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# The impact of board structure on accounting information quality in the context of modern accounting systems



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#### A B S T R A C T

This study examines the relationship between the quality of accounting information and the composition and structure of an organization's board of directors. Given the importance of accurate and transparent financial reporting for decision-making, the study explores how different board characteristics influence the reliability, relevance, and clarity of accounting data. It also considers how organizational features, industry-specific factors, and regulatory environments may moderate this relationship. A mixedmethods approach is used, combining quantitative analysis of financial data with qualitative insights gathered from surveys or interviews with board members and financial executives. By integrating these methods, the study aims to provide a comprehensive understanding of how board structure impacts accounting information quality. The findings have important implications for corporate governance, regulatory policies, and strategic business decisions. This research offers valuable insights for investors, policymakers, auditors, and company leaders, supporting greater accountability and transparency in financial reporting.

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#### 1. Introduction

The composition of the board of directors is crucial in determining organizational strategies, policies, and general governance in the fast-paced world of contemporary business (Alruwaili et al., 2024; Fenwick et al., 2019). The quality of accounting information, which forms the basis of corporate decision-making processes, is a crucial aspect of this structure. Modern technology has brought about substantial changes in the dynamics of board governance, which creates opportunities and difficulties in improving the relevance and dependability of accounting information (Hamza et al., 2024; Hutahayan, 2020). This study examines the complex link between the organizational structure of the board of directors and the accuracy of accounting data, with an emphasis on the role that contemporary technology plays as a catalyst in this relationship. We explore how board diversity, competence, independence, and composition have changed over time and how these criteria affect the

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timeliness, integrity, and openness of financial reporting.

Technological breakthroughs in the current digital era have completely changed how businesses collect, handle, and distribute financial data (Ansong and Boateng, 2019). These developments provide hitherto unseen potential to optimize accounting procedures, spot new trends, and reduce risks (Alnor, 2024b; Mohamed et al., 2024). Examples of these advances include data analytics tools and automated reporting systems (Appelbaum et al., 2017). But to use these technologies effectively, a structure that encourages board creativity, flexibility, and strategic vision is required (Dittes et al., 2019). Furthermore, the prevalence of data breaches and cyberattacks emphasizes the importance of strong governance frameworks in protecting the integrity and confidentiality of financial data (Cyriac and Sadath, 2019). The board's makeup, especially about cybersecurity experience, is critical for guaranteeing resilience against changing cyber threats (Annarelli et al., 2020). Furthermore, the board's responsibilities now include more than just traditional financial measures due to the increased emphasis on environmental, social, and governance (ESG) factors. In addition to improving stakeholder participation, a diverse and inclusive board composition improves the quality of non-financial disclosures by offering a thorough understanding of the organization's performance and long-term viability (Camilleri, 2018).

This study contributes to the continuing discussion of corporate governance and accounting procedures in the digital era by merging empirical theoretical ideas, and evidence. practical consequences. By gaining а sophisticated understanding of the ways in which contemporary technology and the board of directors' structure interact, companies can formulate tactics to maximize dependability, pertinence, and ease access financial consequently to data, cultivating confidence, openness, and value generation for all parties involved.

This study aims to determine how the diversity. independence, and experience of the board of directors affect the caliber of accounting information. Additionally, frameworks and criteria objectively assess the caliber of accounting data while taking timeliness, relevance, accuracy, and dependability into account. Further, we investigate how to improve the analysis of board structure and its influence on the quality of accounting information by utilizing contemporary technologies, such as artificial intelligence, machine learning, and big data analytics. Additionally, we evaluate the connection between board composition and accounting information quality by conducting case studies and empirical analyses across a range of industries and businesses. Moreover, we conduct a long-term investigation to monitor modifications in the composition of the board and the caliber of the accounting data over time, recognizing patterns and trends. Additionally, we contrast how various board configurations affect accounting information accuracy in various industries, regulatory contexts, and firm sizes. In addition, we examine the potential mediating elements that can affect the relationship between board structure and accounting information quality, such as CEO traits, corporate governance procedures, and the caliber of external audits. Incorporate stakeholder viewpoints, such as those of investors, regulators, and management, to learn about their expectations and opinions about the board's function in guaranteeing accurate accounting information. Furthermore, it offers policymakers and corporate governance practitioners' perspectives and suggestions on how best to optimize board composition to improve the quality of accounting information. Finally, we discuss ethical issues pertaining to data privacy, openness, and possible conflicts of interest while using contemporary technology to assess the caliber of accounting information and board composition.

There are several gaps in research on how board structure affects the quality of accounting information, especially about the integration of contemporary accounting systems. Although board attributes such as governance, communication, transparency, and board experience have been researched, little is known about how they interact with cutting-edge technologies, such as artificial intelligence, blockchain, or ERP. Research frequently ignores developing board qualities, including technological knowledge, as well as geographical, cultural, and industry-specific variance. Longitudinal data, reliable measures of accounting system effectiveness, and examination of mediating elements such as business culture or regulatory pressures are also lacking. Additionally, useful insights from case studies and their influence on stakeholders' views are still not adequately covered.

This study contributes to literature in several ways. First, it adds to the body of knowledge on the subject. Second, real-time reporting and financial monitoring are made possible using data contemporary accounting software and data analytics tools (Vasarhelyi et al., 2018). Thus, board members are guaranteed access to current information, allowing them to act quickly and decisively (Murdock, 2016). Third, technology can facilitate increased accountability and openness in financial reporting (Al-Htaybat and von Alberti-Alhtaybat, 2017). Board members have access to comprehensive financial data via online portals or dashboards, guaranteeing that all interested parties are aware of the company's financial performance (Vlachopoulou et al., 2021). Fourth, complex financial data may now be visually represented via interactive dashboards, graphs, and charts thanks to modern technology. This facilitates board members' more effective comprehension and interpretation of financial data, which improves decision-making (Gupta et al., 2021). Fifth, potential financial hazards and irregularities in accounting data can be found using sophisticated analytics technologies (Richins et al., 2017). Boards can ensure the integrity of financial reporting and proactively address risks by utilizing machine learning algorithms and predictive analytics. Sixth, regardless of where they are located, technology makes it easier for board members to collaborate and communicate with each other Gan, 2016). Governance (Balakrishnan and processes are made more efficient and successful using communication tools, collaborative document sharing platforms, and virtual board meetings (Alreshidi et al., 2017). Seventh: Integrated compliance capabilities that assist businesses in adhering to legal obligations and accounting standards are frequently found in contemporary accounting software (Appiah et al., 2016). By doing this, financial reporting is made sure to be accurate, consistent, and in compliance with all relevant rules. Eighth, making use of technology makes it possible to build an extensive audit trail that records all modifications and transactions made within the accounting system (Dai and Vasarhelyi, 2017). This openness and gives increases stakeholders confidence about the precision and dependability of financial data (García-Sánchez et al., 2019). Finally: Putting strong cybersecurity measures in place is crucial to protecting financial data given the growing threat of cyber-attacks (Kafi and Akter, 2023). Access restrictions, encryption, and other security measures can be implemented with the aid of technology to safeguard confidential financial data

against breaches or unwanted access (Shukla et al., 2022).

### 2. Literature review

Many theoretical vantage points can be used to investigate how the composition of the board of directors affects the caliber of accounting information, particularly considering the impact of contemporary technology (Alsalim et al., 2018). According to the theory of agency, conflicting objectives lead to conflicts of interest between agents, shareholders, principals, and management (Panda and Leepsa, 2017; Tran Thanh Thuy, 2025). The board of directors serves as a mediator to lessen the intensity of these disputes (Alnor, 2024b). The makeup, independence, and experience of a board can impact its capacity to oversee management and guarantee accurate financial reporting in the context of accounting information quality, particularly when contemporary technology is involved (Singh and Alhulail, 2023). Technology can help supply data and analytics in real time, improving the board's capacity for monitoring (Bradley et al., 2019). The theory of resource dependence emphasizes the significance of resource dependencies between organizations and their surroundings (Biermann and Harsch, 2017). Access to and management of vital resources, especially information, are vital functions of boards of directors (Puthusserry et al., 2021). With the help of modern technology, boards can access a plethora of non-financial and financial data instantly, which can enhance their decision-making abilities and, as a result, the caliber of accounting information (Benzerrouk et al., 2024; Komal et al., 2023). Theory of stewardship According to stewardship theory, managers prioritize the interests of shareholders in their role as stewards (Löhde et al., 2021). According to this theory, managerial conduct and, in turn, the caliber of financial reporting are influenced by the composition of the board. With the help of contemporary technology, boards may now obtain quicker and more thorough financial data, which enhances their ability to assess management's stewardship and guarantees the integrity and transparency of accounting data (Wolf, 2023). The theory of institutions holds that organizations adopt institutional norms and practices to acquire resources and legitimacy (Jeong and Kim, 2019). Boards of directors have the option to organize themselves to meet institutional requirements for independence, diversity, and expertise (Kolev et al., 2019). Boards can use contemporary technology to meet stakeholder expectations for openness and accountability in the digital age, which will improve the caliber of accounting data and preserve their credibility (Alayli, 2023). According to this idea, the theory of contingency depends on the congruence of organizational structures with contextual elements, including technology, environment, and strategy. Boards may implement procedures and structures related to accounting information quality that are dependent on the state of the technology. With the

capabilities that modern technology offers for data analytics, risk assessment, and communication, boards can customize their oversight procedures to guarantee the accuracy and applicability of accounting data (Austin et al., 2021). Theory of information processing: This theory focuses on information gathering, processing, and decisionmaking processes used by companies (Joseph and Gaba, 2020). Boards now have access to enormous volumes of data that can be analyzed more quickly because of the development of modern technologies (Ghazal et al., 2021). Boards can assess the quality of accounting information and make more informed choices by using artificial intelligence and sophisticated analytics to glean valuable insights from financial data (Bose et al., 2023).

## 2.1. Board experience and quality of accounting information

A board with a broad range of experience in technology, accounting, finance, and industryspecific knowledge can offer insightful advice on how to develop and operate accounting systems that utilize contemporary technology (Austin et al., 2021). Financially savvy directors can guarantee that the selected technology complies with legal and accounting regulations, improving the accuracy and dependability of financial reporting (Al-Okaily et al., Experienced 2023). board members can appropriately analyze accounting data and apply it to decision-making procedures (Merendino et al., 2018). Better overall organizational performance results from their ability to see patterns, evaluate financial performance, and make strategic decisions based on trustworthy financial data (Grewatsch and Kleindienst, 2017). Regulations and accounting standards change over time (Abrahams et al., 2024). Experienced board members are better able to handle these changes and guarantee prompt compliance, thus reducing interference with the accuracy and dependability of accounting information.

The findings of a few earlier studies show that single-board characteristic measures are superior to multifactor business and academic governance indicators for the detection and interpretation of the quality of accounting information, such as Afolabi et al. (2023) and Gouiaa and Zéghal (2014). Based on the above discussion and review of previous literature and studies, the researcher can build the following hypothesis proposed.

**H1:** There is a positive relationship between board experience and quality of accounting information.

A varied board with experience in industry, finance, and technology guarantees regulatory compliance, improves the accuracy of financial reporting, conducts efficient data analysis, and adjusts to changing standards for better organizational performance.

## **2.2.** Governance and oversight and quality of accounting information

The board of directors is responsible for the company's financial reporting procedures. A wellorganized board with the right committees (such as the audit committee) can effectively oversee and manage accounting procedures (Cohen et al., 2017). Boards can ensure transparency and accountability by utilizing real-time monitoring and analytics tools with current technology to identify anomalies or irregularities in financial data (Abrahams et al., 2024). Board members with experience can effectively oversee financial reporting systems, especially if they have a background in accounting. auditing, or finance, or have financial expertise (Li and Tongkong, 2024). They are more qualified to evaluate financial risks, comprehend complicated accounting challenges, and guarantee adherence to rules and standards in accounting. Experienced board members are more likely to set up strong internal controls over financial reporting and governance frameworks (Bentley-Goode et al., 2017). Good governance frameworks increase the dependability and integrity of accounting information by lowering the possibility of fraud, irregularities, or accounting errors (Alaoubi and Almomani, 2021). The results of a few previous studies demonstrate that when it comes to the identification and interpretation of the quality of accounting information, single-board characteristic measures outperform multifactor business and academic governance indicators, such as Afolabi et al., (2023), Aryani and Suhardjanto (2016), and Gouiaa and Zéghal (2014). The following hypothesis can be developed based on the discussion above and the evaluation of earlier studies and literature:

**H2:** There is a positive relationship between governance and oversight and quality of accounting information.

An encountered, well-structured board with specialized committees enhances financial reporting through strong management, real-time monitoring, and adherence to regulations, ensuring openness, accuracy, and reduced financial risks.

## 2.3. Communication and transparency and quality of accounting information

Maintaining the integrity of accounting information requires open lines of communication between the board and management. With the use of digital platforms and collaboration tools, modern technology makes it easier for boards to communicate effectively, acquire pertinent financial data instantly, and have productive conversations with management regarding accounting concerns and disclosures (Gupta et al., 2024). Stakeholder confidence in an organization's financial performance and health is increased by high-quality accounting information (Akisik and Gal, 2017). Experienced board members are better able to interact with creditors, investors, regulators, and other stakeholders in an efficient manner, building credibility and confidence in the financial data that is disclosed (Riyadh et al., 2024). Board members with extensive experience frequently have broad professional networks that include connections in the finance and accounting sectors (Gil, 2025). These networks can give users access to important tools, knowledge, and best practices that raise the caliber of accounting information.

A few prior studies' findings show that singleboard characteristic measures are superior to multifactor business and academic governance indicators for identifying and interpreting the quality of accounting information, such as Afolabi et al. (2023) and Gouiaa and Zéghal (2014). The researcher can formulate the following hypothesis based on the previously discussed topic, as well as an assessment of previous research and literature:

**H3:** There is a positive relationship between communication and transparency and quality of accounting information.

Modern technology facilitates effective boardmanagement communication, which improves accounting integrity, stakeholder trust, and trustworthiness of financial data. Seasoned board members use networks to gain access to best practices and important resources.

### 3. Methodology

This debate suggests a mixed-methods strategy that combines quantitative analysis and qualitative inquiry to study the research issue empirically. In quantitative approaches, a sample of publicly listed companies' financial data is gathered and analyzed, and statistical tools are added to evaluate the correlation between the quality of accounting information, the adoption of current accounting systems, and the characteristics of the board.

After writing the introduction and theoretical framework for the research and building its hypotheses, a practical study was conducted to test the independent variables (board of directors' experience. governance and oversight. communication, and transparency) and dependent variables of the study (quality of accounting information). The data were collected from the study sample, which consisted of board members and employees of companies operating in Saudi Arabia, through a survey link specifically designed for this study. The sample was selected based on companies relevant to the study topic using statistical models. As the study did not utilize personal data, ethical approval was not required.

### 3.1. Measure

We surveyed 253 stakeholders (including employees, regulators, and investors) to determine

how they felt about the quality of accounting information. Their comments can offer insightful information about how well the board is able to monitor the caliber of accounting data and the application of contemporary accounting technologies.

### 3.2. Procedures for data gathering and sampling design

To investigate the effects of the quality of the board of directors on the caliber of accounting information, a survey of users' opinions will serve as the source of analysis data after the research's objectives, dependent and independent variables, and theoretical framework have been established. The sampling frame and target study population were established. We considered variables such as organizational size, geography, and industry. A random sample method was applied, meaning that each person of the population had an equal chance of being chosen, based on the goals of the study. The study population consisted of 450 individuals from the board members and managers of Saudi companies. Because there were only 450 companies, the survey questionnaires were sent to all 450 targeted individuals, and 253 usable questionnaires were received, representing a 56.22% response rate. Board members, senior managers, and middle managers in Saudi companies were chosen as the unit of analysis for the survey because of their familiarity with the quality of good accounting information studied.

#### 4. Data analysis and findings

This study uses partial least squares structural equation modeling (SPSS) in conjunction with contemporary accounting systems to examine the impact of the composition of the board of directors on the caliber of accounting information. The SPSS software was used to conduct the analysis, and the findings are presented in Fig. 1.



Fig. 1: Framework of the study

### 4.1. Profile of respondents

Table 1 shows the frequency and percentage of demographic information for members of the study sample. First, in terms of sex, we found that 72% of the sample was male. Second, in terms of age, we find that 40% of the sample is between 30 and 40 years old, followed by the 41–50 years old category at 26%. Third, in terms of academic qualifications, we found that 50% of the sample holds a bachelor's

degree, followed by 20% who hold a higher diploma. Fourth, in terms of professional qualifications, we find that 49.8% of the sample do not hold a professional qualification and 21.5% hold fellowships other than those mentioned. Fifth, in terms of specialization, we find that 33% of the sample specializes in accounting, followed by 21 those who specialize in banking sciences. Finally, 30% of the workers had more than 20 years of experience as well as 5-10 years. Table 1: Frequencies and percentage

|          |                            |                         | Frequency | Percentage |
|----------|----------------------------|-------------------------|-----------|------------|
|          |                            | Male                    | 182       | 72.0       |
| Panel: A | Gender                     | Female                  | 71        | 28.0       |
|          |                            | Total                   | 253       | 100.0      |
| Panel: B |                            | From 30 – 40 years old  | 101       | 40.0       |
|          |                            | From 41 – 50 years old  | 66        | 26.0       |
|          | Age                        | From 51 – 60 years old  | 61        | 24.0       |
|          |                            | Less than 30 years old  | 20        | 8.0        |
|          |                            | Above 60 years old      | 5         | 2.0        |
|          |                            | Total                   | 253       | 100.0      |
|          | Qualification              | Bachelor                | 127       | 50.0       |
|          |                            | Postgraduate Diploma    | 51        | 20.0       |
| Panel: C |                            | Diploma                 | 40        | 16.0       |
|          |                            | Master                  | 25        | 10.0       |
|          |                            | PhD                     | 10        | 4.0        |
|          |                            | Total                   | 253       | 100.0      |
| Panel: D |                            | Nothing                 | 126       | 49.8       |
|          |                            | Other                   | 54        | 21.5       |
|          |                            | Arab fellowship         | 28        | 11.1       |
|          | Professional Qualification | American fellowship     | 27        | 10.6       |
|          |                            | British fellowship      | 18        | 7.0        |
|          |                            | Total                   | 253       | 100.0      |
|          | Specialization             | Accounting              | 83        | 33.0       |
|          |                            | Banking sciences        | 53        | 21.0       |
| Denel E  |                            | Information technology  | 5         | 2.0        |
| Panel: E |                            | Business administration | 91        | 36.0       |
|          |                            | Other                   | 20        | 8.0        |
|          |                            | Total                   | 253       | 100.0      |
| Panel: G |                            | Above 20 years          | 76        | 30.0       |
|          | Experience                 | From 5-10 years         | 76        | 30.0       |
|          |                            | From 11-15 years        | 35        | 14.0       |
|          |                            | Less than 5 years       | 35        | 14.0       |
|          |                            | From 16-20 years        | 30        | 12.0       |
|          |                            | Total                   | 253       | 100.0      |

Table 2 shows descriptive statistics for the indicators of the variables through the means and standard deviations of the variables, where the first variable, board of directors' experience, obtained an average of 4.0412 and 0.9133 for both the mean and standard deviation, respectively. The second variable, governance and supervision, is 3.972525 and 0.9857. The variable transparency and communication are 3.95665 and 0.971175 and the dependent variable is 4.28325. This indicates that the variables obtained high agreements and a low coefficient of dispersion.

### 4.2. Reliability indicator and internal consistency reliability

Reliability indices and internal consistency reliability are crucial for determining the reliability of a measurement instrument, such as the survey utilized in this study (Hamza et al., 2024). The most widely used measure of internal consistency reliability is Cronbach's alpha, which computes the average correlation between all possible pairs of items in a scale (Vaske et al., 2017). A higher Cronbach's alpha coefficient indicates greater internal consistency (Benzerrouk et al., 2023; Vaske et al., 2017). Internal consistency reliability evaluates the degree to which the items within a test or scale are consistent when measuring the same construct.

Table 3 shows Cronbach's alpha coefficients, which are all greater than 0.7, and A Cronbach's alpha of less than 0.7, signal low internal consistency and a lack of strong correlation between the scale's items.

**Table 2:** Descriptive statistics of the variable's indicators

| Board experience                  |                   |                    |  |  |
|-----------------------------------|-------------------|--------------------|--|--|
| Indicators                        | Mean              | Standard deviation |  |  |
| BE1                               | 4.0101            | 0.8021             |  |  |
| BE2                               | 4.1125            | 1.0018             |  |  |
| BE3                               | 3.9901            | 0.9402             |  |  |
| BE4                               | 4.0521            | 0.9091             |  |  |
| Weighted                          | mean              | 4.0412             |  |  |
| Weighted standa                   | rd deviation      | 0.9133             |  |  |
| Go                                | overnance and ove | ersight            |  |  |
| G01                               | 3.9622            | 1.021              |  |  |
| G02                               | 4.029             | 1.0082             |  |  |
| GO3                               | 4                 | 0.8963             |  |  |
| G04                               | 3.8989            | 1.0173             |  |  |
| Weighted                          | mean              | 3.972525           |  |  |
| Weighted standa                   | rd deviation      | 0.9857             |  |  |
| Comm                              | unication and tra | nsparency          |  |  |
| CT1                               | 3.9296            | 0.8963             |  |  |
| CT2                               | 4                 | 1.0139             |  |  |
| CT3                               | 3.8971            | 1.0333             |  |  |
| CT4                               | 3.9999            | 0.9412             |  |  |
| Weighted                          | mean              | 3.95665            |  |  |
| Weighted standard deviation       |                   | 0.971175           |  |  |
| Quality of accounting information |                   |                    |  |  |
| QAI1                              | 4.2               | 1.0893             |  |  |
| QAI2                              | 4.3               | 1.101              |  |  |
| QAI3                              | 4.01              | 0.8954             |  |  |
| QAI4                              | 4.623             | 0.9326             |  |  |
| Weighted                          | mean              | 4.28325            |  |  |
| Weighted standa                   | rd deviation      | 1.004575           |  |  |

### 4.3. Correlation coefficient

Table 4 lists the correlation coefficients between variables. The correlation coefficient was interpreted as a perfect correlation if it was +1, a strong correlation if it was greater than 0.5, a weak correlation if it was greater than zero, and no correlation if it was zero. This was also interpreted as a completely negative correlation. If it is -1, it is strongly negative if less than -0.5, or weakly negative if less than zero (Hamza et al., 2024). All study

variables have a strong positive correlation, except for the correlation between communication and transparency and the quality of accounting information, where the positive correlation was weak.

|                                   | No. of items | Cronbach's alpha | Hotelling's T-squared | F      | Sig   |
|-----------------------------------|--------------|------------------|-----------------------|--------|-------|
| Board experience                  | 4            | 0.780            | 62.630                | 47.360 | 0.000 |
| Governance and oversight          | 4            | 0.881            | 81.550                | 45.852 | 0.000 |
| Communication and transparency    | 4            | 0.865            | 76.920                | 43.951 | 0.000 |
| Quality of accounting information | 4            | 0.915            | 92.562                | 53.753 | 0.000 |

Table 2. Deliability in director and internal consistency valiability.

|                                   |                     | BE | GO    | СТ     | QAI   |
|-----------------------------------|---------------------|----|-------|--------|-------|
| Decard experience                 | Pearson correlation | 1  | 0.593 | .682*  | 0.837 |
| Board experience                  | Sig.                |    | 0.000 | 0.000  | 0.000 |
| Communication of committee to     | Pearson correlation |    | 1     | .860** | 0.692 |
| Governance and oversight          | Sig.                |    |       | 0.000  | 0.000 |
|                                   | Pearson correlation |    |       | 1      | 0.119 |
| Communication and transparency    | Sig.                |    |       |        | 0.00  |
| Quality of accounting information | Pearson correlation |    |       |        | 1     |
| Quality of accounting information | Sig.                |    |       |        |       |

\*\*: Correlation is significant at the 0.01 level

### 4.4. Hypotheses testing result

Table 5 shows the test of the study's hypotheses, as the first hypothesis tests the effect of the board of directors' experience quality of accounting information. The value of  $\beta$  was 1.839, the standard deviation was 0.109, and the value of T was 20.12. These data indicate a positive relationship between the experience and quality of the board of directors and accounting information.

The second hypothesis tests the effect of governance and oversight on the quality of accounting information. The values were  $\beta = 0.925$ ,

standard deviation of 0.116, and T = 15.99. These data indicate a positive relationship between governance, oversight, and the quality of accounting information.

The third hypothesis tests the effect of communication and transparency on the quality of accounting information. The value of  $\beta$  = 0.873, the standard deviation is 0.094, and the value of T = 29.52 these data indicate that there is a positive relationship between communication, transparency, and the quality of accounting information.

Table 5: Hypotheses testing

| Hypothesis  | β     | Standard deviation | Т     | R     | R <sup>2</sup> | F      | Sig   |
|---|-------|--------------------|-------|-------|----------------|--------|-------|
| Board experience -> quality of accounting information               | 1.839 | 0.109              | 20.12 |       |                |        |       |
| Governance and oversight -> quality of accounting information       | 0.925 | 0.116              | 15.99 | 0.652 | 0.821          | 30.925 | 0.000 |
| Communication and transparency -> quality of accounting information | 0.873 | 0.094              | 29.52 |       |                |        |       |

#### 5. Discussion

The primary factors influencing the quality of accounting information and its implications for corporate governance procedures concerning board composition are examined in this section, as we examine the empirical results in the context of the theoretical framework. We specifically examine the effects governance and supervision, of communication and transparency, and diversity and experience on board. We will also examine the opportunities and difficulties of incorporating data security, hiring new employees, and organizational culture into board oversight procedures using advanced accounting tools. To improve the alignment between board structure, accounting systems, and financial reporting quality, we will conclude by offering suggestions for boards, management teams, and policymakers, as well as future research areas.

The results of a few prior research studies, which were based on a sample from worldwide companies,

show a positive relationship between the size, independence, diversity, and activity of the board of members and the quality of unified reports such as Alnor (2024a), García-Sánchez et al. (2017), and Vitolla et al. (2020). Based on the findings of some previous studies, it is apparent that the current study agrees with some of the findings of variables such as the experience of the board of directors, while noting that other variables, such as dedication to governance, were not studied.

The experience of the Board of Directors is essential for managing a company's financial reporting procedures. Boards of directors made up of individuals with a variety of backgrounds in technology, accounting, and finance may be better suited to comprehend and take advantage of the possibilities of contemporary accounting systems to raise the caliber of accounting data. How do these experiences impact the decision-making processes around the adoption and application of contemporary accounting systems and how does this impact the caliber of accounting data?

### 6. Conclusion

In summary, by analyzing the role of the board of directors in gaining from contemporary accounting systems to enhance the quality of accounting information, this study adds to the body of knowledge on corporate governance (the quality of the board of directors) and the quality of accounting information. By examining the intricate relationship between accounting technology and board characteristics, this study intends to provide practitioners, policymakers, and academics with new insights into how to improve decision making in the modern business environment with respect to accountability, transparency, and efficacy.

We investigate the effects of board members' technological expertise and their ability to implement and operate contemporary accounting systems. Examine whether boards with more technological experience can better utilize cutting-edge accounting tools to enhance decision-making, timeliness, and data correctness. Examine how the Board of Directors oversees the organization's implementation and utilization of contemporary accounting systems. Examine the ways in which proactive governance and oversight procedures aid in identifying and preventing fraud, accounting errors, and anomalies, ultimately improving the accuracy of financial reporting.

### 6.1. Implication of study

Corporate governance strategies may be informed by findings that show a positive correlation between board experience and accounting information quality. Companies may want to reassess the roles, responsibilities, and competence of their boards of directors to promote financial transparency, improve the quality of accounting information, and improve decision-making processes.

Regulations pertaining to corporate governance may consider the lessons learned from such studies. Guidelines encouraging businesses to implement efficient board structures with governance and oversight powers that support the acquisition of high-quality accounting data may be developed or revised because of this.

Corporate boards can make informed decisions about technology adoption by considering how contemporary accounting systems contribute to improving accounting information quality. Companies can increase the quality, timeliness, accuracy, and relevance of accounting information by investing in cutting-edge accounting software and analytical tools, which increases the value of financial statements.

### 6.2. Limitation of study and future suggestion

The validity of the findings of a study can be significantly affected by the caliber and

dependability of the data employed. We attempted to minimize errors in the analysis; however, bias or errors may still occur if the study's questionnaire approach and data sources are not reliable or complete.

To more accurately determine causality, the researcher advises conducting longitudinal studies that shed light on how the relationship between board structure and the caliber of accounting information changes over time. Additionally, the researcher advises carrying out cross-border studies because it can provide light on how institutional elements influence these linkages by comparing the effects of board structures on the caliber of accounting information in various nations and regulatory contexts.

### List of abbreviations

| AI             | Artificial intelligence                                      |  |
|----------------|--|--|
| BE             | Board experience   |  |
| β              | Beta (regression coefficient)                                |  |
| COBIT          | Control objectives for information and related technologies  |  |
| СТ             | Communication and transparency                               |  |
| ESG            | Environmental, social, and governance                        |  |
| ERP            | Enterprise resource planning                                 |  |
| F              | F-statistic  |  |
| GO             | Governance and oversight                                     |  |
| H1, H2, H3     | Hypothesis 1, hypothesis 2, hypothesis 3                     |  |
| LEI/vLEI       | Legal entity identifier / verifiable legal entity identifier |  |
| PLS-SEM        | Partial least squares structural equation modeling           |  |
| QAI            | Quality of accounting information                            |  |
| R              | Correlation coefficient                                      |  |
| R <sup>2</sup> | Coefficient of determination                                 |  |
| SMEs           | Small and medium-sized enterprises                           |  |
| SPSS           | Statistical package for the social sciences                  |  |
| Sig            | Significance (p-value)                                       |  |
| Т              | T-statistic  |  |

### Compliance with ethical standards

### **Ethical considerations**

This research was conducted in accordance with ethical standards. Participation was voluntary, and informed consent was obtained from all participants prior to their involvement. The survey did not involve the collection of personal or sensitive data, and participant anonymity was preserved throughout.

### **Conflict of interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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