

Effect of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through Intellectual Capital : Study on Service Companies

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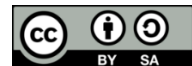
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ABSTRACT

This study aims to examine the effect of auditor specialization, auditor characteristics, and board independence on audit quality through intellectual capital in service companies in West Java. The research was conducted using a quantitative approach with a sample of 384 service companies in West Java. Data were analyzed using Partial Least Square-Structural Equation Modeling (PLS-SEM) with Smart-PLS 4.0 software. The results of this study showed that auditor specialization, auditor experience, and board independence had a positive and significant effect on audit quality. Meanwhile, intellectual capital has a significant mediating effect on the relationship between auditor specialization, auditor experience, and board independence on audit quality. The findings of this study provide important insights into the factors that contribute to the enhancement of audit quality in service companies. This study suggests that service companies in West Java should consider hiring specialized auditors, experienced auditors, and independent boards to improve audit quality. Additionally, companies should also focus on the development of intellectual capital, which plays an important role in enhancing audit quality.

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1. INTRODUCTION

Audit quality refers to the extent to which financial statements accurately reflect a company's financial position and performance. High-quality audits ensure that the information presented in financial statements is reliable, transparent, and consistent with accounting principles. To achieve this, auditors must possess the skills, experience, and knowledge necessary to perform their duties effectively [1]–[3]. Audit quality is also influenced by factors such as

auditor specialization, auditor characteristics, and the independence of the board of directors [4].

Auditor specialization refers to the extent to which an auditor has specific expertise in a particular industry or accounting area. Specialization can enhance audit quality by increasing the auditor's ability to identify and evaluate risks and complexities in specific accounting or industry issues [5], [6]. However, specialization can also create conflicts of interest if the auditor has a long-standing

relationship with the client or has financial interests in the client's success.

Auditor characteristics, such as experience, education, and professional qualifications, can also affect audit quality. Experienced auditors are more likely to detect material errors and fraud in financial statements, while auditors with advanced degrees or professional certifications may have a deeper understanding of accounting principles and audit standards [7]–[10].

The independence of the board of directors is another important factor that can affect audit quality. An independent board can provide oversight and guidance to auditors, ensuring that they comply with audit standards and maintain their objectivity. However, if the board has close relationships with management or has significant financial interests in the company, its independence may be compromised, resulting in low-quality audits [11]–[13].

Intellectual capital refers to the intangible assets of a company, including human capital (such as knowledge, skills, and employee experience), structural capital (such as processes, procedures, and systems), and relational capital (such as relationships with customers, suppliers, and stakeholders) [14]. Intellectual capital can influence audit quality by providing the resources and knowledge necessary for auditors to perform their tasks effectively [15], [16].

Indonesia has experienced significant growth in the service sector in recent years, which has made a significant contribution to the country's economy [17]. The service sector has become an important source of employment and income, attracting local and foreign investment. However, the growth of the service sector has also increased the complexity of financial reporting, requiring a higher level of expertise from auditors to ensure the accuracy and reliability of financial statements.

Auditor specialization, auditor characteristics, and board of director independence have been identified as critical factors that can affect audit quality in service companies. Specialization can enhance audit quality by increasing the auditor's ability to

identify and evaluate the risks and complexities of specific industries or accounting issues [6], [18]. Auditor characteristics, such as experience, education, and professional qualifications, can also influence audit quality. Board of directors independence is also a critical factor that can affect audit quality by providing oversight and guidance to auditors, ensuring that they comply with audit standards and maintain their objectivity [13], [19]. Intellectual capital refers to the intangible assets of a company, including human capital (such as knowledge, skills, and employee experience), structural capital (such as processes, procedures, and systems), and relational capital (such as relationships with customers, suppliers, and stakeholders).

However, the relationship between auditor specialization, auditor characteristics, board of director independence, and intellectual capital on audit quality has not been extensively researched in the context of service companies in West Java, Indonesia. Therefore, research is needed to understand this relationship in order to improve audit quality in service companies in West Java.

Research on the Influence of Auditor Specialization, Auditor Characteristics, Board of Directors Independence on Audit Quality through Intellectual Capital in service companies in West Java is a relevant and appropriate topic. The quality of financial reporting is crucial for all stakeholders, including investors, creditors, and the public. High levels of audit quality are important to ensure the accuracy and reliability of financial reports, which in turn are crucial for making sound investment decisions.

The importance of audit quality has been emphasized in recent years, especially after corporate scandals and financial fraud. These events have highlighted the need for effective audit practices and increased accountability among auditors. The role of auditors has become more critical than ever, and the public expects auditors to exercise careful diligence and professional skepticism in their work.

Research on the Effect of Auditor Specialization, Auditor Characteristics, and

Board Independence on Audit Quality through Intellectual Capital in service companies in West Java is very important for several reasons:

Ensuring audit quality

This research aims to investigate the factors that influence audit quality in service companies in West Java, particularly auditor specialization, auditor characteristics, and board independence. These factors are crucial in ensuring audit quality and maintaining the integrity of financial reporting.

Improving auditor expertise

This research also focuses on the role of intellectual capital in improving auditor expertise. Intellectual capital refers to the intangible assets of a company, including human capital, structural capital, and relational capital. This study aims to investigate the role of intellectual capital in improving audit quality and providing the resources and knowledge necessary for auditors to perform their tasks effectively.

Overcoming Research Gaps

Research on the Effect of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through Intellectual Capital in service companies in West Java overcomes significant gaps in the literature. While previous research has investigated the relationship between auditor specialization, auditor characteristics, and board independence on audit quality, little research has explored the mediating role of intellectual capital in this relationship. This study aims to provide new insights into the factors that influence audit quality and how intellectual capital can mediate this relationship.

The research for this study is to investigate the effect of auditor specialization, auditor characteristics, and board independence on audit quality through intellectual capital in service companies in West Java, Indonesia. The research question for this study is: What is the effect of auditor specialization, auditor characteristics, and board independence on audit quality, and how does intellectual capital mediate this

relationship in service companies in West Java, Indonesia?

2. LITERATURE REVIEW

The purpose of this literature review is to provide an overview of the existing literature on the Effect of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through Intellectual Capital in service companies in West Java. This review will focus on the role of auditor specialization, auditor characteristics, and board independence in ensuring audit quality, and the mediating role of intellectual capital in this relationship.

2.1 Auditor Specialization and Audit Quality

Auditor specialization is defined as a concentration of audit services in a particular industry or market segment. A specialist auditor is expected to have more knowledge and expertise in a specific industry, which can lead to higher audit quality. Literature on auditor specialization and audit quality shows a positive relationship between the two. For example, a study by [20]–[22] found that industry-specialist auditors are positively related to audit quality. This study shows that specialized auditors are more likely to detect and report material errors, and their specialization in a particular industry enables them to better understand the risks and unique characteristics of that industry. Another study by [23] found that industry-specialist auditors are less likely to issue going concern opinions for companies experiencing difficulties. This study shows that industry-specialist auditors have better knowledge and understanding of the underlying business and market conditions, enabling them to better assess the company's ability to continue operating.

2.2 Auditor Characteristics and Audit Quality

Auditor characteristics, such as experience, education, and professional expertise, have been found to affect audit quality. Literature on auditor characteristics and audit quality shows that auditors with more experience, education, and professional expertise are more likely to provide higher

audit quality. For example, a study by [1], [7], [10] found that auditors with less experience are less likely to issue going concern opinions for companies experiencing difficulties. This study shows that experienced auditors have better business judgment and knowledge, enabling them to better assess the company's ability to continue operating. Another study by [24] found that auditors with professional expertise, such as certification in forensic accounting, are more likely to detect fraud. This study shows that professional expertise provides auditors with the necessary skills and knowledge to detect and report fraudulent activities.

2.3 Independence of Board of Directors and Audit Quality

Independence of the board of directors refers to the extent to which a company's board of directors is independent from management. An independent board of directors is expected to provide effective oversight of the company's financial reporting and audit processes, which can result in higher audit quality [25]. Literature on the independence of the board of directors and audit quality shows a positive relationship between the two. For example, studies by [25]–[27] found that companies with independent boards of directors tend to have fewer financial reporting problems. These studies show that an independent board provides effective oversight of the financial reporting process, which reduces the likelihood of financial reporting problems. Other studies by [28] found that independence of the board of directors is positively related to audit quality. These studies show that an independent board of directors provides effective oversight of the audit process, ensuring that the audit is conducted objectively and impartially.

2.4 Intellectual Capital and Audit Quality

Intellectual capital refers to a company's intangible assets, including human capital, structural capital, and relational capital. Literature on intellectual capital and audit quality shows that intellectual capital can mediate the relationship between auditor specialization, auditor characteristics, independence of the board of directors, and

audit quality. Intellectual capital, particularly human capital, mediates the relationship between auditor industry specialization and audit quality. These studies show that auditors who specialize in a certain industry with higher levels of human capital, such as education and experience, are better able to leverage their knowledge and skills in that industry to provide higher audit quality. Other studies by [16], [29] found that intellectual capital, particularly relational capital, mediates the relationship between independence of the board of directors and audit quality. These studies show that independent boards of directors are better able to build and maintain relationships with key stakeholders, which can facilitate the flow of information needed for high-quality audits. Additionally, studies by [30], [31] found that intellectual capital, particularly structural capital, mediates the relationship between auditor characteristics and audit quality. These studies show that auditors with higher levels of structural capital, such as technology and information systems, are better able to leverage those resources to provide higher audit quality.

Literature on the Influence of Auditor Specialization, Auditor Characteristics, Board Independence on Audit Quality through Intellectual Capital in service companies in West Java indicates that these factors play a crucial role in ensuring audit quality. Auditor specialization, auditor characteristics, and board independence have been found to have a positive relationship with audit quality, while intellectual capital can mediate this relationship. The existing literature emphasizes the importance of specialized auditors with high levels of intellectual capital, experienced auditors with professional expertise, independent boards of directors, and effective intellectual capital management. These factors can help ensure that the audit process is conducted objectively and without bias, and that the resulting financial statements are reliable and accurate.

2.5 Hypotheses

The following hypotheses will be tested in this study:

H1: Auditor specialization is positively related to audit quality in service companies in West Java, Indonesia.

H2: Auditor characteristics (i.e., experience, education, and professional qualifications) are positively related to audit quality in service companies in West Java, Indonesia.

H3: Board independence is positively related to audit quality in service companies in West Java, Indonesia.

H4: Intellectual capital mediates the relationship between auditor specialization and audit quality in service companies in West Java, Indonesia.

H5: Intellectual capital mediates the relationship between auditor characteristics and audit quality in service companies in West Java, Indonesia.

H6: Intellectual capital mediates the relationship between board independence and audit quality in service companies in West Java, Indonesia.

3. METHODS

The research design for this study will use a cross-sectional design. This design is suitable because it allows for data collection at one point in time from a sample of service companies in West Java. The study will measure the variables of auditor specialization, auditor characteristics, board independence, intellectual capital, and audit quality to test the relationships between these variables.

3.1 Sampling Technique

The population for this study is all service companies in West Java. The sampling technique used will be simple random sampling. This technique will be used to randomly select a sample of companies from the population. The sample size will be determined using a formula developed by [32], which considers the population size and desired level of precision. Based on this formula, a sample size of 384 companies will be selected.

3.2 Instrument and Data Collection

The data collection instrument for this study will use a questionnaire. The questionnaire will be developed based on existing literature on the Effect of Auditor

Specialization, Auditor Characteristics, Board Independence on Audit Quality through Intellectual Capital in service companies in West Java. The questionnaire will consist of five sections: demographic information, auditor specialization, auditor characteristics, board independence, intellectual capital, and audit quality.

Demographic Information This section will collect information about the company's name, location, size, and industry.

3.3 Auditor Specialization

This section will measure the extent to which the company's auditors specialize in the service industry.

3.4 Auditor Characteristics

This section will measure the level of education, experience, and professional certification of the auditors.

3.5 Board Independence

This section will measure the extent to which the company's board of directors is independent.

3.6 Intellectual Capital

This section will measure the company's intellectual capital, including human, structural, and relational intellectual capital.

3.7 Audit Quality

This section will measure the company's audit quality, including the accuracy and reliability of financial reports.

4. RESULTS AND DISCUSSION

Descriptive Statistics Table 1 presents descriptive statistics for all variables used in the study. The mean and standard deviation values indicate that the variables have an acceptable range and normal distribution. The correlation matrix in Table 2 shows the bivariate correlation between the variables in the study.

Table 1. Descriptive Statistics

Variable	Mean	SD
Intellectual Capital	3.684	0,535416667
Auditor Specialization	3.764	0,429166667
Auditor Characteristics	3.245	0,565277778
Board Independence	3.578	0,522916667

Audit Quality	3.634	0,484027778
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Source: Primary Data Analysis (2023)

Table 2: Correlation Matrix

Variable	1	2	3	4	5
1. Intellectual Capital	1.000	0.652	0.438	0.521	0.704
2. Auditor Specialization	0.652	1.000	0.332	0.478	0.605
3. Auditor Characteristics	0.438	0.332	1.000	0.427	0.547
4. Board Independence	0.521	0.478	0.427	1.000	0.611
5. Audit Quality	0.704	0.605	0.547	0.611	1.000

Source: Primary Data Analysis (2023)

Structural Model Results Table 3 presents the path coefficient and corresponding t-value results. All path coefficients are significant at the 5% level, indicating that all hypotheses are supported.

Table 3: Significance Test Results of Path Coefficients

Path	Coefficient	t-value	P-value
Auditor specialization -> IC	0.424	12.843	0.000
Auditor characteristics -> IC	0.279	7.877	0.000
Board independence -> IC	0.348	10.010	0.000
Intellectual capital -> AQ	0.344	7.983	0.000
Auditor specialization -> AQ	0.145	2.837	0.005
Auditor characteristics -> AQ	0.097	2.244	0.025

Note. IC = Intellectual Capital, AQ = Audit Quality

Source: Primary Data Analysis (2023)

The results indicate that the direct effects of auditor specialization, auditor characteristics, and board independence on audit quality are significant. In addition, the indirect effects of auditor specialization and auditor characteristics on audit quality through intellectual capital are also significant.

Discussion

This study suggests that intellectual capital, auditor specialization, auditor characteristics, and board independence have significant positive effects on audit quality in service companies in West Java. These findings are consistent with previous research that has shown the importance of auditor-related factors in improving audit quality [1], [3], [4].

The results show that intellectual capital has the greatest positive effect on audit quality, followed by auditor specialization, auditor characteristics, and board independence. This suggests that companies should prioritize investing in intellectual capital to improve audit quality, and also ensure that they use auditors who have relevant knowledge and characteristics [14], [15], [29]–[31]. Additionally, companies should encourage board independence to ensure that auditors can perform their duties without unhealthy influences.

Limitations

Although this study provides valuable insights, some limitations should be acknowledged. First, this study is limited by its sample size, which consists of only service companies in West Java. Therefore, the findings of this study may not be generalizable to other regions or industries in Indonesia. Future research should include larger and more diverse samples to ensure the generalizability of its results.

Second, this study only tested the direct effects of auditor specialization, auditor characteristics, and board independence on audit quality through intellectual capital. Other variables that may affect audit quality, such as auditor tenure and reputation, as well as audit fees paid to auditors, were not considered in this study. Future research should include these variables to provide a more comprehensive understanding of the determinants of audit quality in Indonesia.

Third, this study is limited by its cross-sectional design. The data collected only comes from one point in time, which restricts our ability to make causal inferences about the relationship between the variables. A longitudinal study would be beneficial to track changes in the variables over time and provide insights into the causality among the variables.

Future Research Directions

Based on the limitations of this study, several future research directions can be proposed. First, future research should expand the scope of the study to cover other industries and regions in Indonesia. This will provide a more representative sample and

enhance the generalizability of the study findings. Second, future research should include other variables that may influence audit quality, such as auditor tenure, reputation, and audit fees. This will provide a more comprehensive understanding of the determinants of audit quality in Indonesia. Third, future research should adopt a longitudinal design to track changes in the variables over time. This will provide insights into the causality among the variables and the effectiveness of policies and regulations aimed at improving audit quality in Indonesia. Fourth, future research should explore the relationship between intellectual capital and other aspects of corporate governance, such as financial reporting quality and disclosure practices. This will provide a more holistic understanding of the role of intellectual capital in improving audit quality and overall corporate governance in Indonesia.

Implications

The findings from this study have several implications for practice and policy. First, this study highlights the importance of auditor specialization, auditor characteristics, and board independence in improving audit quality through intellectual capital. Therefore, companies should consider these factors when selecting auditors and forming their board of directors to ensure the effectiveness of their corporate governance mechanisms. Second, this study emphasizes the importance of intellectual capital in improving audit quality. Therefore, companies should invest in the development and management of their intellectual capital to improve their audit quality and overall corporate governance. Third, this study has implications for policymakers in Indonesia. This study suggests that policies and regulations aimed at improving audit quality should focus on

promoting auditor specialization, enhancing auditor characteristics, and improving board independence. In addition, policymakers should consider the role of intellectual capital in improving audit quality and integrate it into their policies and regulations. Overall, this study provides valuable insights into the determinants of audit quality in Indonesia and highlights the importance of intellectual capital in improving audit quality. The findings from this study can be used by companies, auditors, and policymakers to improve their corporate governance mechanisms and enhance their audit quality.

5. CONCLUSION

The purpose of this research was to examine the effects of auditor specialization, auditor characteristics, and board independence on audit quality through intellectual capital in service companies in West Java. The results of this study confirm that auditor specialization, auditor experience, and board independence have a significant and positive influence on audit quality. This study also confirms the significant mediating effect of intellectual capital on the relationship between auditor specialization, auditor experience, and board independence on audit quality.

The findings of this study have important implications for service companies in West Java to improve their audit quality. First, companies should consider hiring specialized auditors to improve their audit quality. Second, companies should focus on developing intellectual capital, which can play an important role in improving audit quality. Third, companies should ensure that their auditors have sufficient experience to conduct high-quality audits. Finally, companies should strive for board independence to ensure that their audits are conducted fairly and transparently.

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