

## **The Effect of the Implementation of Local Government Information Systems (SIPD) and Human Resources on Regional Financial Management Accountability**

**Nurmila Daud<sup>1\*</sup>, Harun Blongkod<sup>2</sup>, Nilawaty Yusuf<sup>3</sup>**

Faculty of Economics and Business, Gorontalo State University, Indonesia<sup>1,2,3</sup>

Email: nurmiladaud77@gmail.com, blongkod@ung.ac.id,

nilawaty.yusuf@ung.ac.id

**Keywords:**

Regional Government Information Systems, Human Resources, Financial Accountability, Transparency, Regional Financial Management.

**Abstract:** This study aims to analyze the influence of the implementation of the Local Government Information System (SIPD) and the quality of Human Resources (HR) on the accountability of regional financial management in Regional Apparatus Organizations (OPD) in Gorontalo Province. SIPD functions as an information system that supports transparency, efficiency, and accuracy in regional financial management, while the quality of human resources plays a role in ensuring that the implementation of the system can run optimally. This study uses a quantitative approach with the Structural Equation Modeling (SEM) method to test the relationship between variables. The research sample consisted of 142 civil servants who served in the Gorontalo Province OPD and were involved in regional financial management. The results of the study show that SIPD has a positive and significant effect on the accountability of regional financial management, especially in the aspects of efficiency, transparency, and accuracy of financial data. In addition, HR also has a significant influence on accountability, where employees who have an understanding of financial regulations and the ability to operate SIPD tend to be more responsible in reporting and managing regional budgets. Simultaneously, SIPD and HR have a very strong influence on regional financial accountability, with a contribution of up to 100% in explaining the variation in financial accountability. However, there are several obstacles in the implementation of SIPD, such as lack of employee training and technical obstacles in the system. Therefore, local governments need to increase continuous training for ASN and conduct periodic evaluations of the effectiveness of SIPD to ensure better transparency and accountability in regional financial management.

*This is an open access article under the License (<https://creativecommons.org/licenses/by/4.0>).*

*CC BY*



Copyright holders:

Nurmila Daud, Harun Blongkod, Nilawaty Yusuf (2025)

## INTRODUCTION

Public sector accounting plays a crucial role in governance, especially in transparent and accountable financial management and reporting. More than just recording numbers, public sector accounting aims to create real benefits for society (Wow. et al., 2023). Local governments as part of the public sector have a responsibility to ensure the performance of organizations that are oriented to the interests of the community and responsive to environmental dynamics (Putri et al., 2022).

To achieve optimal performance, transparency and accountability in regional financial management are the main factors that must be strengthened (Sutrisno & Astuti, 2024). Accountability includes not only regulatory compliance, but also reflects financial integrity and accountability in the receipt, storage, and disbursement of public funds (Arifuddin et al, 2024). In this context, Government Regulation Number 12 of 2019 emphasizes that regional financial management must be carried out in an orderly, efficient, effective, transparent, and responsible manner, taking into account the principles of justice and benefits for the community (Pondaag et al., 2024).

The application of technology in the public sector accounting system is one of the solutions to increase financial accountability. The Regional Government Information System (SIPD), as mandated in Law Number 23 of 2014 and Permendagri Number 70 of 2019, is designed to integrate regional financial information in a more adaptive, responsive, and accountable manner (Minister of Home Affairs of the Republic of Indonesia, 2019). Previous research has shown that SIPD can increase transparency, accelerate decision-making, and facilitate access to government information (Hunairah & Syamsu, 2024). However, the implementation of SIPD still faces various challenges, such as limited human resources, unpreparedness of supporting regulations, and technical obstacles in system operations (Segovia, 2023).

In addition to information systems, human resources also have an important role in ensuring the effectiveness of regional financial accountability. Optimal quality of human resources will contribute to better organizational performance in producing output and achieving expected outcomes (Fitri & Arza, 2023). Therefore, increasing human resource capacity and optimizing the implementation of SIPD are strategic steps in ensuring accountability for regional financial management, especially in the Gorontalo Provincial Government Regional Apparatus Organization, which requires more attention in financial governance for the welfare of the community.

The diagram below presents a report on the realization of the Gorontalo Provincial government's budget from 2020 to 2023, which depicts the details of revenue and expenditure as well as budget achievements during a certain period. This data is important to understand financial performance and the effectiveness of budget management in the Gorontalo Province area.



Figure 1. Diagram of the Gorontalo Provincial Government Budget Realization Report for 2020-2023

(Source: Gorontalo Provincial Finance Agency in 2024)

The diagram above shows that the realization of regional revenue in Gorontalo Province every year exceeds the budgeted target and the realization of regional expenditure in Gorontalo Province from 2020 to 2023 does not exceed the spending target or often experiences a surplus of budget calculations (SILPA) where the allocated budget is not fully used in the budget period. The things that have been described above show that the budget is not well planned or not accountable in the allocation of funds. (Septariani & Supra, 2023) SILPA is the difference between the difference between revenue and expenditure, as well as the receipt and expenditure of financing in the APBD. Therefore, it is important to identify and overcome constraints in the accountability of regional financial management in Regional Apparatus Organizations so that there is a conformity between the budget plan and the realization. From these problems, the author is interested in researching about these problems with the title "The Effect of the Implementation of Local Government Information Systems (SIPD) and Human Resources on Regional Financial Management Accountability".

## METHOD

This research was carried out in Korontalo City from September to December 2024. The object of the research is employees in each Regional Apparatus Organization (OPD) of the Gorontalo Provincial Government who have used SIPD as a system in carrying out Regional Financial Management Accountability. The purpose of this study is to collect representative and trustworthy data for further analysis, because the sample size is 142 respondents. I hope that a fairly wide sample can provide an accurate picture of the experience and process of using the Regional Government Information System Application in Regional Financial Management.

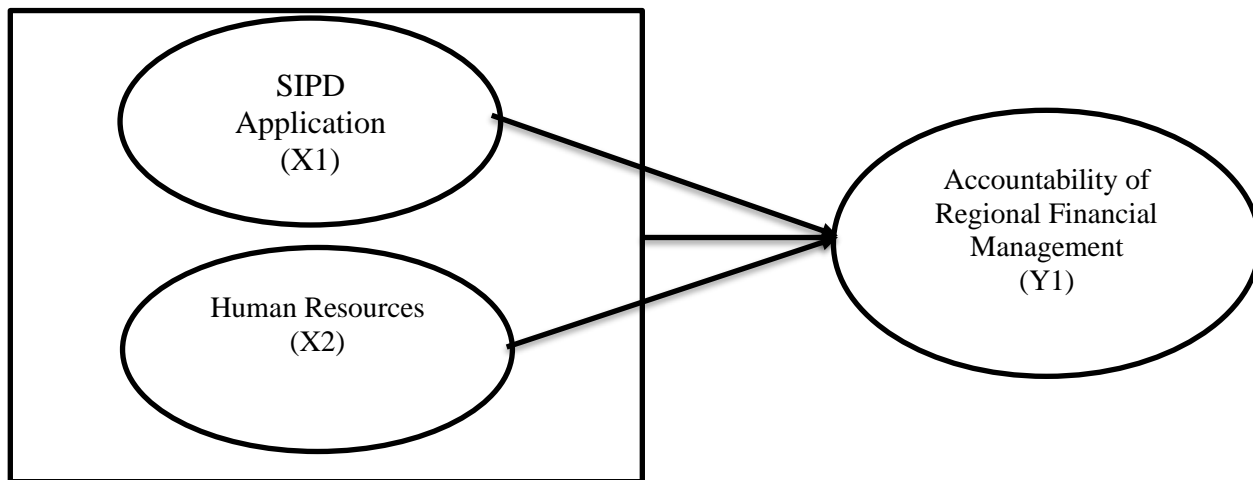
In this study, a quantitative approach is adopted as the main method. This approach involves evaluating the possible influence between the variables being studied, with the data collected presented in numbers and statistically analyzed to validate the hypothesis that has been proposed.

According to Sugiyono, (2019), Quantitative research is a method based on the philosophy of positivism, used to conduct research on a specific population or sample. Data collection is carried

out using research instruments, while data analysis is quantitative or statistical, with the main goal of testing predetermined hypotheses.

In this study, the independent variables reviewed are Regional Government Information System ( $X^1$ ) and Human Resources ( $X^2$ ), while the dependent variable is Regional Financial Management Accountability ( $Y$ ). The design of this study aims to explain and evaluate the dynamics of the relationship between the variables mentioned.

Figure 1 The Effect of SIPD Policy Implementation and Human Resources on Regional Financial Management Accountability



The population in this study includes all state civil servants (ASN) who work in Regional Apparatus Organizations (OPD) in Gorontalo Province. Population is a collection of subjects that have certain characteristics that are the object of research to be analyzed and drawn conclusions (Sekaran, 2003:121). In line with this opinion, Sugiyono (2015:135) defines population as a generalization area consisting of objects or subjects that have certain characteristics that have been determined by the researcher as the basis for obtaining research findings. In the context of this study, the population includes civil servants who are in charge of regional financial management and the implementation of the Regional Government Information System (SIPD). Based on data obtained from Governor Regulation (PERGUB) Number 38, the total population in this study consists of 33 OPDs with a total of 142 ASN people. Each OPD has a different number of ASN, with the most representatives coming from the Gorontalo Provincial Finance Agency as many as 11 people, while other OPDs are represented by an average of 4 ASN from each agency or agency.

The sample is a part of the population that is selected with certain characteristics for further analysis. Due to limited resources in researching the entire population, this study uses the purposive sampling technique, which is a sampling method based on certain considerations (Sugiyono, 2019). The selection of the sample in this study considers the relevance of the role of ASN in regional financial management and the implementation of SIPD, so that not all ASN in the population is used as a research sample. The sample of this study consisted of 142 ASN from various OPDs in Gorontalo Province, with the following main criteria: (a) ASN who serve as an accounting or regional financial reporting entity with competence in the government's internal control system and regional management information system, (b) ASN who are involved in the planning, budgeting, and supervision process of the Regional Revenue and Expenditure Budget (APBD), (c) ASN who serves as treasurer of the service or agency, finance section, and SIPD operator, and (d) ASN who directly operates SIPD in the preparation of the budget and regional financial management.

In this study, the number of samples determined in each OPD has been adjusted to the role and involvement of ASN in regional financial management. Based on the data in Table 3.3, ASN

working in the regional secretariat consists of 6 OPDs with a total of 21 respondents, while ASN in the DPRD secretariat and Inspectorate each have 4 respondents. At the official level, as many as 19 OPDs are represented by 86 respondents, while agencies in the provincial government include 6 OPDs with 27 respondents. Overall, the number of OPDs that became the research sample was 33 with a total of 142 respondents. The selection of this sample is expected to provide a representative picture of the implementation of SIPD and the level of accountability of regional financial management in Gorontalo Province.

## RESULTS AND DISCUSSION

This study analyzes the influence of the implementation of the Local Government Information System (SIPD) and the quality of Human Resources (HR) on the accountability of regional financial management in the regional apparatus organization (OPD) of Gorontalo Province. The analysis was carried out through the Structural Equation Modeling (SEM) approach to test the direct or indirect influence of the variables studied.

The results of the study show that the Regional Government Information System (SIPD) has a significant effect on the accountability of regional financial management. SIPD has a positive impact in terms of efficiency, effectiveness, transparency, accountability, and economics in regional financial management.

Several indicators of the SIPD variable have high mean values and make a great contribution to regional financial accountability. For example:

- The SIPD feature to track the status of complaints or requests for public information has a mean value of 4.317, indicating that the public has access to more transparent monitoring of regional finances.
- SIPD helps reduce operational costs in regional financial management with a mean value of 4.225, which means that this system is effective in reducing government spending.
- The utilization of regional assets to provide economic benefits for the region has a mean value of 4.176, indicating that asset management has had a positive impact on increasing regional income.
- The accuracy of the data generated by SIPD received a mean value of 4.155, which shows that this system has a high level of accuracy in presenting financial information.

In addition, the study also revealed that Human Resources (HR) has a significant influence on regional financial accountability. The results of the hypothesis test show that increasing the competence of human resources involved in regional financial management directly increases the transparency and accountability of financial statements. Based on the results of SEM analysis, the t-value obtained was  $2,723 > 1,660$  with a p-value of 0.006, which means that the hypothesis is accepted and proves that HR plays a significant role in increasing financial accountability.

Simultaneously, SIPD and HR have a very significant joint influence on the accountability of regional financial management, with an R-square value of 1.027 (100%), which means that all variations in regional financial accountability can be explained by these two variables.

## Discussions

The results of this study confirm that the Regional Government Information System (SIPD) and the quality of human resources play a key role in improving the accountability of regional financial management. These findings are in line with the theory of transparency and accountability which states that technology-based information systems can increase efficiency and facilitate data access for stakeholders.

The Influence of Local Government Information Systems on Financial Management Accountability The results of the study show that the implementation of SIPD makes a great contribution to increasing the accountability of regional financial management through the following mechanisms:

1. Efficiency and effectiveness: SIPD speeds up the financial administration process and

reduces the risk of recording errors.

2. Transparency: This system allows public access to regional financial data, thereby increasing public involvement in government financial supervision.
3. Accountability: With SIPD, financial reporting becomes more systematic and well-documented, so it can be accounted for to stakeholders.

However, there are several challenges in the implementation of SIPD, including lack of training for employees and technical obstacles in system operations. Some employees stated that they still need additional training to optimize the use of SIPD in financial reporting.

The Influence of Human Resources on Financial Management Accountability This study also proves that human resource competence has a positive impact on regional financial management accountability. This finding is in line with previous research which stated that employees with a good understanding of accounting regulations tend to be more thorough and responsible in financial management.

Some of the factors that affect the role of human resources in regional financial accountability include:

1. Level of understanding of financial regulations: Employees who have better knowledge of regional financial regulations tend to be more compliant in managing the budget.
2. Ability to operate SIPD: Employees who have participated in SIPD training have better performance in regional financial reporting and analysis.
3. Involvement in financial supervision: ASN who play a direct role in budget planning and supervision has a great influence in maintaining transparency and accountability.

Despite having a positive impact, this study also found obstacles in improving the quality of human resources, such as the lack of continuous training and high workload that hindered employees from mastering the SIPD system to the maximum.

Simultaneous Influence of SIPD and HR on Financial Management Accountability Regression analysis shows that the combination of SIPD implementation and human resource quality has a significant influence on regional financial management accountability. With an R-square value of 1.027 or 100%, it can be concluded that regional financial accountability is fully influenced by these two variables.

These results confirm that the effectiveness of SIPD in increasing financial transparency and accountability is highly dependent on the quality of the human resources that operate it. Therefore, local governments need to ensure that employees receive continuous training related to the use of SIPD and improve the supervision and evaluation system in regional financial management.

## CONCLUSION

Based on the results of the study, it can be concluded that the Local Government Information System (SIPD) and the quality of Human Resources (HR) have a significant influence on the accountability of regional financial management in the Regional Apparatus Organization (OPD) of Gorontalo Province. SIPD has been proven to be able to increase efficiency, effectiveness, transparency, and accuracy in the process of regional financial management and reporting. This system also plays a role in reducing operational costs and providing more open access to information for the public and other stakeholders. However, although the implementation of SIPD shows a positive impact, there are several obstacles in its implementation, such as lack of training for employees and technical obstacles that hinder system optimization.

In addition, the quality of human resources also has a very crucial role in ensuring regional financial accountability. Employees who have a deep understanding of financial regulations, competence in operating SIPD, and direct involvement in budget planning and supervision tend to be more responsible in regional financial management. The findings of the study show that the improvement of human resource competence directly contributes to increasing transparency and accountability in local government budget management.

Furthermore, the results of the analysis show that the combination of the implementation of SIPD and the simultaneous improvement of human resource quality has a very large influence on the accountability of regional financial management, with a contribution of up to 100% in explaining the variation in financial accountability. Thus, success in increasing regional financial transparency and accountability depends not only on the use of sophisticated information systems, but also on the readiness and competence of human resources who operate the system. Therefore, as a strategic step forward, local governments are advised to increase continuous training for civil servants in the management of SIPD, conduct periodic evaluations of the system, and strengthen regional financial supervision and accountability mechanisms to ensure more effective, efficient, and responsible use of the budget.

## BIBLIOGRAPHY

- Adi Kurniawan Saputra, K., Dian Pradnyanitasari, P., & Made Intan Piliandani and Gst B Ngr P Putra, N. I. (2019). Accountability and Human Resource Competency Practices for Fraud Prevention in Village Fund Management. *KRISNA Journal: Accounting Research Collection*, 10(2), 168–176. <http://dx.doi.org/10.22225/kr.10.2.915.168-176>
- Adi Kurniawan SAPUTRA, K., Subroto, B., Fuad RAHMAN, A., & Saraswati, E. (2021). Financial Management Information System, Human Resource Competency and Financial Statement Accountability: A Case Study in Indonesia. *Journal of Asian Finance*, 8(5), 277–0285. <https://doi.org/10.13106/jafeb.2021.vol8.no5.0277>
- Alim Ashari Muttaqien, Jamaluddin Majid, N. R. S. (2024). The Influence of Human Resource Competence and Internal Control System on the Quality of Regional Financial Reports with Organizational Commitment as a Moderation Variable. *Indonesian Journal of Taxation and Accounting*, 2(1), 1–23.
- Amalia Yunia Rahmawati. (2020). Implementation of the Regional Government Information System (Sipd) in Increasing Accountability of Regional Financial Management in North Hulu Sungai Regency, South Kalimantan Province. *Journal of Accounting Applications*, July, 1–23.
- Arif, R. N., Firmansyah, A., Development, U., & Veteran, N. (2024). Implementation of the *Indonesian Regional Government Information System (Sipd RI) in the accounting and reporting process*. 3(1), 14–28.
- Arifuddin, Kartini, Rizky, Pagalung, Baja, M., Ashari, & Rahman, A. (2024). *Improving the Capability of the Expenditure Treasurer in the Administration of Regional Expenditure in Pangkajene Regency and the Islands*. 3(1), 44–55.
- Ariyani, A., & Maghfiroh, S. (2022). Factors Affecting the Performance of Employees Using the Regional Government Information System (SIPD) in Brebes Regency. *Journal of Tambusai Education*, 6(2), 15022–15038.
- Balqis, N., Fadhly, Z., & Az, M. (2021). Implementation of the Regional Government Information System (Sipd) application at the West Aceh Regency Transmigration and Manpower Office. *Wahana Bhakti Praja Scientific Journal*, 11(1), 146–161. <https://doi.org/10.33701/jiwbp.v11i1.1953>
- Bano, A. R. M., Blongkod, H., & Tuli, H. (2022). Analysis of Factors Affecting the Quality of Financial Reports in Boalemo Regency (Study on the Regional Apparatus Organization of Boalemo Regency). *Journal of Accounting Students*, 1(2), 101–115. <https://doi.org/10.37479/jamak.v1i2.34>
- Fernanda, M., Frinaldi, A., & Asnil. (2023). Implementation of Local Government Information Systems in the Implementation of Accountable Regional Financial Management at the Regional Financial and Asset Management Agency of Mandailing Natal Regency. *Ministrate*, 5(2), 339–349.
- Fitri, R. A., & Arza, F. I. (2023). The Influence of Transparency, Internal Control System and Human Resource Quality on the Accountability of Nagari Financial Management: An Empirical Study on Nagari in Pariaman City. *Journal of Accounting Exploration*, 5(3), 1115–1126. <https://doi.org/10.24036/jea.v5i3.824>
- Fitri Wulandari. (2020). *Human Resource Management*. Cv Gerbang Media Aksara.
- Hanafiah, R. R., Abdullah, S., & Saputra, M. (2016). The Influence of Accountability, Transparency, Human Resource Capacity, and Internal Supervision on Regional Financial Management (Study at the North Aceh Regency Government Skpk). *Postgraduate Syiah Kuala University*, 10(4), 77.
- Hunairah, A., & Syamsu, R. (2024). *SEIKO: Journal of Management & Business Evaluation of the Implementation of the Regional Government Information System (SIPD) in Regional Financial Management at the Regional Asset Finance Agency of the Bulukumba Regency Government*. 7(2), 464–

- Iswahyuni, Y. (2019). *Journal of Economic Frames*. 4(2), 64–71.
- Journal, I. (2024). *International Journal of Education, Business and Economics Research (IJEER) ISSN: 2583-3006*. 4(3), 366–375.
- Koven, J., Yetty Murni, & Sri Irvati Wahyoeni. (2022). Factors Affecting Audit Quality. *RELEVANT: Journal of Accounting Research*, 2(2), 126–132. <https://doi.org/10.35814/relevan.v2i2.3431>
- Kusnadi, K., & Anwar, A. P. (2023). Village Government Accountability in the Management of Direct Cash Assistance for Village Funds in Padaasih Village, Cisarua District, West Bandung Regency. *Journal of Mediasosian : Journal of Social Sciences and State Administration*, 7(1), 59–74. <https://doi.org/10.30737/mediasosian.v7i1.4462>
- Lubis, R., Sari, E. N., Hanum, Z., Muhammadiyah, U., & North, S. (2024). *Proceeding 2 nd Medan International Economics and Business Analysis Of Factors Implementing Sipd With Leadership Support As Moderating In Medan Proceeding 2 nd Medan International Economics and Business*. 2(1), 409–419.
- Mawaddah, Murhaban, & Dewi, K. S. (2019). Government Internal Control System on Regional Financial Management Accountability (Study on SKPD Lhokseumawe City). *Journal of Accounting and Development / Volume 5 / Number 2 / June 2019*, 5(2), 79–90.
- Minister of Home Affairs of the Republic of Indonesia. (2019). Regulation of the Minister of Home Affairs of the Republic of Indonesia Number 70 of 2019 concerning Regional Government Information Systems. *Permendagri of the Republic Number 70, Number 65(879)*, 2004–2006.
- Mudjiyono, & Iswahyuni, Y. (2019). Factors Affecting Regional Financial Management Accountability (Empirical Study on the Regional Apparatus Work Unit of Central Java Province). *Journal of Economic Frames*, 5(2), 16–26.
- Pondaag, A. H., Kereh, O. A., & Friend Henry Anis. (2024). Juridical Study of Regional Financial Management Based on Government Regulation Number 12 of 2019. *To-Ra Law Journal: Law to Regulate and Protect Society*, 10(1), 40–55. <https://doi.org/10.55809/tora.v10i1.282>
- Prabtanto, W. D., Apriyanto, G., & Respati, H. (2021). The Effect of Regional Financial Accounting System and Human Resources Competency on Regional Financial Report Accountability with Information Quality .... *International Journal of ...*, 6(9), 18–23. <https://www.academia.edu/download/77767900/8340436275.pdf>
- Putri, F. D., Defitri, S. Y., & Sukraini, J. (2022). Determination of the performance of local government organizations from the perspective of accountability, transparency and public participation. *Journal of Innovation Research and Knowledge*, 1(11), 1505–1516.
- Risakotta, K. A., Putra, D. G., Winarni, D., Murni, Y., & Adelina, C. (n.d.). *No Title*.
- Rumondor, M. D., Tinangon, J. J., & Wokas, H. R. N. (2023). Analysis of the Implementation of Information System Applications for Financial Management in the Implementation of Regional Expenditures in the North Sulawesi Provincial Budget. *Journal of Accounting and Auditing Research "Goodwill"*, 14(1), 65–86.
- Sapulette, S. gilbi. (2023). *Accountability for the Performance of Local Government Agencies*. 19(5), 1–23.
- Sari, D. M., & Khaerani, T. R. (2019). Regional Financial Management Towards Transparency and Accountability at the Pati Regency DPPKAD Office. *Paper Knowledge . Toward a Media History of Documents*.
- Segovia, C. (2023). Implementation of Local Government Information Systems in Increasing Accountability of Financial Management in Banjarmasin City, South Kalimantan Province. *Doctoral Thesis, June*, 1–2.
- Septariani, J., & Supra, D. (2023). Evaluation of the financial performance of the Musi Banyuasin Regency Government based on the remaining amount of budget financing (Silpa). *Scientific Journal of Accounting Rahmanyah*, 6(2), 198. <https://doi.org/10.51877/jiar.v6i2.284>
- Situmorang, K. T. (2023). *Implementation of the Local Government Information System in Increasing Accountability of Financial Management in the City* ...[http://eprints.ipdn.ac.id/16187/%0Ahttp://eprints.ipdn.ac.id/16187/1/REPOSITORY KEVIN TUMBUR SITUMORANG.pdf](http://eprints.ipdn.ac.id/16187/%0Ahttp://eprints.ipdn.ac.id/16187/1/REPOSITORY%20KEVIN%20TUMBUR%20SITUMORANG.pdf)
- Sugiyono, P. D. (2019). *Qualitative and R&D quantitative research methods*. CV. ALFABETA.
- Sutrisno, S., & Astuti, I. (2024). The Effect of the Application of Government Accounting Standards and the Quality of Financial Statements on the Accountability of Government Agency Performance in the State Cyber and Cryptography Agency. *Alliance: Journal of Management and Business*, 18(2), 185–198. <https://doi.org/10.46975/aliansi.v18i2.532>
- Transparency, A., and, E., In, E., Fund, P., & Special, A. (n.d.). *Analysis of transparency, accountability, effectiveness and efficiency in the management of special allocation funds for early childhood operational assistance in the Rainbow State Budget*.

Nurmila Daud, Harun Blongkod, Nilawaty

- Government Law of the Republic of Indonesia. (2008). Law on Public Information Disclosure (Law Number 14 of 2008). *Journal of Information and Communication Technology (JTIK) STMIK ProVisi Semarang*, 49–60.
- Viyurintina, E., Sisdianto, E., Islam, U., Raden, N., Lampung, I., & Lampung, K. B. (2024). *Good governance and quality of financial statements*. 2(4).
- Waoma, samalua, SE., M., Bonara, rebecca shintia febriarti., SE., M. A., & winanto, Ahmad, S.E., M. A. (2023). *Public Sector Accounting Book*. PT. Sonpedia Publishing Indonesia.
- Zeny Antika, Yunika Murdayanti, & Hafifah Nasution. (2020). The Influence of Regional Financial Accounting System, Accessibility of Financial Statements, and Internal Control on Regional Financial Management Accountability. *Journal of Wahana Akuntansi*, 15(2), 212–232. <https://doi.org/10.21009/wahana.15.027>.