

Information Technology Audit in Optimizing Resources and Utilization of Financial Information Systems

Fransisca Dyah Anggraini^{1*}, Sumartono², Hedar Rusman³

^{1*} Universitas Katolik Misi Charitas (UKMC), Palembang, Indonesia

² Universitas Yapis Papua, Jayapura, Indonesia

³ Sekolah Tinggi Ilmu Administrasi (STIA) Menarasiswa, Bogor, Indonesia

^{1*} dyah_anggraini@ukmc.ac.id, ² destyantoro80@gmail.com, ³ hedarrusman@menarasiswa.ac.id

ARTICLE INFO (8 pt)

ABSTRACT

Keywords:

Information Technology
Audit;
Financial Information
System;
IT System Optimization;
COBIT 5 Framework;
Maturity Level Analysis

The utilization of financial information systems in companies has become part of the application of information technology, but there are challenges in the complexity and risk of its implementation. This study uses a qualitative and quantitative approach with the information technology audit method and the COBIT 5 framework. The research objectives analyzed the Maturity Level in the EDM, APO, BAI, and DSS domains using the COBIT 5 framework. The results showed a GAP between Current Maturity and Expected Maturity in each domain. The EDM domain has an average Current Maturity of 3.80, at the Manage and Measurable level, with the highest GAP in IT utilization. The APO domain has an average Current Maturity of 4.00, also at the Manage and Measurable level, with the highest GAP in portfolio management and IT quality services. The BAI domain has an average Current Maturity of 3.96, at the Manage and Measurable level, with the highest GAP in managing IT service availability and capacity. The DSS domain has an average Current Maturity of 4.40, at the Manage and Measurable level, with the highest GAP in the implementation of IT operating procedures. The research conclusions highlight areas of improvement involving information system management, information system portfolio management, and the effectiveness of operating financial reporting information system utilization procedures to improve maturity levels and optimize the utilization of the company's financial information systems.

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License \(CC-BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)

1. Introduction

In the present era of digitization and globalization, firms and organizations are becoming more reliant on information technology to facilitate their day-to-day activities. Financial information systems are increasingly vital components of organizational structures, serving a crucial function in financial administration, reporting, and strategic decision-making (Fauzi et al., 2023; Novikov, 2020). Nevertheless, the increasing intricacy and swift advancement of information technology have given rise to additional hazards, including the unauthorized disclosure of data, cyber assaults, and failure to adhere to relevant legislation (Aditya et al., 2018; Bakri et al., 2023).

Sumber Cahya Company, as a business entity operating in the context of globalization and digitalization, has an increasing need for information technology to support their operations and financial management. Financial Information System at Sumber Cahya is used to process, store and report financial information, including daily transactions, financial reports and strategic information for management.

Based on observations carried out at the research site, it shows that it is not fully running well because problems are still found, such as frequent discrepancies between financial records and expenditure and income in the company's financial processes.(Nur et al., 2019; Olimsar et al., 2023; Rahayu et al., 2022; Sumartono et al., 2023). So there is a need for an information technology audit that can help Sumber Cahaya company in evaluating financial management information systems. This is reinforced by several related studies that use information technology audits, especially on the use of information systems(Devanti et al., 2019; Fitriyah & Sucahyo, 2008; Rachmad et al., 2023). This research uses the EDM (Evaluation, Direct, Monitor), APO (Align, Plan, Organize), BAI (Build, Acquire, Implement), and DSS (Deliver, Service, Support) domains with the COBIT 5 framework in evaluating system utilization. financial management information(Bakri & Kadiman, 2023; Sumartono et al., 2022).

Several related studies state that an Information Technology Audit using the COBIT 5 framework is a very important instrument to ensure that the financial information system is organized to function well, efficiently and safely.(Rijal & Bakri, 2023). An IT audit involves evaluating systems, IT infrastructure, security procedures, and compliance with related standards. The importance of IT audits in optimizing resources and utilization of financial information systems lies in the need to maintain the integrity, confidentiality and availability of financial data, as well as mitigating risks related to technology. However, along with the growth of business complexity and dynamics, the security and efficiency of SIK at PT. The Source of Light becomes increasingly important. Various risks such as cyber attacks, non-compliance with regulations, or sub-optimal use of IT resources can hinder the performance and integrity of financial information.

Literature Review

An information system audit is the process of collecting and assessing evidence to determine whether the system can maintain data integrity, can promote the achievement of organizational goals effectively and use resources efficiently. An information system audit is an examination or audit carried out within the framework of IT Governance which is actually an operational audit specifically on the management of information resources(Mulgund et al., 2019; Sumartono et al., 2023). Research by explaining COBIT (Control Objectives for Information and Technology) is a model designed to control IT functions. This model was actually developed by the Information Systems Audit and Control Foundation (ISACF), a research institute for the Information Systems Audit and Control Association (ISACA). Other research(Sumartono et al., 2022; Vua et al., 2023)focuses on measuring maturity and capability levels. Maturity levels can be viewed as a structured set of levels that describe how well an organization's behavior, practices and processes can reliably and sustainably produce the required results. There are 5 levels of maturity levels, but in this research it only limits at level 4 as the goal of this research. Other research(F. D. Anggraini, 2020; Nuijten et al., 2023; Sumartono et al., 2019)using quantitative and qualitative methods, namely collecting data from observations then distributing questionnaires and conducting interviews with questions guided by these domains. The results of calculating maturity and capability levels produce averages for each audit domain that can be used in evaluating the use of information systems(C. F. Anggraini et al., 2023; Bahari et al., 2019; Schmitz et al., 2021). Other research(Purwono, 2023)shows that by using the COBIT 5 Framework it can produce an evaluation of the optimization of the information system at the research site which has not met the target, namely that it needs to be improved based on the above assessment in terms of management (EDM05), development (BAI04) and DSS01 services.

2. Research Methods

This research uses qualitative and quantitative types in obtaining research data(Ibrahim et al., 2023; Sudipa et al., 2023). The data collection techniques used consisted of observation, interviews, documentation and distribution of questionnaires to research respondents. The use of qualitative and quantitative types allows researchers to collect data in descriptive and numerical form(Arifin et al., 2018; Kurniawan et al., 2023; Wada et al., 2024). A qualitative approach can provide an in-depth understanding of the context and nuances related to research, while a quantitative approach allows for statistical measurements and analysis that can empirically support the findings.This research uses the EDM (Evaluation, Direct, Monitor), APO (Align, Plan, Organize), BAI (Build, Acquire, Implement),

and DSS (Deliver, Service, Support) domains with the COBIT 5 framework in evaluating system utilization with company information.

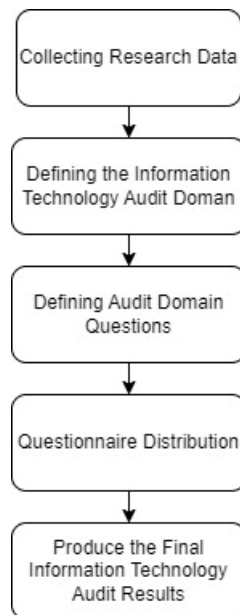


Fig. 1. Research Stages

Based on Figure 1, it can be explained that the initial stages are: collect data by conducting observations, interviews and documentation at the research location to find out the Enterprise Goal based on the Mission and Objectives that have been previously analyzed. And after that we determine the IT-Related Goal based on the company's Enterprise Goal. After obtaining the IT-Related Goal, proceed with determining the appropriate information technology audit domain. Next, at this stage, create information technology audit questions so that they can be adapted to the audit domain. The technique for distributing questionnaires is by applying questions into a questionnaire on Google Form. After we finished making the questionnaire and distributing it to research respondents. The final stage is to carry out an analysis of the results of the questionnaire assessment and create the final results of the information technology audit.

Respondent Identification Analysis

The data collection technique used by researchers is the questionnaire method. There were 5 respondents involved in this research. Respondents were asked to provide their opinions regarding the level of IT maturity referring to the COBIT 5 framework. The questionnaire that we created was distributed online using Google Form. And in the questionnaire there are 37 questions from each audit domain that have been analyzed.

Description of Questionnaire Scores

A description of the questionnaire scores is needed to provide respondents with an understanding regarding the scale of scores that can be given to each question in the information technology audit domain. There is a scale of 0 to 5 that can be filled in by research respondents.

Table 1. Questionnaire Score Value Scale

Score	Information	Description
0	There isn't any	The company did not know that this was necessary

1	Very not good	The company has procedures but they have not been written down and are not implemented
2	Not good	The company does not yet have written procedures but they have been implemented
3	Enough	The company has written procedures and they have been implemented
4	Good	The company manages well and employee compliance with procedures can be measured
5	Very good	Standardized companies always experience continuous improvement efforts

3. Results and Discussions

EDM Domain Level Maturity Analysis

After conducting a survey and carrying out calculations on each process in the domain, there are GAP analysis results obtained from the expected maturity assessment value minus the current maturity, resulting in a GAP from the value of each EDM domain.

Table 2. EDM Domain GAP Analysis

No	Domain	Current Maturity	Expected Maturity	GAP Analysis
1	EDM01	4.00	5.00	1.00
2	EDM02	3.50	5.00	1.50
4	EDM04	3.50	5.00	1.50
5	EDM05	4.25	5.00	0.75
Average		3.8	5.00	

In the EDM domain the average overall score of all statements is 3.80, where in the maturity level the score is at the Manage and Measurable level. In the EDM domain there is the highest number of gaps, namely 1.50, namely the statement of optimal IT utilization and the statement of optimization of IT resources, where IT utilization is quite optimal, but it has not been checked regularly. Then resources to support business services, including resources The available people, business processes and IT have not been managed optimally. In the EDM domain there is the lowest number of gaps, namely 0.75, namely the statement that the delivery of information to stakeholder parties is quite transparent.

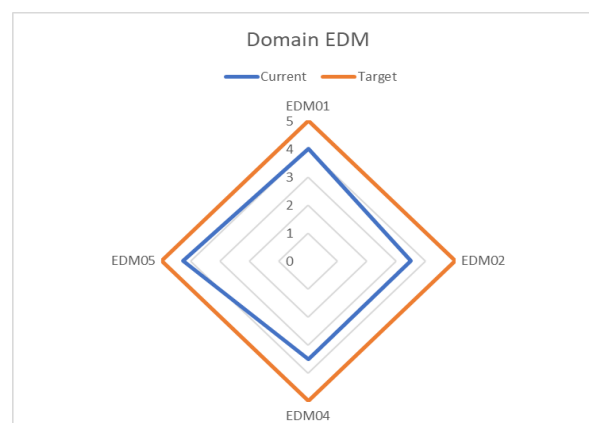


Fig. 2. EDM Domain Audit Chart

Based on the image above, it can be seen that the Expected Maturity for the EDM domain is at level 5.00 (Optimized) for each domain. Of the four questions that describe the EDM Domain, the overall average Current Maturity of the EDM Domain is 3.80 which is at the Manage and Measurable level, which means that the existing processes are already in the company's procedures, are permanent and have been well implemented. The highest average Current Maturity is 1.50 which is found in the fifth question which refers to EDM 05, namely transparency in the delivery of information, then the lowest average Current Maturity is 3.50 which is found in the second question and the fourth question which refers to EDM02 namely ensuring optimal IT utilization and EDM04 namely ensuring optimization of IT resources.

APO Domain Level Maturity Analysis

After conducting a survey and carrying out calculations for each process in the domain, there are GAP analysis results obtained from the expected maturity assessment value minus the current maturity, resulting in a GAP from the value of each APO domain.

Table 3. APO Domain GAP Analysis

No	Domain	Current Maturity	Expected Maturity	GAP Analysis
1	APO01	4.25	5.00	0.75
2	APO02	4.00	5.00	1.00
3	APO03	4.25	5.00	0.75
4	APO04	4.25	5.00	0.75
5	APO05	3.75	5.00	1.25
6	APO06	3.75	5.00	1.25
7	APO07	4.00	5.00	1.00
8	APO08	3.75	5.00	1.25
9	APO09	4.25	5.00	0.75
10	APO010	4.50	5.00	0.50
11	APO011	3.75	5.00	1.25
12	APO012	3.75	5.00	1.25
Average		4.00	5.00	

In the APO domain the average overall value of the statement is 4.00, where in the maturity level the value is at the Manage and Measurable level. In the APO domain, there is the highest number of gaps, namely 1.25, namely portfolio management statements, company statements managing budgets and costs, statements about the relationship between IT and current business processes, statements about IT quality services, and statements about risk management carried out by IT. The related statement is that everything is running according to the SOP, but it is not running regularly and still needs to be improved. In the APO domain there is the lowest number of gaps, namely 0.50, which is a statement of the role of IT in supplier management.

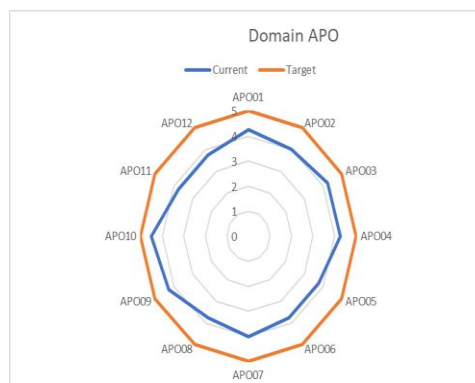


Fig. 2. APO Domain Audit Chart

Based on the image above, it can be seen that the Expected Maturity set by Management for the APO domain is at level 5.00 (Optimized) for each subchapter. Of the 12 questions that describe the APO Domain, the highest average Current Maturity of 4.50 is found in the tenth question which reflects APO 10 (the role of IT in supplier management), with the lowest average Current Maturity of 3.75 which is at the Defined level There are questions that reflect APO 05 (Portfolio Management), APO 06 (Companies manage budgets and costs), APO 08 (Relationship of IT with current business processes), APO 11 (Organization improves IT quality services), APO 12(Risk management carried out by IT

BAI Domain Level Maturity Analysis

After conducting a survey and carrying out calculations for each process in the domain, there are GAP analysis results obtained from the expected maturity assessment value minus the current maturity, resulting in a GAP from the value of each BAI domain.

Table 4. BAI Domain GAP Analysis

No	Domain	Current Maturity	Expected Maturity	GAP Analysis
1	BAI01	4.00	5.00	1.00
2	BAI02	4.50	5.00	0.50
3	BAI03	4.25	5.00	0.75
4	BAI04	3.75	5.00	1.25
5	BAI05	3.75	5.00	1.25
6	BAI06	3.75	5.00	1.25
7	BAI07	4.00	5.00	1.00
8	BAI08	3.75	5.00	1.25
Average		3.96	5.00	

In the BAI domain the average overall score for all statements is 3.96, where at the maturity level the score is at the Manage and Measurable level. In the BAI domain, there is the highest number of gaps, namely 1.25, namely the statement on managing the availability and capacity of IT services. The statement on managing organizational changes that have taken place has received understanding from employees or staff, but sometimes there are still mistakes regarding the changes that have occurred. The management of changes in information technology that has been running is in accordance with the soup, but when changes in information technology occur there are still obstacles such as adjustment and understanding from employees. In the BAI domain, the lowest number of gaps is 0.50, namely a statement of identification and analysis of program needs to be in accordance with the company's strategy.

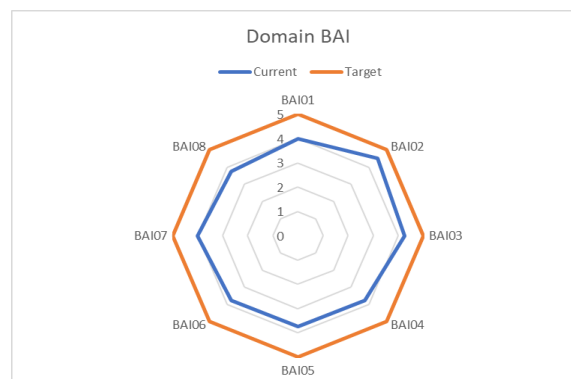


Fig. 3. BAI Domain Audit Chart

Based on the image above, it can be seen that the Expected Maturity set by Management for the BAI domain is at level 5.00 (Optimized) for each subchapter. Of the 8 questions that describe the BAI Domain, the highest average Current Maturity of 4.50 is found in the tenth question which reflects BAI 02 (Identification and analysis of program needs to suit company strategy), with the lowest average Current Maturity of 3.75 those at the Defined level are found in questions that reflect BAI 04 (Management of service availability and capacity), BAI 05 (Management of ongoing organizational changes), BAI 06 (Management of ongoing information technology changes), BAI 08 (Identifying, collecting and maintain relevant and up-to-date knowledge). The overall average of the eight questions describing the BAI Domain is 3.96 which is at the Defined level,

DSS Domain Level Maturity Analysis

After conducting a survey and carrying out calculations on each process in the domain, there are GAP analysis results obtained from the expected maturity assessment value minus the current maturity, resulting in a GAP from the value of each DSS domain.

Table 5. DSS Domain GAP Analysis

No	Domain	Current Maturity	Expected Maturity	GAP Analysis
1	DSS01	4.25	5.00	0.75
2	DSS02	4.50	5.00	0.50
3	DSS03	4.25	5.00	0.75
4	DSS04	4.50	5.00	0.50
Average		3.96	5.00	

In the DSS domain the average overall score for all statements is 4.40, where in the maturity level the score is at the Manage and Measurable level. In the DSS domain there is the highest number of gaps, namely 0.75, namely the implementation of IT operating procedures, and the statements outlined have now been carried out in accordance with the applicable sops in the company, but sometimes the applicable procedures are not effectively used at certain times. In the DSS domain there are The lowest number of gaps is 0.50, namely the statement of managing requests and service incidents that occur, and the statement that the company builds a sustainable IT plan to reduce risks that may occur.

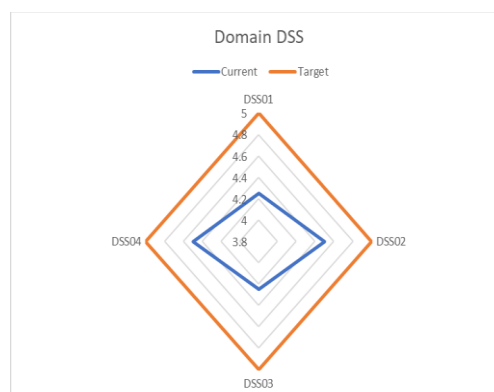


Fig. 4. DSS Domain Audit Chart

Based on the image above, it can be seen that the Expected Maturity set by Management for the DSS domain is at level 5.00 (Optimized) for each subchapter. Of the four questions that describe the DSS Domain, the highest average Current Maturity of 4.50 is found in the second question and the fourth question which reflects DSS 02 (Management of requests and incidents) and DSS 04 (Building a sustainable IT plan), with the average The lowest Current Maturity of 4.25 which is at the Defined level is found in questions that reflect DSS 01 (Implementation of IT operating procedures), DSS 03

(Management of IT problems and IT security). The overall average of the four questions that describe the DSS Domain is 4.40 which is at the Defined level.

Recommended Improvements

In the EDM domain, the highest number of Gaps is 1.50, namely the statement of optimal IT utilization and the statement of optimization of IT resources, where IT utilization is quite optimal, but periodic checks have not been carried out. then resources to support business services, including human resources, business processes, and available IT are not optimally managed. In the EDM domain, the lowest number of Gaps is 0.75, namely the statement that the delivery of information to stakeholders is quite transparent. In the EDM02 domain, namely ensuring optimal IT utilization and EDM04, namely ensuring the optimization of IT resources. IT relationship statements with current business processes, IT quality service statements, and risk management statements carried out by IT. The related statements have all been running according to the sop, it's just that it hasn't been running regularly and still has to be improved. In the APO domain, the lowest Gap amount is 0.50, namely the statement of the role of IT in supplier management. In the APO 05 (Portfolio Management) domain, APO 06 (The company manages budgets and costs), APO 08 (IT relationship with current business processes), APO 11 (The organization improves IT quality services), APO 12 (Risk management carried out by IT). As well as recommendations on domain BAI 04 (Management of service availability and capacity), BAI 05 (Management of organizational changes that have been running), BAI 06 (Management of changes), BAI 06 (Management of organizational changes), and BAI 06 (Management of organizational changes).

4. Conclusion

The research findings indicate that enhancements are required in multiple domains, including the EDM domain, through the implementation of periodic checks and management of IT resources to support business services, as well as by optimizing the administration of human resources, business processes, and IT, as determined by an analysis of each audit domain. Enhancements are required in the APO Domain in the following areas: grouping company portfolio information appropriately, optimizing budgets and costs, performing periodic audits of the information system technology in use, enhancing IT quality services through periodic audits, and developing measures and procedures to mitigate IT risks. Enhancements are recommended in the BAI domain for the following reasons is management of IT service capacity and availability should be improved; communication regarding organizational changes and information technology should be strengthened; and pertinent and current IT knowledge should be identified, gathered, and maintained. Within the realm of DSS, the recommendation is to enhance the operational protocols governing the utilization of the financial reporting information system in order to optimize efficiency and fortify the management of IT issues and security.

References

- Aditya, B. R., Hartanto, R., & Nugroho, L. E. (2018). The role of IT audit in the era of digital transformation. *IOP Conference Series: Materials Science and Engineering*, 407(1), 12164.
- Anggraini, C. F., Estiyanti, N. M., & Dewi, P. A. C. (2023). Governance Audit Using COBIT 5 in CV. XYZ on Accounting Information System. *ADI Journal on Recent Innovation*, 4(2), 201–209.
- Anggraini, F. D. (2020). THE EFFECT OF ENTRY SELECTION PATH AND FAMILY ENVIRONMENT ON ACCOUNTING STUDENTS'LEARNING ACHIEVEMENT WITH LEARNING MOTIVATION AS INTERVENING VARIABLE. *Erudio Journal of Educational Innovation*, 6(2), 233–247.
- Arifin, A., Haryanto, H., Basri, M., & Ansari, A. (2018). Multicultural Approach in Developing Instructional Learning Material at Indonesian Senior High School. *PROCEEDINGS OF THE 65th TEFLIN INTERNATIONAL CONFERENCE*, 65(02).

- Bahari, B. A., Adnan, F., & Prasetyo, B. (2019). Audit Capability Level Using COBIT 5.0: A University Customer Care Center at University of Jember. *2019 International Conference on Computer Science, Information Technology, and Electrical Engineering (ICOMITEE)*, 5–12.
- Bakri, A. A., & Kadiman, I. R. (2023). Kualitas Laporan Keuangan: Perspektif Kompetensi Sumber Daya Manusia, Sistem Akuntansi dan Pemanfaatan Teknologi Informasi. *Value-Relevance*, 1(1), 31–38.
- Bakri, A. A., Yusni, Y., & Botutihe, N. (2023). Analisis Efektivitas Penggunaan Teknologi Big Data dalam Proses Audit: Studi Kasus pada Kantor Akuntan Publik di Indonesia. *Jurnal Akuntansi Dan Keuangan West Science*, 2(03), 179–186.
- Devanti, K., Parwita, W. G. S., & Sandika, I. K. B. (2019). Audit Tata Kelola Teknologi Informasi Menggunakan Framework Cobit 5 pada PT. Bisma Tunas Jaya Sentral. *Jurnal Sistem Informasi Dan Komputer Terapan Indonesia (JSIKTI)*, 2(2), 65–76.
- Fauzi, A. A., Kom, S., Kom, M., Budi Harto, S. E., MM, P. I. A., Mulyanto, M. E., Dulame, I. M., Pramuditha, P., Sudipa, I. G. I., & Kom, S. (2023). *PEMANFAATAN TEKNOLOGI INFORMASI DI BERBAGAI SEKTOR PADA MASA SOCIETY 5.0*. PT. Sonpedia Publishing Indonesia.
- Fitrihanah, D., & Sucahyo, Y. G. (2008). Audit Sistem Informasi/Teknologi Informasi dengan kerangka kerja COBIT untuk evaluasi manajemen teknologi informasi di Universitas XYZ. *Jurnal Sistem Informasi*, 4(1), 37–46.
- Ibrahim, M. B., Sari, F. P., Kharisma, L. P. I., Kertati, I., Artawan, P., Sudipa, I. G. I., Simanihuruk, P., Rusmayadi, G., Nursanty, E., & Lolang, E. (2023). *METODE PENELITIAN BERBAGAI BIDANG KEILMUAN (Panduan & Referensi)*. PT. Sonpedia Publishing Indonesia.
- Kurniawan, H., Hakim, L., Sanulita, H., Maiza, M., Arisanti, I., Rismawan, M., Sudipa, I. G. I., Daryaswanti, P. I., Kharisma, L. P. I., & Haryani, H. (2023). *TEKNIK PENULISAN KARYA ILMIAH: Cara membuat Karya Ilmiah yang baik dan benar*. PT. Sonpedia Publishing Indonesia.
- Mulgund, P., Pahwa, P., & Chaudhari, G. (2019). Strengthening it governance and controls using cobit: a systematic literature review. *International Journal of Risk and Contingency Management (IJRCM)*, 8(4), 66–90.
- Novikov, S. V. (2020). Data science and big data technologies role in the digital economy. *TEM Journal*, 9(2), 756–762.
- Nuijten, A. L. P., Keil, M., & Zwiers, B. (2023). Internal Auditors' Perceptions of Information Technology-Related Risks: A Comparison Between General Auditors and Information Technology Auditors. *Journal of Information Systems*, 37(1), 67–83.
- Nur, M., Batmetan, J. R., & Manggopa, H. K. (2019). Smart city maturity level analysis using itil framework. *5th UPI International Conference on Technical and Vocational Education and Training (ICTVET 2018)*, 243–247.
- Olimsar, F., Mokoagow, I., Anggraini, F. D., Mokoginta, H., & Mokoginta, M. N. S. (2023). Cooperative financial evaluation using altman z-score to identifying financial distress. *Jurnal Mantik*, 7(2), 1302–1309.
- Purwono, I. B. S. A. (2023). Determine the Level of Information Technology Risk to Optimization Capability Services Organization Using Cobit 5 in Indonesia. *Examination of Current Issues in the Field of Social Sciences with New Approaches* 2, 126.
- Rachmad, Y. E., Rusman, H., Anantadjaya, S. P. D., Hernawan, M. A., & Metris, D. (2023). The Role Of Computer Assisted Audit Techniques, Professional Skeptism And Remote Auditing On Quality Of Audit In Public Accountant Office. *Journal of Economic, Bussines and Accounting (COSTING)*, 6(2), 2180–2192.
- Rahayu, S., Cakranegara, P. A., Simanjorang, T. M., & Syobah, S. N. (2022). Implementation of Customer Relationship Management System to Maintain Service Quality for Customer. *Enrichment: Journal of Management*, 12(5), 3856–3866.
- Rijal, S., & Bakri, A. A. (2023). Effect of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through intellectual capital: Study on service companies. *The ES Accounting And Finance*, 1(02), 95–103.
- Schmitz, C., Schmid, M., Harborth, D., & Pape, S. (2021). Maturity level assessments of information security controls: An empirical analysis of practitioners assessment capabilities. *Computers &*

Security, 108, 102306.

- Sudipa, I. G. I., Udayana, I. P. A. E. D., Rizal, A. A., Kharisma, P. I., Indriyani, T., Asana, I. M. D. P., Ariana, A. A. G. B., & Rachman, A. (2023). *METODE PENELITIAN BIDANG ILMU INFORMATIKA (Teori & Referensi Berbasis Studi Kasus)*. PT. Sonpedia Publishing Indonesia.
- Sumartono, S., Ermawati, Y., & Rorong, T. M. (2022). Influence of experience and professional skepticism on audit judgement of government external auditors. *Jurnal Akuntansi Dan Auditing Indonesia*, 211–223.
- Sumartono, S., Pasolo, M. R., Ermawati, Y., & Sonjaya, Y. (2023). Interplay of Auditor Rotation, Firm Size, and Audit Quality: An Empirical Investigation. *Advances in Managerial Auditing Research*, 1(2).
- Sumartono, S., Pasolo, M. R., & Nugraha, K. (2019). Studi Empiris Kualitas Audit Internal Pemerintah: melalui Batasan Waktu Audit dan Skeptisme Profesional. *Journal of Applied Business Administration*, 3(2), 245–257.
- Vua, T. Q., Huynha, Q. N. T., & Lama, Y. T. M. (2023). ACCOUNTING INFORMATION SECURITY AND INFORMATION TECHNOLOGY GOVERNANCE UNDER COBIT 5 FRAMEWORK-RESEARCH IN PUBLIC HOSPITALS. *ICAEFM 2023 CONFERENCE PROCEEDINGS*, 54.
- Wada, F. H., Pertiwi, A., Hasiolan, M. I. S., Lestari, S., Sudipa, I. G. I., Patalatu, J. S., Boari, Y., Ferdinan, F., Puspitaningrum, J., & Ifadah, E. (2024). *Buku Ajar Metodologi Penelitian*. PT. Sonpedia Publishing Indonesia.