, 9(4), 3413-3425. <https://doi.org/10.35957/jatisi.v9i4.2792>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a qualitative description approach in health care research. *Global Qualitative Nursing Research*, 4. <https://doi.org/10.1177/2333393617742282>
- Deng, T. (2024). The application of database systems in information management. *Applied and Computational Engineering*, 40(1), 33-42. <https://doi.org/10.54254/2755-2721/40/20230625>
- Didi, L. (2024). Alleviating extreme poverty through community empowerment programs. *Adv*, 2(6), 829-839. <https://doi.org/10.46799/adv.v2i6.252>

- Firdasari, K. and Hardjati, S. (2024). Analysis of policy implementation of the food program in rural areas. *Journal La Sociale*, 5(5), 1390-1402. <https://doi.org/10.37899/journal-la-sociale.v5i5.1278>
- Hakim, A. and Sutrisno, S. (2023). Pengaruh sistem informasi akuntan terhadap pengambilan keputusan manajemen pada pt. neid. *Jurnal Ekonomi Trisakti*, 3(1), 2059-2066. <https://doi.org/10.25105/jet.v3i1.16474>
- Hartono, N. and Masyhur, Z. (2023). Optimizing transaction data performance in database management systems. *Matrix Jurnal Manajemen Teknologi Dan Informatika*, 13(2), 106-114. <https://doi.org/10.31940/matrix.v13i2.106-114>
- Hia, E., Siagian, M., & Achmad, N. (2021). Implementasi family development session program keluarga harapan. *Perspektif*, 10(1), 128-139. <https://doi.org/10.31289/perspektif.v10i1.4146>
- Huda, S. (2022). Pengenalan pemanfaatan cloud computing dalam pengembangan desa wisata budaya di desa plunturan. *Parta Jurnal Pengabdian Kepada Masyarakat*, 3(1), 14-18. <https://doi.org/10.38043/parta.v3i1.3590>
- Hutahaean, M. (2020). Implications of the decentralization policy on poverty reduction in indonesia. *Policy & Governance Review*, 4(2), 87. <https://doi.org/10.30589/pgr.v4i2.274>
- Kholisah, N., Saskia, B., Dinarti, N., Rohmatilahi, L., & Rostika, D. (2024). Analysis of the impact of lack of classrooms on students' conductivity while learning. *Progres Pendidikan*, 5(2), 134-138. <https://doi.org/10.29303/prospek.v5i2.408>
- Kusuma, E. and Salomo, R. (2020). Coordination among ministries/institution in the context of reducing poverty.. <https://doi.org/10.4108/eai.30-10-2019.2299332>
- Mahendra, G. S., Wali, M., Idwan, H., Listartha, I. M. E., Yuliasuti, G. E., Sasongko, D., Saskara, G. A. J., & Jude, G. A. (2022, Oktober 1). Keamanan Komputer. *Galiono Digdaya*.
- Mardi, M. and Rahman, A. (2022). The implementation of the family hope program in alleviating poverty in lamurukung village tellusiatinge district bone regency. *Jurnal Ad Ministrare*, 9(2), 553. <https://doi.org/10.26858/ja.v9i2.40974>
- Mardinata, E., Cahyono, T., & Rizqi, R. (2023). Transformasi digital desa melalui sistem informasi desa (sid): meningkatkan kualitas pelayanan publik dan kesejahteraan masyarakat. *Parta Jurnal Pengabdian Kepada Masyarakat*, 4(1), 73-81. <https://doi.org/10.38043/parta.v4i1.4402>
- Marom, K., Tamamudin, T., & Adinugraha, H. (2021). Hope family program for muslim society welfare: evidence from hope family west pekalongan regency. *Jurnal Ekonomi Syariah Akuntansi Dan Perbankan (Jeskape)*, 5(1), 54-69. <https://doi.org/10.52490/jeskape.v5i1.1137>
- Mawadah, N. and Marsudi, K. (2023). Implementation of good corporate governance principles in bank syariah indonesia nganjuk sub-branch. *Etihad Journal of Islamic Banking and Finance*, 3(2), 102-110. <https://doi.org/10.21154/etihad.v3i2.7602>
- Mumtahana, H. (2022). Optimization of transaction database design with mysql and mongodb. *Sinkron*, 7(3), 883-890. <https://doi.org/10.33395/sinkron.v7i3.11528>
- Muslimin, M. (2022). Analisis intention to use sistem informasi pengelolaan keuangan daerah kabupaten penajam paser utara. *Jurnal Indonesia Sosial Teknologi*, 3(1), 172-182. <https://doi.org/10.36418/jist.v3i1.339>
- Neergaard, M., Olesen, F., Andersen, R., & Søndergaard, J. (2009). Qualitative description – the poor cousin of health research?. *BMC Medical Research Methodology*, 9(1). <https://doi.org/10.1186/1471-2288-9-52>
- Purba, J., Tarigan, U., Nasution, I., & Suharyanto, A. (2019). Implementasi sistem informasi administrasi kependudukan dalam pengurusan kartu tanda penduduk elektronik. *Perspektif*, 8(2), 77-83. <https://doi.org/10.31289/perspektif.v8i2.2597>

- Purnawati, L., Angkasawati, A., & Wahyudi, A. (2023). Poverty reduction evaluation through the program looks down on poverty problems (gertak) in trenggalek district, east java. *International Journal of Environmental Sustainability and Social Science*, 4(4). <https://doi.org/10.38142/ijesss.v4i4.581>
- Purwadi, P., Harefa, H., Suhendra, A., Halik, A., Santoso, C., Rosidah, R., ... & Sutanto, H. (2023). Policy design for extreme poverty alleviation in west lombok regency. *Jurnal Bina Praja*, 15(3), 605-619. <https://doi.org/10.21787/jbp.15.2023.605-619>
- Riansyah, R., Ruliansyah, R., & Rahayu, S. (2021). Sistem informasi administrasi menggunakan metode waterfall pada kelurahan kalidoni kota palembang. *Journal of Computer and Information Systems Ampera*, 2(3), 169-189. <https://doi.org/10.51519/journalcisa.v2i3.110>
- Ritonga, H., Irmayani, D., & Pane, R. (2021). Sistem informasi geografis (gis) pada rumah sakit di kabupaten labuhanbatu berbasis web. *Jurteksi (Jurnal Teknologi Dan Sistem Informasi)*, 7(2), 227-235. <https://doi.org/10.33330/jurteksi.v7i2.1089>
- Sanjaya, F., Lutfina, E., Nugroho, A., & Abdillah, M. (2023). Systematic literature review perancangan sistem informasi stok opname gudang berbasis web. *Science Technology and Management Journal*, 3(1), 21-27. <https://doi.org/10.53416/stmj.v3i1.129>
- Siwi, G. and Sulianta, F. (2022). Rancang bangun aplikasi layanan administrasi desa berbasis website. *Syntax Idea*, 4(10), 1493-1508. <https://doi.org/10.46799/syntax-idea.v4i10.1978>
- Sudipa, N. and Nurjani, P. (2021). Strategy for accelerating poverty reduction in klungkung regency, bali. *Jurnal Bina Praja*, 41-51. <https://doi.org/10.21787/jbp.13.2021.41-51>
- Suratman, S. and Suyitno, S. (2023). The implementation of extracurricular scouting in the development of disciplinary character in terms of the civic dimension of elementary school students. *Proceedings Series on Social Sciences & Humanities*, 12, 108-112. <https://doi.org/10.30595/pssh.v12i.783>
- Suryani, D. and Suyatno, S. (2023). Analysis of disaster resilience governance in pancoh tourist village, yogyakarta. *Journal of Social Politics and Governance (Jspg)*, 5(2), 186-198. <https://doi.org/10.24076/jspg.v5i2.1458>
- Syaebani, A., Tyasmala, D., Maulani, R., Utami, E., & Wahyuni, S. (2021). Pengembangan sistem informasi pelayanan surat menyurat (sira) berbasis website dengan menggunakan framework codeigniter. *Journal of Information System Management (Joism)*, 3(2), 59-65. <https://doi.org/10.24076/joism.2021v3i2.446>
- Trisudarmo, R. (2022). Penerapan metode prototype dalam sistem e-government pada pelayanan administrasi kependudukan. *J. Inf. Tekn. Pend.*, 2(2), 64-71. <https://doi.org/10.25008/jitp.v2i2.35>
- Vishwakarma, J. and Shukla, A. (2018). Survey on security issues and their techniques in dbms. *International Journal of Advanced Research in Computer Science and Software Engineering*, 8(1), 124. <https://doi.org/10.23956/ijarcsse.v8i1.544>
- Wadisman, C., Putra, Y., & Aldi, F. (2023). Penggunaan sipaga dalam pengusulan rencana kebutuhan barang milik daerah (rkbmd) kepada pemerintahan kota padang. *Dedikasi Sains Dan Teknologi*, 3(2), 262-272. <https://doi.org/10.47709/dst.v3i2.3209>
- Wahyudi, F. and Utomo, L. (2021). Sistem informasi manajemen data pengadaan barang atau jasa (simda-pbj) berbasis web. *Jurnal Teknologi Dan Manajemen Informatika*, 7(1), 20-28. <https://doi.org/10.26905/jtmi.v7i1.5434>
- Wali, M. (2017). *Membangun Aplikasi Windows dengan Visual BASIC .NET® 2015 Teori dan Praktikum*. Lembaga KITA.
- Wali, M. (2018). *Add-ins Microsoft Office: Add-ins Microsoft Office*. Kita Publisher.
- Wali, M. (2020). *Modul Praktikum Rekayasa Perangkat Lunak*. Ellunar Publisher.

- Wali, M., Nengsih, T. A., Gunawan Hts, D. I., Choirina, P., Awaludin, A. A. R., Yusuf, M., Aminuddin, F. H., Purwandari, N., & Baradja, A. (2023, Maret 3). *Pengantar 15 Bahasa Pemrograman Terbaik Di Masa Depan (Referensi & Coding Untuk Pemula)*. PT. Sonpedia Publishing Indonesia.
- Widiono, S., Wahyuni, E., Kolopaking, L., & Satria, A. (2024). Poverty reduction strategy in the conservation region: learning from lebong regency, bengkulu province, indonesia. *Iop Conference Series Earth and Environmental Science*, 1359(1), 012045. <https://doi.org/10.1088/1755-1315/1359/1/012045>
- Wijayanto, G., Jushermi, Sakkir, G., Sukmasetya, P., Arikarani, Y., Leo, M., Safitri, N. M., Wali, M., Luthfiana, D., Zaenurrohman, J. A., Vikaliana, R., Madiawati, P. N., & Sianipar, M. Y. (2022). Analisis dan Interpretasi Data Riset Berbasis Digital. Dalam *Metode Riset Berbasis Digital: Penelitian Pasca Pandemi*. Media Sains Indonesia.
- Yuliadi, Y., Rodianto, R., & Julkarnaen, M. (2021). Rekayasa perangkat lunak aplikasi inventaris barang pada badan usaha milik desa (bumdes) bina madani desa dasan lekong. *Teknimedia Teknologi Informasi Dan Multimedia*, 2(1), 32-36. <https://doi.org/10.46764/teknimedia.v2i1.34>.

How to cite this article: Baizah, Z. (2024). Design of Information System for Poor Household Data Collection in Glumpang Tiga Subdistrict. *Journal Dekstop Application (JDA)*, 3(1), 43-57. <https://doi.org/10.59431/jda.v3i1.527>.