

# Good Audit Planning Practices in The Digital Era

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## ABSTRACT

The purpose of this study is to identify important considerations that must be carried out by junior auditors in the planning phase in the current digitalization era. This research uses a qualitative study approach by conducting in-depth interviews with experts in auditing, information technology, and the digital economy. The results show that the critical considerations that need to be considered by the junior auditor are a comprehensive understanding of the auditee on 1) Information Technology-Based Accounting System; 2) IT Governance and the Possibility of Digital Fraud; 3) Business risks related to increasingly fierce industry competition; 4) Analytical procedures using big data analysis; and other important things related to the auditors themselves, namely 5) Digital-Based Audit Working Papers. The research results have implications for current audit learning, which must adapt to the audit environment in the digital era. The limitation of this research is that the research area of audit planning aspect is generally discussed. However, the characteristics of each industry are different. Then further research can be developed by linking the planning process with the type of industry.

**Keywords:** *Audit Planning, Digitalization, Learning.*

## 1. INTRODUCTION

The use of the internet and information technology is an important requirement in industrial era 4.0. Digitization in each transaction line causes significant changes in the accounting process of a business entity [1]. Digitization also has implications for the process of auditing financial statements by auditors [2]. In the past, the audit process emphasized the collection of manual transaction evidence, and then along with the times, nowadays, digital audit evidence brings significant changes in the audit process [3].

This change in the audit process also impacts the learning process, which requires auditors to understand better the digitization process in accounting transactions [4]. Junior auditors must understand the audit program. Digitalization changes in business transactions require junior auditors to pay attention to these changes in the audit evidence collection process. For senior auditors who have more audit experience, it will be easier to understand changes in business digitization than junior auditors.

The financial statement audit process is divided into several stages, including planning, testing, and reporting. The audit planning process is the most crucial because this process will determine the efficiency and effectiveness of the audit process [5]. In planning the audit of financial statements, the auditor is required to understand the business processes [6] and the company's accounting system, key internal controls, analyze possible fraudulent actions, determine the level of materiality, analytical test procedures. In the end, the auditor is required to develop a systematic audit program.

Understanding the company's business processes is the main thing needed in the audit process [7]. Entities engaged in the manufacturing industry will, of course, have different business processes compared to the financial services industry, such as banking. The business process must be understood in depth because it will determine the company's incoming and outgoing cash transactions. The different flow of financial transactions will cause the accounting system owned by the company to be different. For example, raw materials are processed into finished materials in the manufacturing industry, which are inventories for the

company. There is an inventory accounting system in the manufacturing industry, which cannot be found in the banking industry [8].

Auditors are also required to identify the company's internal control and analyze the possibility of fraud [9]. The auditor will analyze the possibility of errors in presenting financial statements, which are common errors and errors caused by fraud. Standard errors can be minimized through the company's internal controls. Meanwhile, errors caused by fraud cannot only be minimized by internal control, so the auditor must analyze the possibility of fraud in preparing financial statements [10]

After analyzing internal control and the potential for fraud in the financial statements, the auditor must determine the level of error considered material in the financial statements [11]. The determination of the materiality level must be carried out in detail for all accounts in the financial statements. Therefore, the auditor will test analytical procedures by comparing the data in the financial statements with non-financial data [12] to see which accounts will be tested using more or fewer samples. After all, is done, the auditor will develop a systematic audit program [13].

The audit planning process that produces a systematic audit program will certainly experience changes and changes in business processes with greater use of the internet [2, 14], changes in accounting systems using information technology, changes in internal controls, and information technology-based fraud prevention. , determination of misstatements and assessment of analytical procedures using big data analysis [15, 16]. Various changes due to the use of information technology have prompted a comprehensive emphasis on auditee understanding.

Previous research relating to important changes in the audit planning process in the digitalization era has not been widely conducted. Previous research has focused more on the audit process in the digital era, not specifically on audit planning, as research conducted [2, 17] states that digitalization has brought significant changes in the audit environment, especially in the process of gathering audit evidence. Information technology-based accounting systems produce transaction forms and documents stored in digital documents. Therefore, printed documents are no longer used to verify the validity of documents, which has led to changes in audit procedures in verifying source documents.

Meanwhile, research was conducted [18] that examined the current audit process, which requires audit applications to improve audit results, especially for calculating inventory. Audit applications used in Indonesia include ATLAS, SAS, ACL, and other software. Auditors must systematically document audit

evidence. Therefore, audit software such as ATLAS is needed. Audit software used by public accounting firms will encourage improved quality management. Some audit documents that are not appropriately managed will cause difficulty for the auditor in making audit conclusions.

Research conducted by [13,19, 20] focused on aspects of audit planning but has not explicitly linked digitalization in accounting practice. This study explained that the planning phase was critical because if the audit planning were not carried out systematically, it would cause a decrease in audit quality. Research conducted [13] explicitly describes the process of assessing the risk of material misstatement in the planning phase of the audit that must be carried out appropriately. If the risk assessment is too high from the actual condition, it will cause inefficient audit procedures and impact high audit fees and longer audit times. Meanwhile, if the risk of material misstatement assessment is lower than the actual condition, it will cause ineffective audit procedures and have implications for poor audit quality [10].

Previous researches have not studied much about changes in the audit process due to digitalization or have not explicitly discussed things that auditors must consider in the audit planning phase. Based on this gap, it is crucial to conduct research that identifies important considerations that auditors must carry out in the planning phase in the digitalization era so that a more profound understanding is needed of the condition of the auditee and its impact on the audit procedures that will be established. The purpose of this study is to identify important considerations that must be carried out by junior auditors in the planning phase in the current digitalization era.

### ***1.1. Theory of Planned Behavior And Auditor Behavior***

The attitude determines human behavior that humans and their environment want to do. Ajzen, in 1991 developed a theory of planned behavior, which assumes that humans behave intentionally and consider available information [21]. This theory is a development of the theory of reasoned action developed by Ajzen and Fishbein in 1979. The theory of reasoned action states that human desires are determined by two things, namely 1) attitudes and 2) subjective norms. The theory of planned behavior adds a third element, namely 3) perceived control behavior [22].

Individual attitudes affect behavior, and this will depend on the assessment of whether the existing behavior is favorable or unfavorable. While subjective norms will affect behavior refer to the perceived social pressure to perform or not perform the behavior. Control behavior will affect behavior, depending on the ease or

difficulty of performing the behavior. Based on these three things, a person's behavior will be based on the desire or motivation of the person. However, not all individual conditions have complete control to realize their desires, so there is a control that will affect their actions [21].

In practice, auditors are required to behave professionally. Auditors cannot exercise complete control over their wishes because professional organizations have set audit standards used as guidelines in conducting the audit process. Auditing standards require the auditor to carry out an audit planning process. The audit planning process is an important process that the auditor must carry out. Auditing standard no. 300 regarding planning an audit of financial statements includes planning the involvement of team members, activities, documentation, and audit strategies to be carried out. These things will depend on the risk the auditee has [23]. Therefore, understanding the auditee becomes an important part of planning the audit.

### ***1.2. Financial Statement Audit Planning in the Digital Era***

The audit is a systematic process to determine the degree of conformity between information and criteria; an independent and competent person carries out the audit. One of the increasing needs for audit services is audit services on financial statements. The audits demands happen because of the development of business transactions that cause a separation between those who manage the company and those who own the company. Requests for audit services exist to reduce information risk due to potential moral hazard because company management has more information about the company's condition than shareholders as company owners. In order to reduce information risk, quality audit services are needed. Quality audit reports are produced from an audit process that follows auditing standards.

The audit process in the financial statements consists of several stages, namely the planning process and client acceptance, testing controls and substantive tests of transactions, testing analytical procedures and tests of details of balances, and the audit reporting process. The planning process is critical in the implementation of the audit. Good audit planning will determine good audit quality. In order for the auditor to plan the audit properly, the auditor must carefully conduct an in-depth understanding of the condition of the auditee.

A fraud prevention system will reduce the risk in the audit so that this will have an impact on the extent and less audit evidence collected compared to the condition of the auditee with greater audit risk. The higher the audit risk, the broader the scope of audit evidence

obtained by the auditor. Many factors influenced by the auditor's and the auditee's factors can affect audit failure [10]. Auditor factors related to the competence and independence of auditors in audit assignments [24] The more competent the auditor is, the easier it will be for the auditor to collect and conclude audit evidence. Another factor is related to the auditee; the more open and integrity the entity's management, the easier it will be for the auditor to obtain persuasive audit evidence [25].

The competent auditor is the main factor determining audit quality [26]. Auditors who understand the entity being audited will make audit procedures more effective and efficient. Along with the development of digitalization, there will be many changes in business processes. Therefore, it will impact vital internal controls of the auditee that the auditor must understand. In the end, it will have an impact on different audit procedures. Auditors are required to have additional competencies in the field of information technology quickly in order to adapt to industrial developments.

One of the developments that occurred so massively was the use of an information technology-based accounting system, of course, had implications for the use of audit document sources that were no longer manual to find out economic transactions [1]. A good information technology system will certainly align with the strategy and business objectives set. If the information system cannot support business objectives, it can be said that the system does not have good system governance [27]. Therefore, the auditor needs to know whether the company's information system is in line with the company's business strategy or not.

Companies need to establish the right business strategy because business competition is very competitive, there will be a risk of failing and succeeding in business competition. Therefore, the risk aspect should not be ignored in the process of understanding the auditee [28]. One of the resources to win a business competition is quality information. The current era of big data causes auditors to have access to more information. For auditors, it will be easier to analyze the comparison of company financial data compared to similar industries [14, 15, 16]. An entity's understanding will eventually lead to changes in the collection of audit evidence contained in the audit working papers.

## **2. METHODS**

The research method used to answer the problem identification in this study was the qualitative research methods with data collection techniques through in-depth interviews [29] and field observations. Interviews were conducted semi-structured to resource persons

who have competence in auditing, information technology, and the digital economy. The following is a table 1 of sources:

**Table 1.** Interviewees

Interviewees	Skill	Experience
Interviewees 1	Financial Reporting Audit	4 Years
Interviewees 2	Information Technology	6 Years
Interviewees 3	Digital Economy	2 Years

After in-depth interviews with the sources above, the data validity test was conducted using source and technical triangulation. The source triangulation process is carried out to see the consistency and interrelationships between one source and another to increase the validity of the interview results. After that, data validity was also carried out through a technical triangulation process by comparing the results of interviews with sources, relevant theories, and other secondary document sources [30]. After testing the validity of the data, a table of interview results is made, which can facilitate understanding of the research results through the keywords presented by the participant. Furthermore, conclusions are made regarding the results of this study.

### 3. RESULTS AND DISCUSSION

#### 3.1. Result

Audit planning is the initial phase that becomes a critical point in the success of the audit process. A comprehensive audit planning will result in an effective and efficient audit program. Changes in digital business processes cause significant changes in the audit process. This study aims to identify important considerations that auditors must carry out in the planning phase in the digitalization era. This study provides empirical evidence through interviews conducted with apt sources in their fields. The following are excerpts from interviews which are summarized in table 2 below:

**Table 2.** Summary of interview result

No	Summary of Interview	Interviewees
1	The era of digitalization has significantly changed the company's accounting processes. Source documents created by the company will be interconnected with one another. For example, when a company makes a sale, the sales department will print a sales invoice, then the finance department will print an invoice connected to the sales department.	Interviewees 1 (Financial Reporting Audit)

The accounting department will record sales connected to the data in the sales and finance departments. The connection between these sections causes the accuracy of financial statements to increase because one section to another can control the records. Companies' information technology-based accounting systems are diverse; some use accounting applications sold in the market, such as Zahir, MYOB, Accurate, Journal. Companies can also develop their accounting system to be adapted to the entity's needs. EQUIP and SAP software are the basis of accounting software widely used today for large-scale companies. For example, the EQUIP financial management system can predict financial performance with financial forecasting features that can track profit and loss at the division level or based on company geography. The audit process compares accounting and budget data to the analytical procedure testing. This comparison can determine the level of material misstatement in the financial statements. Comparing company financial data with industry financial data also needs to be done in testing analytical procedures. Currently, XBRL-based financial reporting is developing, a standard business reporting software based on the XBRL XML language used to ensure accessibility of business information and transparency using a uniform format and is usually used by the business intelligence department. Understanding the accounting system used by the auditee will help the auditor make a better audit plan. In audit planning, another important thing is the management of working papers. Through the digitalization era, audit work papers have been developed that make it easier for auditors to verify audit evidence and draw audit conclusions. For example, the development of ATLAS, a Microsoft Excel-based practical application for assisting auditors in carrying out audit procedures according to Auditing Standards and documenting the

	results as a basis for giving opinions.	
2	<p>Information technology-based accounting information systems that are currently developing can encourage the improvement of the quality of financial reports. In addition to showing the many advantages of using information systems, many information technology-based systems do not work properly because they are not for business needs or because the application systems developed often experience technical problems (errors). For example, an application system developed by a business entity requires information about the expiration of raw materials, but the system does not have that menu. So that the application does not help the company's business manage its inventory; therefore, the auditor needs to know IT governance to ensure that the information system used by the company is following the company's business strategy. Through good IT Governance, the company can reduce the risk from using IT (IT risk) and control the IT Process (called IT Control) to be optimal. An understanding of IT Governance consists of an understanding of leadership, organizational structure, and processes that can ensure that the information system run by the company is under the company's business strategy to win the competition. It is undeniable that information is the primary source to win a business competition. Accounting and financial information are important sources of information for companies. The first component, namely leadership, is closely related to information technology decisions used by the company. At the same time, the second component relates to the design of the machine used to move the people in the company by dividing tasks and responsibilities. The third component is the process; this is related to the process carried out by the organizational structure. The auditor must understand IT governance in the auditee information system to make it easier for the auditor to understand audit risk through this</p>	Interviewees 2 (Information Technology)

	understanding: the better IT Governance, the fewer audit risk aspects.	
3	<p>A significant effort in winning the competition is innovating to adapt to market needs. In the current era of information digitalization, human preferences for the products and services offered are numerous. Therefore, companies that can pay attention to changes in consumer behavior and capture signals of consumer needs will succeed in the market. Preferences are not only related to the function or quality of the products and services produced, but the price comparison is also a determining factor for consumers to make choices. Therefore, in today's digital business, prices must be set carefully by considering production costs, profit margins to be obtained, and price offers from competitors. Business decisions can change quickly and dramatically so that a continuous learning process needs to be carried out by companies. Intense competition and significantly changing business strategies lead to high potential risks in the company's business failure. A quality information system must support changes in strategy to produce information that can be used by company management in making decisions.</p>	Interviewees 3 (Digital Economy)

The results of interviews conducted by researchers with the three informants illustrate that there are significant changes that have occurred due to the industrial revolution through the digitization of business transactions, including changes in the accounting system, changes in the form of fraud or errors in information technology-based financial reports, changes in business risks, changes in the process of collecting and evaluating evidence. Transactions will ultimately change the overall process of planning activity. The results of the interviews are also supported by observations made by researchers so that they get an in-depth picture that the audit planning process is the most critical part of the audit process. Changes in economic digitization should be the focus of auditors' attention in planning their audits.

### 3.2. Discussion

Audit planning involves establishing an audit strategy, through audit planning will help the auditor to identify risk areas, resolve potential issues promptly, assist in selecting team members, manage engagements and facilitate the supervision process (Audit Standard 300). Therefore, in the audit planning phase, the auditor must carry out in-depth identification of various changes in the auditee environment in the digitalization era, including understanding:

#### a. Information Technology-Based Accounting System

Digital-based information systems have been widely implemented by small, medium, and large-scale business entities or entities that do not aim for profit. This condition has long led to changes in the audit process, so that in the audit standard 300 concerning planning audits of financial statements, it is stated that the determination of audit strategy needs to consider the impact of the use of information technology on audit procedures, including the availability of data and the expected use of computer-aided audit techniques.

What auditors need to learn is an application system that supports the process of preparing financial statements. There are various kinds of technology-based information systems used, some of which are general applications, and there are also applications explicitly built according to the entity's needs. Among them, various applications such as Zahir, MYOB, Accurate, Journal or EQUIP Software, and SAP are the basis for accounting software widely used today. Each accounting system in the software certainly has different strengths or weaknesses. The weakness of the accounting information system can lead to a higher risk of material misstatement. So the auditor needs to understand how the system works and the flow of documents or reports generated from the system.

The statement from Interviewees one regarding the understanding of the information system is also supported by previous research, which states that the auditor must have a sufficient understanding of the flow of the entity's accounting information system so that the auditor can more easily trace audit source documents [31]. This statement is also in line with auditing standard 300 regarding planning audits of financial statements, which states that the auditor must have a sufficient understanding of the information system of the auditee [23]. The changes in accounting systems using information technology, changes in internal controls, and information technology-based fraud prevention, determination of misstatements and assessment of analytical procedures using big data analysis [15, 16].

#### b. IT Governance and the Likelihood of Digital Fraud

The use of digitization in the accounting system can help significantly to improve the quality of financial reports. However, it cannot be denied that information technology-based information systems are tools that also have limitations without human control. Not a few business entities have to incur high costs to build an information system, but the system cannot support the information needs expected by the company's management. For example, a company requires information on the expiration of raw materials, but the system does not have an "input" menu for the expiration date of raw materials. Therefore, the company cannot manage its inventory properly, so that it is not in line with the company's goal to produce quality products.

The failure of the information system to produce the information needed by management in decision making is a condition that is considered to have a high risk of a material misstatement because the risk of material misstatement will be related to the company's business risk. For companies engaged in the sale of goods, the highest risk of misstatement is in the inventory account. While companies are engaged in the financial services industry, the risk of material misstatement is not in the inventory account because its business processes do not produce inventory, but the account that is considered at risk is the accounts receivable account.

An information system in line with the entity's objectives shows that the entity's information system has good IT governance. Through good IT Governance, the company can reduce the risk from using IT (IT risk) and control the IT Process (called IT Control) to be optimal. An understanding of IT Governance consists of an understanding of leadership, organizational structure, and processes that can ensure that the information system run by the company is by the company's business strategy to win the competition.

Apart from understanding the IT Governance of the entity's information system, it is also necessary to understand the potential for new types of fraud that occur with the digitization of transactions that can affect irregularities in the presentation of financial statements. For example, the existence of cybercrime actions in the form of taking over web access/server down to sabotage the entity's activities.

Interviewees two's statement regarding the importance of understanding IT governance of client information systems and identifying new frauds due to digitalization is in line with what was conveyed by Interviewee three that digital business causes new types of crime models. The auditor's obligation to understand the company's dynamic accounting system is in line with the theory of planned behavior [21] that the auditor's actions can be influenced by his desire to complete the audit assignment. However, in practice,

not all audit assignments are things that the auditor can know because of clients' dynamic and different nature; the auditor must always understand the potential for new types of fraud that occur in the audited entity.

- c. Business risks related to increasingly fierce industry competition

In industrial revolution 4.0, information was the primary source of assets owned by companies. Unlimited access to information causes human preferences for choices of goods and services to become more and more. Therefore, there will be a lot of trade competition. Companies that can win the competition are companies that have a competitive advantage. These advantages can be obtained through a continuous process of innovation.

Companies are starting to develop products that are increasingly specific between one individual and another. For example, in the '90s, when buying cassettes of songs, recording companies would generally offer one album of songs with one category of singers, which were mass-produced and had similar genres. However, in the 21st century, we can access various songs in just one album according to our interest in existing song works. Personal product offerings cause intense competition among traders or producers.

Apart from the function and quality of goods and services, competition also occurs from price differences. Therefore, the role of cost accounting in pricing becomes important. Therefore the price of goods must be calculated carefully by considering production costs, profit margins to be obtained, and price offers from competitors. Price differences are also a determining factor for consumers to make choices. Purchasing decisions can change quickly and dramatically so that a continuous learning process needs to be carried out by producers. Intense competition and significantly changing business strategies lead to high potential risks in the company's business failure. A quality information system must support changes in strategy to produce information that can be used by company management in making a decision.

The statement from interviewees three, which states that there are new risk aspects that the auditor must identify as a result of digitalization, is in line with that expressed by resource interviewees one, which states that the auditor must understand the digital business process to see the possibility of potential material misstatements due to business risks. The auditor's obligation to assess the potential business risk for the risk of misstatement in line with established auditing standard 315 regarding "Identification and Assessment of the Risks of Material Misstatement through Understanding the Entity and Its Environment," which states that risk assessment procedures must be carried out to obtain an understanding of the entity and

its environment, including the entity's internal control, to identify and assess the risks of misstatement. Whether due to fraud or error, material at the financial statement and assertion level [32].

- d. Analytical procedures using big data analysis

One of the procedures that the auditor must perform in the planning phase is analytical procedures. This procedure is carried out to compare financial data with non-financial data, financial data with auditor expectations, last year's financial data with this year's data, this year's financial data with company budget data, and company financial data with industry data. Through these comparisons, the auditor can determine material misstatements and the extent of audit evidence collected.

Comparison between company financial data and industry data is an important procedure, but this was often not the main focus of auditors in the past because of the availability of industry data that can be used for comparison. Currently, XBRL-based financial reporting is developing, a standard business reporting software based on the XML language. XBRL is used to ensure the accessibility of business information and transparency by using a uniform format and is usually used by business intelligence departments. Understanding the accounting system used by the auditee will help the auditor make a better audit plan.

Interviewees two's stated that auditors in the digitalization era in the audit planning process would perform industrial data more easily because of the XBRL format required to prepare financial statements of public companies listed on the Indonesian stock exchange. So the process of analytical testing procedures will provide more persuasive audit evidence. By auditing standard 520 that the auditor must design to perform analytical procedures that are carried out in all phases of the audit both in the planning, testing and even near the end of the audit, analytical procedures must also be carried out to form a consistent overall financial report [33].

- e. Digital Based Audit Working Paper

Audit working papers are important documents for auditors to provide appropriate audit conclusions. Managing working papers in the audit process is needed to achieve good audio quality. In the digitalization era, audit work papers have been developed that make it easier for auditors to verify audit evidence and draw audit conclusions. Digital collection of working papers is also considered environmentally friendly because it will reduce paper usage. Auditors must study the development of audit software that can help manage audit work papers and organize documents from all established audit procedures, such as the development of ATLAS (Audit Tool and Linked Archive System), a Microsoft Excel-based practical application for assisting

auditors in carrying out audit procedures according to Auditing Standards and documenting the results as a basis for giving opinions. The Financial Professional Development Center launched the ATLAS application to help practitioners in the public accounting industry to be able to meet applicable audit standards.

Interviewees one stated that auditors need to study the development of tools that assist in managing audit papers. Changes will occur continuously. Therefore the learning carried out by the auditor must be carried out continuously by always being critical of the audit evidence obtained [34].

#### 4. CONCLUSIONS

Audit planning is an important phase in the audit process. Good audit planning can improve audit quality. There are many changes in today's business processes in the digital era that have implications for the audit process. In the digital era, some things need to be considered by auditors, especially for novice auditors in the audit planning phase, namely a deep understanding of related auditees: 1) Information Technology-Based Accounting System; 2) IT Governance and Possibility of Digital Fraud; 3) Business risks related to increasingly fierce industrial competition; 4) Analytical procedures using big data analysis; and other important matters related to the auditors themselves, namely 5) Digital-Based Audit Working Papers. The study results have implications for current audit learning, which must adapt to the audit environment in the digital era. The limitation of this research is that it focuses on aspects of audit planning in general, not specific to a particular industry, so it is hoped that further research can be developed in this regard.

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#### REFERENCES

- [1] D. Valentinetti and F. Flores Muñoz, "Internet of things: Emerging impacts on digital reporting," *J. Bus. Res.*, vol. 131, no. February, pp. 549–562, 2021.
- [2] R. Manita, N. Elommal, P. Baudier, and L. Hikkerova, "The digital transformation of external audit and its impact on corporate governance," *Technol. Forecast. Soc. Change*, vol. 150, no. August 2019, p. 119751, 2020.
- [3] P. E. Byrnes *et al.*, "Evolution of Auditing: From the Traditional Approach to the Future Audit," *Contin. Audit.*, pp. 285–297, 2018.
- [4] A. Ullrich, J. Enke, M. Teichmann, A. Kreß, and N. Gronau, "Audit - And then what? A roadmap for digitization of learning factories," *Procedia Manuf.*, vol. 31, pp. 162–168, 2019.
- [5] W. Ratanasongtham and P. Ussahawanitchakit, "Strategic audit planning and audit quality: an empirical research of CPAs in Thailand," *Bus. Manag. Rev.*, vol. 7, no. 1, p. 384, 2015.
- [6] B. Ballou, C. E. Earley, and J. S. Rich, "The impact of strategic-positioning information on auditor judgments about business-process performance," *Auditing*, vol. 23, no. 2, pp. 71–88, 2004.
- [7] E. O'Donnell and J. J. Schultz Jr, "The influence of business-process-focused audit support software on analytical procedures judgments," *Audit. A J. Pract. Theory*, vol. 22, no. 2, pp. 265–279, 2003.
- [8] F. E. Apriani and R. N. N. Apandi, "CEO Compensation and Audit Opinion 'Going Concern' Effect Banking Performance Using Data Envelopment Analysis (DEA) Method?," vol. 2021, pp. 256–266, 2021.
- [9] M. Naufal, A. Sofia, I. F. A. Prawira, and R. N. N. Apandi, "Exploring the whistleblowing intention," *Asia Proc. Soc. Sci.*, vol. 5, no. 1, pp. 75–80, 2020.
- [10] R. N. N. Apandi, H. Rossietaa, Fitriany, and L. S. Wondabio, "Does Brainstorming of Auditees Fraud Prevention System Reduce Junior Auditor's Judgment Bias? Evidence from an Experimental Study," *Int. J. Innov. Creat. Chang.*, vol. 12, no. 4, 2020.
- [11] A. Ozeran and N. Gura, "Audit and accounting considerations on cryptoassets and related transactions," *Econ. Ann.*, vol. 184, no. 7–8, pp. 124–132, 2020.
- [12] J. Cohen, G. Krishnamoorthy, and A. Wright, "Waste Is Our Business, Inc.: The importance of non-financial information in the audit planning process," *J. Account. Educ.*, vol. 26, no. 3, pp. 166–178, 2008.
- [13] J. E. Rummell and A. B. Weickgenannt, "Planning for Substantive Testing at the Assertion Level: A Training Activity and Mini Case," *Curr. Issues Audit.*, vol. 15, no. 1, pp. I15–I30, 2021.
- [14] R. Rakipi, F. De Santis, and G. D'Onza, "Correlates of the internal audit function's use of data analytics in the big data era: Global evidence," *J. Int. Accounting, Audit. Tax.*, vol. 42, p. 100357, 2021.



- [15] K. Enget, G. D. Saucedo, and N. S. Wright, "Mystery, Inc.: A Big Data case," *J. Account. Educ.*, vol. 38, pp. 9–22, 2017.
- [16] M. Zhou, "Financial auditing big data platform based on. FPGA and convolutional neural network," *Microprocess. Microsyst.*, pp. 130461–130465, 2020.
- [17] M. Werner, M. Wiese, and A. Maas, "Embedding process mining into financial statement audits," *Int. J. Account. Inf. Syst.*, vol. 41, no. xxxx, p. 100514, 2021.
- [18] A. Gross, J. Hoelscher, B. J. Reed, and G. E. Sierra, "The new nuts and bolts of auditing: Technological innovation in inventorying inventory," *J. Account. Educ.*, vol. 52, p. 100679, 2020.
- [19] S. S. Dikolli, S. A. McCracken, and J. B. Walawski, "Audit-Planning Judgments and Client-Employee Compensation Contracts," *Behav. Res. Account.*, vol. 16, no. 1, pp. 45–61, 2004.
- [20] X. Wang, T. Zhao, and C. Ter Chang, "An integrated FAHP-MCGP approach to project selection and resource allocation in risk-based internal audit planning: A case study," *Comput. Ind. Eng.*, vol. 152, p. 107012, 2021.
- [21] I. Ajzen, "The Theory of Planned Behavior," *Organ. Behav. Hum. Decis. Process.*, vol. 50, no. 2, pp. 179–211, 1991.
- [22] M. Fishbein, "A theory of reasoned action: Some applications and implications," *Nebraska Symp. Motiv.*, vol. 27, no. 65–116, 1979.
- [23] K. A. Saleem, "The Impact of the Requirements of International Audit Standard No (300): Planning for Auditing Financial Statements on the Quality of the Audit Report," *Int. J. Econ. Financ.*, vol. 10, no. 12, pp. 19–36, 2018.
- [24] D. Setyawati and R. N. N. Apandi, "Positive Abnormal Audit Fee dan Koneksi Politik Terhadap Kualitas Audit," *J. ASET (Akuntansi Riset)*, vol. 11, no. 2, pp. 271–278, 2019.
- [25] J. A. Vigim, R. N. N. Apandi, A. Widarsono, and I. F. A. Prawira, "How Auditor Limitation And Corporate Tax Governance Effect On Audit Quality," 2018.
- [26] N. Z. M. Sari and A. Susanto, "The effect of auditor competency and work experience on information systems Audit quality and supply chain (case study: Indonesian Bank)," *Int. J. Supply Chain Manag.*, vol. 7, no. 5, pp. 747–750, 2018.
- [27] M. Alles and G. L. Gray, "'The first mile problem': Deriving an endogenous demand for auditing in blockchain-based business processes," *Int. J. Account. Inf. Syst.*, vol. 38, no. xxxx, p. 100465, 2020.
- [28] A. M. Zaicéanu, E. Hlaciuc, and A. N. C. Lucan, "Methods for Risk Identification and Assessment in Financial Auditing," *Procedia Econ. Financ.*, vol. 32, no. 15, pp. 595–602, 2015.
- [29] S. Knox and A. W. Burkard, "Qualitative research interviews," *Psychother. Res.*, vol. 19, no. 4–5, pp. 566–575, 2009.
- [30] B. S. Bachri, "Meyakinkan Validitas Data Melalui Triangulasi Pada Penelitian Kualitatif," *Tekno. Pendidik.*, vol. 10, pp. 46–62, 2010.
- [31] M. Axelsen, P. Green, and G. Ridley, "Explaining the information systems auditor role in the public sector financial audit," *Int. J. Account. Inf. Syst.*, vol. 24, pp. 15–31, 2017.
- [32] W. I. A. RISK, "audit risk. Auditor Business Risk, and Risk Adaptation," *Audit. A.*
- [33] K. Samaha and M. Hegazy, "An empirical investigation of the use of ISA 520 'analytical procedures' among Big 4 versus non-Big 4 audit firms in Egypt," *Manag. Audit. J.*, vol. 25, no. 9, pp. 882–911, 2010.
- [34] R. N. N. Apandi, A. Sofia, and H. Zulkhaimi, "Understanding of Auditor Professional Skeptis : Are The Sequence of Evidence and Critical Thinking Determining Factors ? ( Experimental Research )," *Int. J. Bus. Rev. (The Jobs Rev.)*, vol. 3, no. 2, pp. 53–64, 2020.