



The Influence of Internal Control and Characteristics of Management Accounting Information Systems on Managerial Performance: Environmental Uncertainty as Moderating Variable

Siti Zahra*, Berta Agus Petra, Dodi Suryadi
Universitas Putra Indonesia YPTK Padang
corresponding author: sitizahra260603@gmail.com

Abstract

This study aims to determine the influence of internal control and Management Accounting Information Systems (MAIS) characteristics on managerial performance with environmental uncertainty as a moderating variable. In this study, the object used is PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur. The sample was selected using a purposive sampling method with certain criteria needed in this study. The sample determination method used in this study was a total sampling of 30 people. The analysis technique in this study used the Structural Equation Modeling (SEM) technique with the Partial Least Squares (PLS) approach. The study's results prove that internal control has an insignificant influence on managerial performance. In contrast, the characteristics of the management accounting information system have a significant effect on managerial performance. Environmental uncertainty does not moderate the relationship between internal control and managerial performance. However, environmental uncertainty moderates the relationship between accounting information system characteristics and managerial performance.

Keywords: Internal Control, Management Accounting Information Systems, Managerial Performance, Environmental Uncertainty

1. Introduction

Technological developments and globalization have created an increasingly complex and uncertain business environment. Factors such as rapid economic change, technological advancements, and complex social dynamics add to the challenges for companies to remain adaptable and innovative (Widianita, 2023b). This uncertainty requires companies to continue improving their managerial capacity to survive and compete. Therefore, effective internal control and an integrated Management Accounting Information System (MAIS) are very important in supporting optimal managerial performance amidst these challenges.

Good managerial performance indicates a company's success in achieving its goals effectively and efficiently (Mulyah et al., 2020). This performance depends not only on achieving desired results but also on the ability of managers to manage resources and reduce costs and risks that arise. Without effective management, the company's goals will be difficult to achieve, and the various efforts made will be in vain. (Widianita,

2023a). Therefore, optimal managerial performance plays a major role in achieving company success.

The importance of performance evaluation in an organization cannot be underestimated. Managerial performance measures managers' success in realizing the company's vision and mission (Asystasia & Siregar, 2024). This evaluation helps identify strengths and weaknesses in strategy implementation and provides a basis for better decision-making (Kusuma & Supriyadi, 2024). Good performance data is also a reference for investors and other parties when assessing the company's prospects. One of the main factors that affects managerial performance is internal control. Good internal control can help companies achieve operational goals more efficiently, ensure the reliability of financial reports, and ensure compliance with applicable regulations (Manossoh et al., 2022). Based on the Committee of Sponsoring Organizations (COSO) guidelines, internal control includes five main components: control environment, control activities, risk assessment, monitoring, and information and communication. These components must be implemented properly to avoid potential fraud and achieve the desired goals.

In addition to internal control, MAIS also play an important role in supporting managerial performance. This information system functions to provide information needed by managers in making the right decisions (Hutahayan, 2020). The characteristics of an effective management accounting information system, such as broad scope, aggregation, integration, and timeliness, will ensure that the information presented is relevant, accurate, and can be used promptly in decision-making (Manossoh et al., 2022). However, research also shows timeliness in presenting information does not always significantly affect managerial performance (Asystasia & Siregar, 2024). Some managers tend not to prioritize speed in reporting information as long as the information remains accurate and useful in decision-making. However, other characteristics remain very important in supporting managerial effectiveness. (Semekto, 2021).

Environmental uncertainty is an external factor that is often difficult to predict but has a major impact on managerial performance. This uncertainty includes unexpected market changes, technology, or government regulations that can affect a company's operations (Febriyanti & Muliati, 2023). Therefore, managers need to have skills in planning and managing risks to ensure that the company can continue operating effectively even in uncertain situations (Manossoh et al., 2022).

Based on the phenomena and literature, several problems affect the company's managerial performance. First, low performance is caused by poor use of management accounting information, resulting in a mismatch between goals and results achieved. Increasing economic complexity also hinders the achievement of company goals (Abu Afifa & Saleh, 2022). Environmental uncertainty complicates planning and decision-making. Lack of internal control and implementation of good information systems can reduce managerial performance and open up opportunities for deviation (Liu, 2015). Managers who do not properly utilise information systems' characteristics, such as timeliness, will have difficulty presenting the information needed. Weaknesses in internal control also increase the risk of fraud. Managers' lack of understanding of management accounting information systems can worsen predictions of unfavourable environmental conditions (Mohammed et al., 2018). Implementing a system that is not optimal also reduces the quality of managerial performance audits. Finally, environmental uncertainty affects decision-making and can weaken the relationship between internal control, information systems, and managerial performance.

Overall, this study will significantly contribute to understanding how internal control, management accounting information systems, and environmental

uncertainty influence each other in achieving optimal managerial performance. The findings of this study can be used by other companies, especially those operating in industries exposed to environmental uncertainty, to improve their management and performance in facing existing challenges. Based on the framework, the hypotheses in this study are:

- H1: Internal control has a significant influence on managerial performance
- H2: MAIS characteristics have a significant effect on managerial performance
- H3: Environmental uncertainty moderates the relationship between internal control and managerial performance
- H4: Environmental uncertainty memoderasi hubungan antara MAIS characteristics terhadap kinerja manajerial.

2. Method

This study focuses on PT Pelabuhan Indonesia (PERSERO) Regional 2 Teluk Bayur. The type of research used is quantitative, aiming to test the relationship between variables through primary and secondary data. Primary data were obtained from questionnaires distributed to respondents at PT Pelabuhan Indonesia (PERSERO) Regional 2 Teluk Bayur, while secondary data were obtained from documents and other relevant sources. Data collection techniques include literature studies to understand relevant theories, field studies with questionnaires to collect data directly from respondents, interviews to obtain qualitative data from management, and observations to obtain additional data related to field conditions.

The instrument used in this study was a questionnaire with a Likert scale to measure respondents' attitudes, opinions, and perceptions related to the research variables. This questionnaire includes questions about internal control, management accounting information systems characteristics, managerial performance, and environmental uncertainty, with scores based on an ordinal scale to obtain objective and measurable data.

The population in this study consisted of managers and heads of departments at PT Pelabuhan Indonesia (PERSERO) Regional 2 Teluk Bayur, with a population of 30 people. Based on the definition, a population is an area of subjects or objects with certain characteristics to be studied and analyzed. The sample used in this study was determined through the saturated sample method. Namely, all population members were used as samples. Sampling was carried out using the purposive sampling technique, where samples were taken based on certain criteria per the research objectives. This study uses the Structural Equation Modeling (SEM) analysis technique with Partial Least

Squares (PLS) software to test the relationship between variables. SEM combines factor analysis, structural models, and path analysis, allowing testing of complex relationships between variables. PLS was chosen because it can handle complex models with small samples and does not require normal data distribution. This analysis conducted validity and reliability tests to ensure that the instruments used were accurate and reliable. Validity was tested using convergent and discriminant validity, while reliability was tested using composite reliability and Cronbach's alpha. The research instruments are shown in table 1 below.:

Table 1. Research Instrument

No	Variables	Indicators	Scale
1.	Managerial Performance (Y)	a. Planning b. Coordination c. Evaluation d. Supervision e. Investigation f. Staffing g. Negotiation h. Representation	Likert
2.	Internal Control (X1)	a. Control Environment b. Risk Assessment c. Control Activities d. Information and Communication e. Monitoring	Likert
3.	MAIS Characteristics (X2)	a. Broad Scope b. Timelines c. Aggregation d. Integration	Likert
4.	Environmental Uncertainty (X3)	a. Environmentally friendly b. Sustainable	Likert

The measurement of the structural model is evaluated between variables and draw valid conclusions about the using R-Square to determine the extent to which the influence of the research model.

independent variables in the model can explain the dependent variable. In addition, hypothesis testing is carried out by looking at the t-statistic value, where the hypothesis is accepted if the t-statistic value is greater than 1.96 and the p-value is less than 0.05. This allows researchers to test the significance of the relationship

3. Result and Discussion

Result

The SEM PLS test results and Average Variance Extracted (AVE) Test Result are in the Figure 1 below:

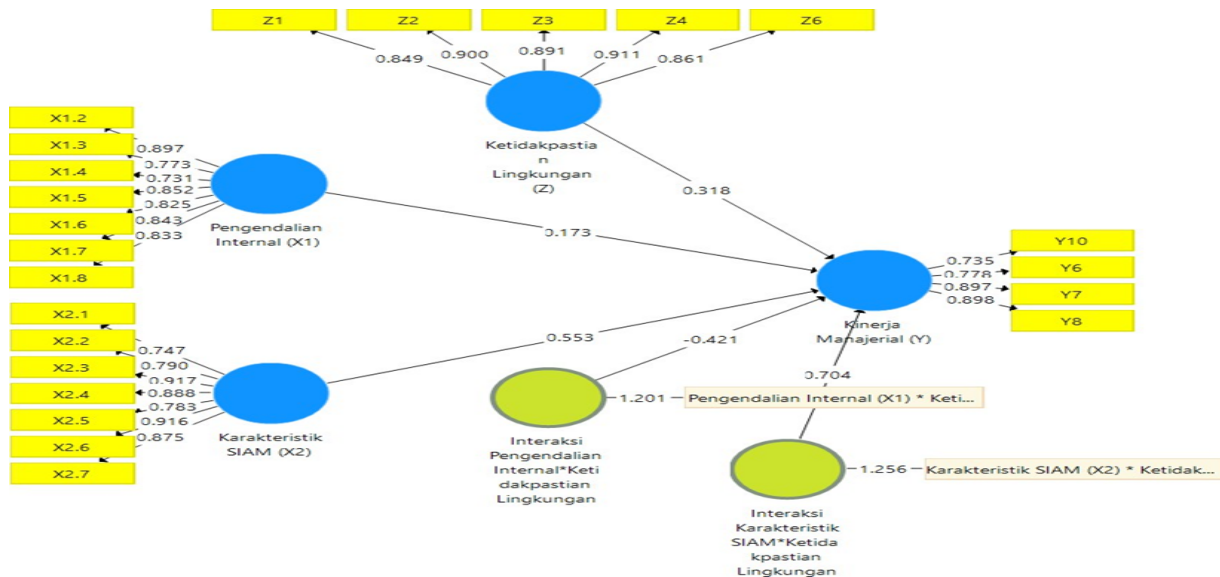


Figure 1. SEM PLS Result

Table 2. Results of the Average Variance Extracted (AVE) Test

Research Variables	Average Variance Extracted (AVE)
Managerial Performance (Y)	0,689
Internal Control (X1)	0,678
MAIS Characteristics (X2)	0,718
Environmental Uncertainty (Z)	0,779
Internal Control*Environmental Uncertainty (Moderating 1)	1,000
MAIS Characteristics*Environmental Uncertainty (Moderating 2)	1,000

Source: Data processed by authors, 2025

Based on the table 2. above, it can be concluded that all constructs or variables above meet the criteria for good validity. Where the Average Variance Extracted (AVE) value is above 0.50. Furthermore, reliability testing is in table 2 below:

Tabel 3. Reliability Test Result

Variables	Cronbach s Alpha	Composite Reliability	Explanation
Managerial Performance (Y)	0,846	0,898	Reliable
Internal Control (X1)	0,921	0,936	Reliable
MAIS Characteristics (X2)	0,934	0,947	Reliable
Environmental Uncertainty (Z)	0,966	0,974	Reliable
Internal Control*Environmental Uncertainty (Moderating 1)	1,000	1,000	Reliable
MAIS Characteristics*Environmental Uncertainty (Moderating 2)	1,000	1,000	Reliable

Source: Data processed by authors, 2025

Table 4 SmartPLS output shows that each construct or variable's composite reliability and cronbach alpha values are greater than 0.70. Thus, it can be concluded that the level of data reliability is good or reliable. Furthermore, the determination coefficient test is in the table below:

DOI: <https://doi.org/10.35134/jbe.v10i2.300>

Creative Commons Attribution 4.0 International License (CC BY 4.0)

Table 4. R-Square Test Result

Variable	R Square	R Square Adjusted
Managerial Performance (Y)	0,766	0,717

Source: Data processed by authors, 2025

In the table above, the R-Square value of the managerial performance variable is 0.766 or 77.6%, so the contribution of the internal control variable and the characteristics of the management accounting information system to environmental uncertainty is 77.6%, the remaining 22.4% is influenced by other variables outside this study. Furthermore, the results of the t-test are in the Table 5 below:

Table 5 Hypotheses Testing Result

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Explanation
Internal Control (X1) -> Managerial Performance (Y)	0.173	0.221	0.248	0.695	0.487	Rejected
MAIS Characteristics (X2) -> Managerial Performance (Y)	0.553	0.500	0.266	2.084	0.038	Accepted
Internal Control* Environmental Uncertainty -> Managerial Performance (Y)	-0.421	-0.375	0.280	1.503	0.133	Rejected
MAIS Characteristics* Environmental Uncertainty -> Managerial Performance (Y)	0.704	0.638	0.338	2.085	0.038	Accepted

Source: Data processed by authors, 2025

Discussion

The Influence of Internal Control on Managerial Performance

The results of data testing using the SmartPLS program tool found that internal control had an insignificant effect on managerial performance. The internal control variable is good based on the frequency distribution of answers with the category "Agree" and the TCR value above 80%. The t-statistic value <t-table 1.96 or 0.695 <1.96 P-Value 0.487> 0.05 thus the hypothesis can be accepted or H0 is accepted and H1 is rejected, in other words there is an insignificant effect of internal control on managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur.

Based on the research results (Setiawati & Lim, 2019), internal control has no significant influence on managerial performance. The result of the F test is 0.000 <0.05, meaning there is a significant influence between internal control and the implementation of good corporate governance principles simultaneously on managerial performance. This can occur because managerial performance is influenced by other more dominant factors, such as managerial skills and experience, organizational culture, external conditions, and the applied incentive system.

In addition, inappropriate performance measurement, such as focusing only on short-term financial results without considering compliance with procedures, can also make the relationship between internal control and managerial performance undetected. The internal control system may not be too complex in small or simple organisations, so managers rely more on direct communication and informal supervision. Therefore, to ensure that internal control has a positive effect, organizations need to design an effective system, provide adequate training, and ensure that managers understand and utilize it well.

However, there is research conducted by (Mamahit et al., 2022) where the results show that internal control and organizational commitment have a significant effect on management at the IPDN North Sulawesi Campus, but the effect is insignificant.

The Influence of MAIS Characteristics on Managerial Performance

From the results of data testing with the SmartPLS program, it was found that the characteristics of the Management Accounting Information System (MAIS) had a significant influence on managerial performance. Based on the frequency distribution of answers with the category "Agree" and the TCR value above 80%. It can

be concluded that the characteristics of the management accounting information system (MAIS) variable is good. The t-statistic value $> t\text{-table } 1.96 \text{ or } 2,084 > 1.96$ P-Value $0.038 < 0.05$ thus the hypothesis can be accepted or H_0 is rejected and H_2 is accepted, in other words there is a significant influence of the characteristics of the management accounting information system (MAIS) on managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur.

Based on the research results in (Marda Hayati & Yulistia, 2023) The results of this research analysis show that the Management Accounting System (MAS) information variable has a positive effect on the managerial performance of West Sumatra Regional Police employees with a significant value of α ($0.000 < 0.05$). The research shows that the management accounting system has a positive and significant effect on managerial performance. However, there is research by (Manossoh et al., 2022) where the results of this study indicate that the characteristics of MAIS have a positive and significant effect on managerial performance. The characteristics of Management Accounting Information Systems (MAIS) have a significant effect on managerial performance. A well-designed MAIS can provide relevant, accurate, and timely information. Thus helping managers in making more effective decisions. When this system is able to present integrated and comprehensive data, managers can analyze organizational performance in more depth and identify areas that need improvement.

In addition, the flexible and adaptive characteristics of MAIS allow managers to adjust to changes in the dynamic business environment, thereby increasing responsiveness and efficiency in achieving organizational goals. With features such as structured reporting and sophisticated analysis tools, MAIS also facilitates more systematic monitoring and evaluation of performance. This ultimately drives increased productivity and managerial accountability. However, this effect will only be optimal if managers understand the use of MAIS and if the system is supported by adequate technological infrastructure.

Thus, the characteristics of an effective MAIS can be a strategic tool in improving managerial performance and supporting the organisation's overall success. If the characteristics of the management accounting information system broad scope, timeliness, aggregation, and integration are better then managerial performance will also increase..

The Effect of Environmental Uncertainty Moderates the Relationship between Internal Control and Managerial Performance

The results of data testing using the SmartPLS program tool found that there was an insignificant effect of

environmental uncertainty being able to moderate the relationship between internal control and managerial performance. Based on the frequency distribution of answers with the category "Agree" and the TCR value above 80%, the environmental uncertainty variable is good. The t-statistic value $< t\text{-table } 1.96 \text{ or } 1,503 < 1.96$ P-Value $0.133 > 0.05$ thus the hypothesis can be rejected or H_0 is accepted and H_4 is rejected, in other words there is an insignificant effect of environmental uncertainty being able to moderate the relationship between internal control and managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur.

In research conducted by (Oktriani, 2012). The results of the study showed that environmental uncertainty significantly moderates the relationship between internal control and managerial performance. In stable and predictable environmental conditions, internal control tends to be more effective in supporting managerial performance because established procedures and policies can be implemented consistently. However, when the business environment is faced with high uncertainty, such as regulatory changes, market fluctuations, or rapid technological developments, a rigid internal control system may be less relevant in this situation, managers need greater flexibility and adaptability to respond to changes quickly.

Environmental uncertainty can reduce the effectiveness of traditional internal controls because the system may not be able to accommodate complex external dynamics. In contrast, organizations with more flexible and responsive internal control systems tend to be better able to deal with uncertainty, thus still being able to support managerial performance. Thus, environmental uncertainty acts as a moderating factor that influences the extent to which internal control can contribute to managerial performance, emphasizing the importance of adaptive system design in the face of external changes.

However, there is a research by (Kusuma & Supriyadi, 2024), The results of this study indicate that management control, accounting control and budget preparation participation simultaneously and partially have a positive and significant influence on managerial performance. Testing shows that internal control, organizational commitment, organizational culture and leadership style positively influence managerial performance through public accountability.

The Influence of Environmental Uncertainty Moderates the Relationship between MAIS Characteristics and Managerial Performance.

From the results of data testing with the SmartPLS program, it was found that there was a significant influence of environmental uncertainty that was able to

moderate the relationship between the characteristics of the management accounting information system (MAIS) and managerial performance. Based on the frequency distribution of answers with the category "Agree" and the TCR value above 80%. It can be concluded that the environmental uncertainty variable is good. The t-statistic value $> t\text{-table } 1.96 \text{ or } 2.085 > 1.96$ P-Value value $0.038 < 0.05$ thus the hypothesis can be accepted or H_0 is rejected and H_5 is accepted, in other words there is a significant influence of environmental uncertainty that is able to moderate the relationship between the characteristics of the management accounting information system (MAIS) and managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur.

This study's results align with the research conducted by (Harash, 2015). The results of the study concluded that the characteristics of management accounting information systems affect managerial performance and environmental uncertainty can moderate the influence of the characteristics of management accounting information systems on managerial performance in private hospitals in the Metro city area, which has a significant effect. In a stable environment, MAIS that provides accurate, relevant, and timely information can effectively support managerial decision-making, thereby improving performance.

However, when the business environment is faced with high uncertainty, such as regulatory changes, market fluctuations, or rapid technological developments, the characteristics of a rigid or less adaptive MAIS may no longer be sufficient. In such situations, managers need a more flexible system that can present real-time information to respond quickly to changes. Environmental uncertainty can reduce the effectiveness of traditional MAIS if the system is not designed to deal with complex external dynamics. In contrast, MAIS with adaptive characteristics, such as integrating data from various sources and providing predictive analysis, can help managers better manage uncertainty. Thus, environmental uncertainty acts as a moderating factor that influences the extent to which MAIS characteristics can contribute to managerial performance, emphasizing the importance of a responsive and dynamic system in facing external challenges. However, there is a study by (Pedroso et al., 2020) where the results of this study are that the management accounting system has an insignificant effect on managerial performance, decentralization has an insignificant effect on managerial performance.

4. Conclusion

From the discussions in the previous chapters, several conclusions can be drawn as follows:

First, internal control has no significant influence on managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur, as indicated by a P-Value of 0.487, which is greater than 0.05. Second, there is a significant effect of the management accounting information system (MAIS) characteristics on managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur, as shown by a P-Value of 0.038, which is less than 0.05. Third, environmental uncertainty does not significantly moderate the relationship between internal control and managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur, with a P-Value of 0.133, which is greater than 0.05. Finally, environmental uncertainty significantly moderates the relationship between the characteristics of the management accounting information system (MAIS) and managerial performance at PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur, as indicated by a P-Value of 0.038, which is less than 0.05.

For the company, managerial performance can be improved if PT Pelabuhan Indonesia (Persero) Regional 2 Teluk Bayur focuses on enhancing managerial performance through activities such as planning, investigating, coordinating, evaluating, monitoring, staffing, negotiating, and representing. Additionally, improving internal control through measures like control environment, risk assessment, control activities, information and communication, and monitoring activities would be beneficial. Furthermore, the management accounting information system (MAIS) characteristics can be strengthened by focusing on broad scope, timeliness, aggregation, and integration.

For academia, future research should explore the independent and moderating variables in greater depth, as many other factors could contribute to improving managerial performance. For future researchers, it is recommended to include additional variables not covered in this study. Moreover, future studies should consider incorporating open-ended questionnaires to overcome the limitations present in this research.

References

- Abu Afifa, M. M., & Saleh, I. (2022). Management accounting systems effectiveness, perceived environmental uncertainty and companies' performance: the case of Jordanian companies. *International Journal of Organizational Analysis*, 30(2), 259–288.
- Asyastasia, W. A., & Siregar, S. A. (2024). Pengaruh Karakteristik Informasi Sistem Akuntansi Manajemen Terhadap Kinerja Manajerial Dengan Variabel Moderasi Ketidakpastian Lingkungan Dan Desentralisasi Pada Pt. Karya Hevea Indonesia. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 8(1), 1773–1786.
<https://doi.org/https://doi.org/10.31955/mea.v8i1.3915>

DOI: <https://doi.org/10.35134/jbe.v10i2.300>

Creative Commons Attribution 4.0 International License (CC BY 4.0)

- Febriyanti, D. P., & Muliati, N. K. (2023). Pengaruh Karakteristik Sistem Akuntansi Manajemen (SAM), Komitmen Organisasi, Dan Ketidakpastian Lingkungan Terhadap Kinerja Manajerial. *Hita Akuntansi Dan Keuangan*, 4(4), 64–73. <https://doi.org/10.32795/hak.v4i4.4330>
- Harash, E. (2015). The role of environmental uncertainty in the link between accounting information system and performance small and medium enterprises in Iraq. *Global Journal of Management and Business Research*, 15(2), 27–31.
- Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking: An International Journal*, 27(4), 1289–1318.
- Kusuma, F. A. H., & Supriyadi, S. G. (2024). Pengaruh Pengendalian Akuntansi, Pengendalian Manajemen, Partisipasi Penyusunan Anggaran Terhadap Kinerja Manajerial Di PT. Garam (PERSERO). *Biznesa Ekonomika: Economic And Business Journal (Jebizko)*, 1(1), 59–77.
- Liu, S. (2015). Effects of control on the performance of information systems projects: the moderating role of complexity risk. *Journal of Operations Management*, 36, 46–62.
- Mamahit, G. M., Pangemanan, S. S., Datu, C., Ekonomi, F., Akuntansi, J., & Ratulangi, U. S. (2022). Pengaruh Pengendalian Internal dan Komitmen Organisasi Terhadap Kinerja Manajerial Pada Kampus IPDN Sulawesi Utara The Effect of Internal Control and Organizational Commitment on Managerial Performance at IPDN North Sulawesi Campus. 5(2), 671–678.
- Manossoh, S. M., Alexander, S. W., & Kalalo, M. Y. . (2022). Pengaruh Karakteristik Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada PT. Bank SulutGo Cabang Tahuna. *LPPM Bidang EkoSosBudKum*, 19(1), 315–324.
- Marda Hayati, R., & Yulistia, Y. (2023). Pengaruh Karakteristik Informasi Sistem Akuntansi Manajemen (SAM), Desentralisasi dan Ketidakpastian Lingkungan Terhadap Kinerja Manajerial pada Kantor Polda Sumatera Barat. *Ekasakti Pareso Jurnal Akuntansi*, 1(1), 23–34. <https://doi.org/10.31933/epja.v1i1.776>
- Mohammed, A. L., Al-Hosban, A., & Thnaibat, H. (2018). The impact of the risks of the input of accounting information systems on managerial control, accounting control and internal control in commercial banks in Jordan. *International Journal of Business and Management*, 13(2), 96–107.
- Muliyah, P., Aminatun, D., Nasution, S. S., Hastomo, T., & Setiana Sri Wahyuni Sitepu, T. (2020). Pengaruh Sistem Akuntansi Manajemen, Human Capital Dan 118 Ketidakpastian Lingkungan Terhadap Kinerja Manajerial Pada Pt. Kunango Jantan Di Kota Padang. *Journal GEEJ*, 7(2), 107–124.
- Oktriani, R. (2012). Pengaruh Partisipasi Anggaran Dan Informasi Akuntansi Terhadap Kinerja Manajerial. *Skripsi*, 1(1), 99–120.
- Pedroso, E., Gomes, C. F., & Yasin, M. M. (2020). Management accounting systems: an organizational competitive performance perspective. *Benchmarking: An International Journal*, 27(6), 1843–1874.
- Semekto, A. (2021). Ketidakpastian Lingkungan dan Lingkup Sistem Informasi Akuntansi Manajemen Terhadap Kinerja Manajerial Pada Usaha Mikro, Kecil dan Menengah (UMKM) di Surabaya. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, 8(02), 86–93. <https://doi.org/10.35838/jrap.2021.008.02.19>
- Setiawati, L. W., & Lim, M. (2019). Jurnal Akuntansi Jurnal Akuntansi. *Badruzaman JAJANG*, 12(1), 29–57.
- Widianita, R. (2023a). Pengaruh Sistem Akuntansi Manajemen Dan Ketidakpastian Lingkungan Terhadap Kinerja Manajerial Dengan Kualitas Informasi Sebagai Variabel Intervening. *AT-TAWASSUTH: Jurnal Ekonomi Islam*, 8(1), 1–19.
- Widianita, R. (2023b). Pengaruh Sistem Pengendalian Internal, Komitmen Organisasi, Budaya Organisasi Dan Gaya Kepemimpinan Terhadap Kinerja Manajerial Dengan Akuntabilitas Publik Sebagai Variabel Intervening (Survei pada Dinas Kesehatan di Kabupaten Tanjung Jabung Barat Provins. *AT-TAWASSUTH: Jurnal Ekonomi Islam*, 8(1), 1–19.