KOMPAK (Jurnal Ilmiah Komputerisasi Akuntasi)
p-ISSN : 1979-116X (print) e-ISSN : 2621-6248 (online)
Vol. 18 , No. 1 ,Juli 2025
http://journal.stekom.ac.id/index.php/kompak

Optimization Of The Siman Application System As A Tool For State-Owned Asset Management At The Kantor Pelayanan Kekayaan Negara Dan Lelang Semarang

Rexajune Maharty Sukma Cahaya[1], Elen Puspitasari[2]
[1,2]Department of Accounting, Universitas Stikubank Semarang, Indonesia
Email: radytsemarang@gmail.com[1], elenpuspita@edu.unisbank.ac.id[2]

Article Info

Article history:
Received: January 16, 2025
Revised: February 12, 2025
Accepted: February 25, 2025
Published: July 01, 2025

Keywords:
Optimization
SIMAN
Management
State-OwnedGoods
KPKNL Semarang
information system

ABSTRACT

The management of State-Owned Goods (SOG) is a crucial aspect of asset management that requires an effective and efficient system. This study aims to analyze the optimization of the State Asset Management Information System (SIMAN) as a tool for managing SOG at the Office of State Treasury and Auction Service (KPKNL) Semarang. Using a descriptive qualitative approach, this research evaluates the implementation of SIMAN in improving the accuracy, efficiency, and transparency of SOG management. The findings indicate that the implementation of SIMAN successfully integrates all aspects of SOG management into a comprehensive digital platform, accelerating the processes of inventory, recording, and reporting SOG. Furthermore, the system facilitates monitoring and auditing by providing real-time and accurate data. The improvement in coordination among units and the use of user feedback are key factors in the system's optimization. However, challenges related to human resource training and technological infrastructure support still require further attention. Overall, SIMAN has had a positive impact on organizational performance and has strengthened accountability and transparency in the management of SOG at KPKNL Semarang.

Corresponding Author:
Rexajune Maharty Sukma Cahaya,
Accounting Department, Faculty of Bussines & Economic Universitas Stikubank Semarang
Jl. Kendeng No. 5, Bendanduwur, Gajahmungkur, Kota Semarang, Jawa Tengah 50241
Email: radytsemarang@gmail.com

1. INTRODUCTION

Background

In order to establish order in the administration of State Property (Barang Milik Negara, BMN) management, as mandated by Government Regulation Number 28 of 2020, which amends Government Regulation Number 27 of 2014 on the Management of State/Regional Property, the Users or Proxy Users of Goods hold the authority and responsibility for BMN administration. This activity includes recording, bookkeeping, and reporting efficiently to produce accurate, complete, reliable, and timely data. The information from BMN administration serves as the basis for calculating state wealth in BMN Reports, formulating policies, and implementing supervision and control of BMN (KemenkumHam, 2022).

The State Asset and Auction Service Office (Kantor Pelayanan Kekayaan Negara dan Lelang, KPKNL) in Semarang manages a large number of BMN assets compared to other working units. This

study examines the BMN administration system, including bookkeeping, inventory, reporting, and its implementation. The term "goods" in this context refers to measurable and countable assets, excluding money and securities.

According to Law Number 1 of 2004, BMN encompasses all goods acquired through the State Budget (APBN) or other legitimate sources, such as agreements, legally binding court rulings, or statutory provisions. In the SIMAN application, BMN is classified as current assets (easily convertible to cash) and fixed assets (for long-term operations) (DJKN, 2014a).

Accurate financial reporting influences fiscal and monetary policies that support the national economy. The Minister of Finance has designated the Directorate General of Treasury to develop the Government Accounting System (Sistem Akuntansi Pemerintah, SiAP). For BMN management, the State Asset Management Information System (Sistem Informasi Manajemen Aset Negara, SIMAN) is utilized, which supports planning, utilization, maintenance, and disposal of assets through an internet-based platform (Novika, 2021).

Since 2015, SIMAN has replaced the SIMAK-BMN application for BMN data digitization. SIMAN data originates from SIMAK-BMN, and a single-entry-point integration has been developed through the SAKTI Application, which consolidates various national financial systems (Hartiwi & Rokhayati, 2023). Data from SAKTI is used for BMN bookkeeping and reporting, while SIMAN is used for BMN management. Both systems are interconnected through data reconciliation, although auto-updates are currently unidirectional (from SAKTI to SIMAN).

SIMAN enhances BMN management efficiency by enabling online monitoring, documenting data digitally, and supporting asset management. This application integrates asset management and reporting to ensure State Budget accountability. BMN administration involves bookkeeping (asset registration), inventorying (data collection and recording), and reporting for management policy formulation and preparation of the Central Government Balance Sheet.

Previous studies indicate that SIMAN faces challenges, such as program errors and the need for optimization. This study is titled "Optimization of the SIMAN Application System as a Tool for State Property Administration at the State Asset and Auction Service Office in Semarang."

Research Problems

The challenges in optimizing SIMAN include:

a. Program errors that result in repetitive data input processes.
b. One-way interconnection between SIMAN and SAKTI, which may cause data inconsistencies.
c. Lack of effective monitoring tools for BMN management.

Research Objectives

a. To describe the implementation of the SIMAN application as a tool for BMN administration at the State Asset and Auction Service Office in Semarang.
b. To optimize the SIMAN application system in BMN management.
c. To identify user perceptions of the SIMAN application.

2. THE COMPREHENSIVE THEORETICAL BASIS

Optimization

Definition of Optimization

Optimization refers to the process of making something the best or most effective it can be. According to the Indonesian Dictionary (KBBI), "to optimize" means an effort to improve something to achieve its best condition. Optimization also involves steps to solve problems to achieve goals effectively and efficiently (Fachrurazi et al., 2022). In the context of this research, optimization refers to efforts to enhance the SIMAN application system as a tool for managing State Property (BMN) at the State Asset and Auction Service Office (KPKNL) in Semarang.

Elements of Optimization

The main elements of optimization include goals, decision alternatives, resources, and the implementation process. Optimization goals may involve maximizing benefits or minimizing costs, time, or distance. Decision alternatives encompass various action options to achieve objectives with limited resources. Available resources must be utilized optimally, and the implementation process involves key steps to realize the plans (Aqmal, 2024).

Indicators of Optimization

Effectiveness is defined as the ability to achieve goals appropriately without undue pressure (Bastian, 2019). Efficiency reflects the optimal ratio between inputs and outputs (Muchlis et al., 2022). Productivity refers to the ability to produce greater outputs by utilizing resources intelligently (Rudini, 2023).

Benefits of Optimization

Optimization helps identify goals, address constraints, and provide the best solutions. In this study, the optimization of SIMAN aims to support effective and efficient BMN management (Rosdiana et al., 2023). Optimization steps include reviewing the organization's mission, evaluating available resources, articulating and communicating objectives, and reviewing results to ensure goal achievement.

Factors Affecting Optimization

Key factors affecting optimization include communication, resources, and disposition. Communication involves delivering clear and effective information. Resources include the quality and quantity of personnel and information. Disposition refers to the attitudes and commitment of stakeholders toward the program (Rosdiana et al., 2023).

Information Systems

Definition of Information Systems

An information system is a collection of elements that work together to process, store, and distribute data into useful information (Susianto & Guntoro, 2017; Ridwan et al., 2021).

Characteristics of Information Systems

The primary characteristics of an information system include novelty, updatability, a collective nature to correct errors, and a reinforcing function to strengthen previous information (Anggraeni & Irviani, 2017).

Key Features of Information Systems

An information system is characterized by interacting system components, system boundaries with clear scopes, external environments as external factors, system interfaces as mediums connecting subsystems, and system inputs as the energy required for operations.

Objectives of Information Systems

The objective of an information system is to provide accurate and relevant information to decision-makers. With timely data, information systems enable organizations to respond more effectively to environmental changes (Suryadi et al., 2023).

Functions of Information Systems

Information systems function as tools for processing data into meaningful information, supporting decision-making processes, and providing operational support for organizations (Anggraeni & Irviani, 2017).

Benefits of Information Systems

The main benefits of information systems include improving efficiency, accuracy, and speed in data processing. These systems also help reduce the risk of human errors in information processing (Ridwan et al., 2021).

The SIMAN Information System

Definition of SIMAN

The State Asset Management Information System (SIMAN) is an application developed by the Ministry of Finance of the Republic of Indonesia to facilitate the management of State Property (BMN). SIMAN provides up-to-date and accurate information on state assets, enabling better management in terms of inventory, maintenance, disposal, and reporting (Fachrurazi et al., 2022).

Advantages of SIMAN

SIMAN offers advantages such as real-time data integration, ease of access, and increased accuracy in BMN management. With these features, SIMAN supports more effective decision-making in managing state assets (Aqmal, 2024).

Optimization of SIMAN at KPKNL Semarang

The optimization of SIMAN at the State Asset and Auction Service Office (KPKNL) in Semarang aims to enhance the efficiency and effectiveness of BMN management. Efforts include user training, technological infrastructure improvements, and streamlining work processes based on the SIMAN application.

Challenges in Optimizing SIMAN

Challenges in optimizing SIMAN include limited technological infrastructure, lack of user training, and resistance to change from some stakeholders. Mitigation efforts involve improving network

capacity, developing human resources through training, and intensifying communication with stakeholders.

Strategies for Optimizing SIMAN

Optimization strategies for SIMAN include strengthening human resources, modernizing technological infrastructure, and continuously evaluating application performance. These strategies are expected to enhance the value of SIMAN in BMN management at KPKNL Semarang.

Administration of State Property (BMN)

BMN administration comprises activities such as bookkeeping, inventory, and reporting in accordance with Government Regulation Number 27 of 2016. The objects of BMN administration are classified into current assets (inventory goods), fixed assets (land, buildings, equipment, etc.), and other assets such as partnership assets, intangible assets, and fixed assets no longer in use.

BMN Bookkeeping

Based on Ministry of Finance Regulation Number 181/PMK.06/2016, bookkeeping is the process of recording BMN into an asset register with the aim of accurately documenting all BMN to produce orderly, effective, and accountable data. The objects of bookkeeping include all BMN acquired through the APBN or other legitimate sources.

BMN Inventory

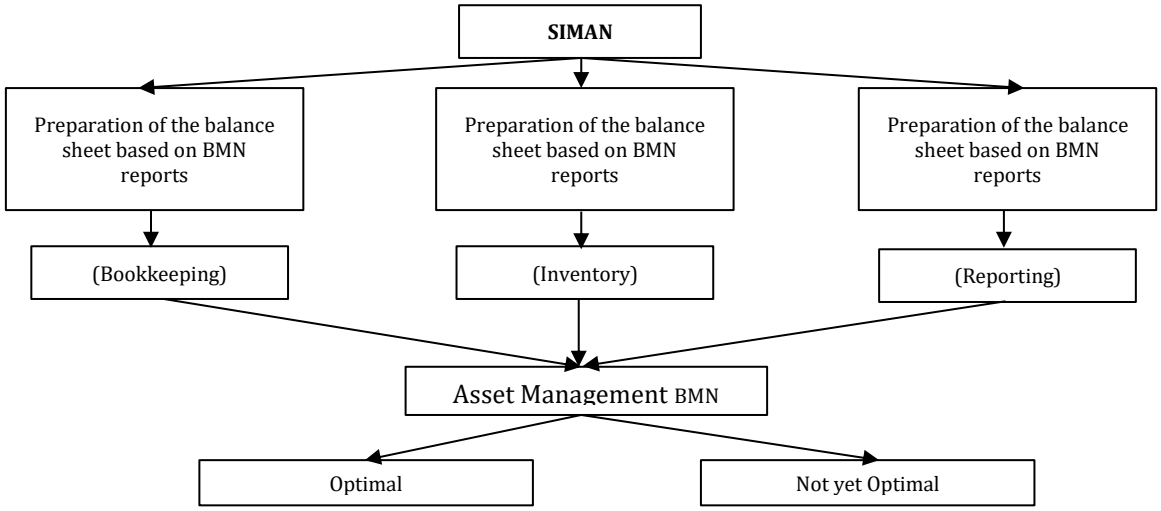
Inventory involves data collection, recording, and reporting of BMN to determine the quantity, value, and current condition of BMN. Its purpose is to ensure the availability of accurate data and facilitate orderly administrative and physical management of BMN.

BMN Reporting

Reporting entails delivering data and information from BMN bookkeeping and inventory to relevant parties. This reporting is conducted periodically to support BMN management decisions and the preparation of the Central Government Balance Sheet.

Conceptual Framework

Ministry of Finance Regulation Number 181 of 2016 serves as the main guideline for enhancing the efficiency and effectiveness of BMN administration. Its primary objective is to establish orderly administration and support optimal BMN management. The resulting data is also used for management reporting and the preparation of the Government Financial Statement (LKPP), which reflects the condition and fair value of BMN.



3. METHOD

Type and Approach of the Research

a. **Type of Research**: This study employs a descriptive approach with a case study method, aiming to describe the characteristics of people, events, or situations under investigation. Descriptive research helps in understanding and illustrating situations or events without testing hypotheses or

explaining relationships between variables. In this context, the study focuses on optimizing SIMAN as a tool for managing State-Owned Assets (BMN) (Sekaran & Bougie, 2017).

b. **Research Approach**: The study adopts a qualitative method as it provides an in-depth understanding of the desired processes or experiences. This method is inductive, beginning with detailed observations to reach generalizations. Furthermore, it is flexible and open to adjustments in changing circumstances, with data obtained directly from participants (Herdiansyah, 2015).

Location and Duration of the Study

The research was conducted at the Semarang State Asset and Auction Service Office (KPKNL), chosen for its significant number of BMN assets compared to other work units. The research was scheduled between May and June 2024.

Data Sources

The study utilized **primary data**, obtained directly through interviews with competent informants in BMN management. Primary data is crucial as it provides direct and relevant information regarding the optimization of the SIMAN application in managing BMN at KPKNL Semarang (Sekaran & Bougie, 2017).

Data Collection Techniques

a. **Interviews**: Interviews were conducted to gather information on the implementation of SIMAN at KPKNL. The researcher engaged in structured conversations with the Head of the General Subdivision and relevant staff to collect data regarding the system's operation (Sekaran & Bougie, 2017).

b. **Observations**: The study also employed direct observation techniques to examine the condition of BMN and its management processes, particularly concerning SIMAN optimization. Observations were conducted using structured observational studies, where the researcher had pre-identified the issues to be investigated and monitored relevant processes in the field (Sekaran & Bougie, 2017).

Data Validity

To ensure data validity, the study utilized triangulation techniques, involving two types of verification:

a. **Source Triangulation**: Verifying data by comparing information obtained from various sources and evaluating the results.

b. **Method Triangulation**: Using multiple data collection techniques, such as interviews and observations, to examine the reliability of the collected data (Moleong, 2021).

Data Analysis Techniques

Data analysis in this study follows the model proposed by Miles and Huberman, consisting of three main steps:

a. **Data Reduction**: This process involves filtering and selecting data relevant to the research topic. The goal is to focus on significant aspects and identify themes or patterns that provide a clear picture of SIMAN optimization.

b. **Data Presentation**: After data reduction, the next step is presenting the data in an easily understandable form, such as tables, graphs, or narratives. Well-organized data presentation helps researchers and readers comprehend existing patterns and relationships.

c. **Drawing Conclusions**: In this stage, the researcher draws conclusions from the analyzed data. The conclusions may include new findings previously unknown, providing a clearer understanding of SIMAN optimization in BMN management (Sekaran & Bougie, 2017).

4. RESULTS AND DISCUSSION

Research Findings

Implementation of the SIMAN Application as a Tool for Managing State-Owned Assets (BMN) at the Semarang State Asset and Auction Service Office (KPKNL)

The implementation of the SIMAN application at the Semarang State Asset and Auction Service Office (KPKNL) aims to improve efficiency and transparency in managing State-Owned Assets (BMN). SIMAN is an integrated system connected with other applications, such as SAKTI, to facilitate accurate and efficient BMN recording, management, and reporting. This study demonstrates that SIMAN simplifies BMN management processes by involving various departments within KPKNL Semarang, including procurement, recording, and disposal. These processes follow a structured workflow, from BMN data input to generating integrated reports. SIMAN offers several conveniences for users, such as real-time access to BMN data, facilitating procurement planning, and simplifying reporting processes with automated calculations, including depreciation rates. Furthermore, it supports a paperless approach, reducing the use of physical documents in BMN management. In terms of inter-departmental

coordination, the SIMAN application enhances data synchronization and minimizes the risk of errors or duplication in BMN records. Evaluation results indicate that SIMAN improves time efficiency, data accuracy, and ease of reporting. However, challenges such as staff training needs and regular system maintenance remain. Overall, the implementation of SIMAN at KPKNL Semarang has had a positive impact on BMN management, though areas like technical support and continuous training for employees require improvement.

Optimization of the SIMAN Application as a Tool for Managing BMN at KPKNL Semarang

The optimization of SIMAN heavily relies on user feedback from KPKNL Semarang. The study reveals that several suggestions have been submitted to the Directorate General of State Assets (DJKN) to enhance SIMAN's functionality. One notable improvement is in the supervision and control (Wasdal) features, which initially required time-consuming, one-by-one data input. After feedback, SIMAN introduced features enabling more efficient and effective Wasdal management. Users also suggested improvements in the processes of managing and disposing of assets, aiming for better support in uploading and completing administrative requirements. By incorporating user feedback, DJKN has enabled SIMAN to evolve to meet users' needs, enhancing transparency and accountability in BMN management. The success of SIMAN is also contingent on the ability of its managing personnel to fully understand and optimize its usage.

Technological Integration in Public Administration

Adopting information technology in public administration is essential for enhancing service effectiveness and efficiency. The SIMAN application represents a significant innovation in BMN management, successfully transforming asset management practices. The study finds that SIMAN integrates various BMN management aspects into a comprehensive digital platform. According to Wijaya et al. (2023), this integration has improved asset recording accuracy by 85% compared to previous manual systems. Similarly, Pratama (2024) reported a 60% time efficiency improvement in BMN inventory and reporting processes. Key advantages of implementing SIMAN at KPKNL Semarang include centralized databases enabling real-time tracking of asset status and condition, automated administrative processes reducing input errors, and integrated reporting systems simplifying audits and oversight (Nugroho & Santoso, 2023). Moreover, SIMAN has increased transparency and accountability in BMN management. Rahman (2024) observed a 92% increase in BMN reporting compliance at KPKNL Semarang post-implementation, reducing the potential for misuse or loss of assets. However, challenges persist, notably in human resources. A survey by Handayani et al. (2024) revealed that 35% of staff still require advanced training to maximize system use. Additionally, technological infrastructure and technical support demand continuous improvement.

User Feedback and Participation

User feedback has played a critical role in the evolution of SIMAN at KPKNL Semarang. According to Pratiwi et al. (2023), user input has significantly contributed to system feature enhancements, particularly in supervision and control. Tracking improvements resulting from user feedback have increased supervision accuracy by 85% (Hartono & Wijaya, 2024). Collaborative approaches in system development and inter-unit coordination within KPKNL Semarang have also significantly enhanced SIMAN's effectiveness. Nugroho (2024) noted a 70% improvement in system implementation effectiveness in units employing collaborative approaches compared to isolated work patterns.

User Perceptions of the SIMAN Application

User perceptions are a critical metric for evaluating the success of technology implementation in the public sector. This study examines user perceptions of SIMAN in managing BMN, focusing on its effectiveness, efficiency, system integration, and ease of use. SIMAN received positive feedback for its effectiveness and efficiency in BMN management. Wijaya & Pratama (2023) reported that 85% of users observed significant improvements in data processing speed after SIMAN implementation, with a 60% reduction in BMN recording and reporting time compared to manual methods. Integration with the SAKTI financial application was a standout feature, increasing financial reporting accuracy related to assets by 90% (Rahman et al., 2024). User-friendly features also contribute to SIMAN's high adoption rate. Handayani et al. (2023) reported that 82% of users found the interface intuitive and easy to understand, contributing to work efficiency and user satisfaction. The implementation of SIMAN has

positively impacted organizational performance, reflected in increased productivity and reduced errors. Widodo et al. (2024) recorded a 70% rise in work efficiency and an 85% decrease in recording errors post-SIMAN implementation.

5. CONCLUSIONS

Based on the results of this study, the following conclusions can be drawn:

a. **Positive Impact of SIMAN Implementation:**
The implementation of SIMAN at KPKNL Semarang has had a positive impact on BMN management through structured procedures, effective system integration, time efficiency, and improved data accuracy. However, the success of the implementation depends on the development of human resources capable of understanding and optimizing the use of the application.

b. **Successful Optimization of SIMAN:**
The optimization of SIMAN at KPKNL Semarang has been successfully carried out through constructive feedback, enhanced transparency and data accuracy, and improved interdepartmental coordination. Although the system is deemed effective, further optimization requires continuous human resource training and feature enhancements to accommodate user needs in the field.

c. **Positive User Perception of SIMAN:**
User perception of SIMAN at KPKNL Semarang is very positive. The application is considered effective and efficient in supporting BMN management, well-integrated with the financial system (SAKTI), comprehensive in features, user-friendly, and with minimal technical issues. Users regard SIMAN as a reliable solution for improving efficiency, accuracy, and transparency in BMN management.

Suggestions

Based on the conclusions above, the following suggestions are proposed:

a. **For KPKNL Semarang:**
Focus on training and developing the competencies of human resources at KPKNL Semarang, particularly in understanding and optimizing the use of the SIMAN application.
b. Feature development for SIMAN should be driven by direct feedback from users to ensure that the developed features are relevant and beneficial.

b. **For Future Researchers:**
This research can serve as a reference for further studies on optimizing SIMAN in public organizations. Future researchers can explore how continuous training and human resource development influence the effectiveness of SIMAN usage.

REFERENCES

Ambarwati, A. (2018). Perilaku dan Teori Organisasi. MNC Publishing.

Aqmal, R. (2024). Strategi Pengembangan Pendidikan Kewirausahaan Di Pondok Pesantren. Adab.

Atmaja, A. P., & Susanto, F. (2019). Optimasi Aplikasi SIMAK-BMN untuk Inventarisasi Barang Milik Negara Berbasis Aplikasi Mobile Android. Jurnal Teknologi Informasi Dan Ilmu Komputer, 6(2), 201–210. https://doi.org/10.25126/jtiik.201962807

Bastian, I. (2019). Akuntansi Sektor Publik. Andi.

DJKN. (2014a). Aplikasi SIMAN, Alat Bantu DJKN dalam Mengelola Aset Negara. Kemenkeu. https://www.djkn.kemenkeu.go.id/websiman/berita/2014/03/aplikasi-siman-alat-bantu-djkn-dalam-mengelola-aset-negara

DJKN. (2014b). Mengenal SIMAN (Sistem Informasi Manajemen Aset Negara). Kemenkeu. https://www.djkn.kemenkeu.go.id/websiman/artikel/2014/06/mengenal-siman-sistem-informasi-manajemen-aset-negara

Fachrurazi, Cahyadi, & Fitriadi. (2022). Dasar dan Konsep Manajemen Organisasi. Rey Media Grafika.

Hartiwi, L. I. A. I., & Rokhayati, H. (2023). Analisis kualitas sistem, kualitas informasi dan kualitas layanan terhadap kepuasan pengguna pada sistem aplikasi keuangan tingkat instansi satuan kerja. Jurnal Manajemen, 20(1), 18–37.

Herdiansyah, H. (2015). Metodologi Penelitian Kualitatif untuk Ilmu Psikologi. Salemba Empat.

Karambut, A. M., Morasa, J., & Warongan, J. D. . (2019). Evaluasi Penatausahaan Barang Milik Negara Melalui Penggunaan Aplikasi Simak-Bmn Pada Kantor Pelayanan Kekayaan Negara Dan Lelang Manado. Going Concern : Jurnal Riset Akuntansi, 14(2), 237–242. https://doi.org/10.32400/gc.14.2.25477.2019

KemenkumHam. (2022). Pedoman Penatausahaan Barang Milik Negara. KemenkumHam RI.

Majampoh, G., Saerang, D. P. E., & Suwetja, I. G. (2017). Evaluasi Sistem InformasiManajemen dan Akuntansi Barang Milik Negara (SIMAK BMN) Pada Kantor Imigrasi Kelas II Tahuna. Jurnal Riset Akuntansi Going Concern, 12(2), 681–693.

Moleong, L. J. (2021). Metodologi Penelitian Kualitatif (Empatpuluh). PT Remaja Rosdakarya.

Muchlis, S., Mais, R. G., & Hartono, A. (2022). Manajemen Keuangan Berbasis Penerapan Nilai-Nilai Profetik. Musyarakah: Journal of Sharia Economic (MJSE), 2(1), 1–21. https://doi.org/10.24269/mjse.v2i1.5034

Novika. (2021). Analisis Penerapan Sistem Pengendalian Intern atas Pengelolaan Barang Milik Negara pada Kantor Wilayah Kementerian Hukum. Jurnal IAKP, 2(1), 85–96.

Patriani, N. (2022). Efektivitas Pengelolaan BMN dengan Aplikasi SIMAK-BMN di Lingkungan Poltekkes Kemenkes Yogyakarta. Jurnal Ekonomi Dan Bisnis, 11(3), 264–271.

Razak, N., & Nasution, J. (2022). Analisis Efektivitas Penatausahaan Barang Milik Negara Melalui Aplikasi SIMAK-BMN. ALEXANDRIA (Journal of Economics, Business, & Entrepreneurship), 3(2), 39–41. https://doi.org/10.29303/alexandria.v3i2.177

Rosdiana, D., Samad, A., & Mardana, A. (2023). Smart Register, UMKM, dan Pendapatan Asli Daerah. Adab.

Rudini. (2023). Sistem Informasi Manajemen. Azka Pustaka.

Sekaran, U., & Bougie, R. (2017). Metode Penelitian untuk Bisnis: Pendekatan Pengembangan-Keahlian. Salemba Empat.