The Role of Digital Auditing in Enhancing the Efficiency of Detecting Error and Financial Fraud

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Doi: 10.21608/ajahs.2024.365890

استلام البحث ٢١ / ٥ / ٢٠٢٤

قبول البحث ٦/ ٦ /٢٠٢٤

Al Otaibi ,Dalia Fahad Khalid & Mohamed, Ezzeddine (2024). The Role of Digital Auditing in Enhancing the Efficiency of Detecting Error and Financial Fraud. ***The Arab Journal of Literature and Human Studies***, The Arab Institute for Education, Science and Letters, Egypt,8(32), 633-658.

http://ajahs.journals.ekb.eg

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Abstract:

This research explores the role of digital auditing in enhancing the efficiency of detecting errors and financial fraud in external auditing processes, with a particular focus on the Saudi context, drawing on in-depth theoretical and practical analyses. The study discusses global economic developments, the importance of liberalizing international trade, and the impact of information technology on financial operations. It also examines the effects of digital auditing on auditors' professional skepticism and their ability to exercise independent judgment, as well as its impact on transparency indicators and investor confidence. Additionally, the research addresses the role that senior management vision and support can play in leveraging digital auditing as a tool for detecting errors and financial fraud. It explores the impact of adherence to legal and regulatory standards on maximizing the effectiveness of digital auditing and investigates how the training and professional development of auditors can enhance the quality of error and fraud detection. These aspects are covered through a review of the literature and the development of a theoretical framework that incorporates various accounting theories to deepen the understanding of the relationship between digital auditing and the different study variables.

Keywords: digital auditing, efficiency, detecting error, financial fraud, enhancing efficiency.

CHAPTER ONE: INTRODUCTION

1.1 Introduction:

In recent years, there have been many developments and changes at the international economic level. One of the most significant is the phenomenon of globalization and the promotion of free market economic ideas worldwide. This has led to an increased global trend towards liberalizing international trade, opening borders and restrictions to the flow of capital among different countries, primarily through joining the World Trade Organization (WTO). There is also a growing reliance on information technology and e-commerce, with the liberalization of trade in services becoming increasingly important globally, especially after the adoption of the General Agreement on Trade in Services (GATS) by the WTO. The accounting and auditing profession has garnered attention within the scope of GATS. The sixth and seventh articles of the GATS agreement specifically address the accounting and auditing profession. (Reda, 2016).

As a result of these developments, numerous complex financial transactions have emerged, leading to the issuance of accounting standards for their recognition and auditing. This has created multiple alternatives that entities can exploit to achieve their goals and manipulate their financial statements, hiding the true results of their operations and financial position. Such actions can deviate from reality and could lead to various problems that harm the national economy (Reda, 2016). The importance of having financial statements free from errors, manipulation, and fraud lies in the fact that they must reflect a fair representation of the results of operations and the financial position. This is crucial because users of financial statements rely on them to make informed decisions (Salem, 1998).

Having accurate and reliable financial statements is essential for shareholders, investors, creditors, and other stakeholders in evaluating the financial health and performance of an entity. It allows them to assess the profitability, liquidity, solvency, and overall stability of the organization. Moreover, accurate financial statements provide transparency, instill trust, and promote confidence in the company's management and its reporting practices. The International Federation of Accountants (IFAC) defines error as unintentional misstatement in financial

ISSN : ***2537-0421*** **eISSN :** ***2537-043X***

statements, which includes omission or misrepresentation of values. On the other hand, fraud refers to intentional acts by one or more individuals in management, employees, or third parties to gain an unfair and unlawful advantage through deception (Reda, 2016).

Accounting fraud and manipulation are carried out through various methods and techniques, and organizations have the freedom and flexibility to choose among them. This allows management the opportunity to manipulate financial numbers and present them differently than they actually are (Amat, Blake, & Dowds, 1999). By incorporating digital auditing into their strategies, Saudi Arabia can further strengthen its efforts to combat financial fraud, corruption, and illegal practices. Digital auditing has the potential to significantly enhance the efficiency and effectiveness of error and fraud detection, providing a more robust and comprehensive approach to ensuring transparency, accountability, and integrity in financial reporting.

Based on the above, this research focuses on highlighting the role of digital auditing in enhancing the efficiency of detecting error and financial fraud.

1.2 Research Problem:

The anti-corruption authorities (Nazaha) play a crucial role in promoting integrity in the financial sector. Their objective is to combat corruption, prohibit any illegal activities in the financial sector, and ensure transparency and integrity. One critical issue that affects the accuracy and integrity of financial statements is the presence of errors, manipulation, and financial fraud. These phenomena can have a negative impact on the reliability of the information presented in financial statements, leading to misleading users of these statements.

Cheating and manipulation of financial data can result from conflicts of interest, where each individual or entity seeks to maximize their own interests at the expense of the public

ISSN : *2537-0421* eISSN : *2537-043X*

interest. Conflict of interest forms the basis of agency theory, defined by (Jensen & Meckling, 1976) as a contract whereby one party (the principal) engages another party (the agent) to perform certain services on their behalf, delegating some decision-making authority to the agent. Agency theory suggests that individuals strive to maximize their personal wealth and pursue their own interests rather than those of the organization. Therefore, managers may prefer to select specific accounting policies that serve their own interests (Yousef, 1999).

The aim of this research is to explore methods and techniques that can enhance the efficiency of detecting errors and financial fraud through digital auditing and investigate the challenges and limitations associated with implementing digital auditing in external audits of financial statement, and assess the impact of digital auditing on auditors' professional skepticism and their ability to exercise independent judgment, discovering how digital auditing can impact transparency indicators and investor confidence. Additionally, examine the influence of top management's vision and support on the utilization of digital auditing as a tool for error and fraud detection, and explore the role of compliance with legal and regulatory guidelines in maximizing the effectiveness of digital auditing. Finally, the research explore how the training and professional development of auditors can contribute to the quality of error and fraud detection through digital auditing. By addressing these research questions, the research will provide insights that can support ongoing efforts to enhance the integrity of the Saudi financial sector, enhance investor confidence, and drive economic prosperity according to Vision 2030.

1.3 Research Questions:

- **Main Research Question:** How does the use of digital auditing improve the accuracy and efficiency of detecting errors and financial fraud in external audit processes?

ISSN : ***2537-0421*** **eISSN :** ***2537-043X***

- **Research Sub Questions:**

1. What are the challenges and limitations associated with implementing digital auditing in the context of external audits of financial statement?
2. What is the impact of digital auditing on auditors' professional skepticism and their ability to exercise independent judgment in the audit process?
3. How does the use of digital auditing affect transparency and investor confidence indicators?
4. What impact can top management's vision and support have in emphasizing the importance and utilization of digital auditing as a tool for detecting errors and financial fraud?
5. How does compliance with legal and regulatory guidelines affect the effectiveness of implementing digital auditing to detect errors and financial fraud?
6. What role does training and professional development of auditors play in enhancing the quality of error and fraud detection through digital auditing?

1.4 Purpose of the Research:

The purpose of this research is clarify how implementation of digital auditing enhances the efficiency of error and financial fraud detection in external audit procedures and explore challenges in digital auditing implementation, its impact on auditors' skepticism and independent judgment, effects on transparency and investor confidence, the influence of top management's support, compliance with legal guidelines, and the role of auditor training in improving error and fraud detection through digital auditing.

1.5 Importance of the Research:

This research is of great importance from both theoretical and practical perspectives. From a theoretical standpoint, this research contributes to the scientific, academic, and educational fields in several ways. This research provide a comprehensive

ISSN : 2537-0421 eISSN : 2537-043X

understanding of the relationship between agency theory, digital auditing, errors, and financial fraud. It also sheds light on the prominent digital tools used in this context at present. Additionally, the research reviews concepts related to financial fraud and errors, discussing methods for their detection and prevention. Furthermore, the research discusses transparency reports for the Big Four for the year 2023 in Saudi Arabia, highlighting the prominent digital auditing tools used, with the aim of enriching scientific research in this growing field. Overall, the research contributes to expanding the horizons of researchers and students in understanding the utility of digital auditing tools and their role in combating errors and financial fraud. It provides a theoretical foundation and various concepts related to the applications of digital auditing and its diverse methodologies.

From a practical standpoint, digital auditing plays a crucial role in achieving the goals of Vision 2030 for comprehensive development and digital transformation in Saudi Arabia. The vision aims to enhance transparency and integrity in financial operations and combat fraud and corruption. By utilizing digital auditing techniques, the efficiency of detecting financial fraud can be improved significantly, reducing financial risks. Additionally, digital auditing can support efforts to promote innovation, improve financial quality, and enhance trust in the financial and economic system.

1.6 Contribution of the Research:

There are only a few studies on digital auditing in the Kingdom of Saudi Arabia. No previous study in the Kingdom of Saudi Arabia has examined the role of digital auditing in enhancing the efficiency of detecting financial errors and fraud. This research contributes to both the theoretical and practical aspects. The main contribution of the research lies in the comprehensive investigation into the role of digital auditing in

ISSN : ***2537-0421*** **eISSN :** ***2537-043X***

enhancing the efficiency of detecting errors and financial fraud during external auditing processes. By studying various factors such as the level of implementation of digital auditing, professional skepticism of auditors, investors' confidence level, senior management's vision and support, legal and regulatory guidelines, and the level of training and professional development of auditors, the recommendations provided contribute to enhancing knowledge and development in digital auditing. They also enhance practices in detecting errors and financial fraud, supporting efforts to improve financial quality, enhance confidence in the financial and economic system, and align with the Kingdom's vision for comprehensive development as mentioned above.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction:

This chapter attempts to present previous studies related to the field of study, as the aim of reviewing previous studies is to familiarize the reader with all the studies that have previously been conducted in the subject of the research, while presenting them in a logical and honest manner that takes into account the similarities and differences between their results (Hassan, 1996).

The presentation of previous studies will be divided into three areas: The first area includes a Foreign Literature Studies. The second area includes an Arabic Literature Studies. Finally, the third area includes a Saudi Literature Studies. starting from the oldest to the most recent. Below is a detailed presentation of the topics:

2.2 Foreign Literature Studies:

- **(Rezaee, 2002). Entitled: "Causes, Consequences, and Deterrence of Financial Statement Fraud"**

This study aims to investigate the causes, consequences, and deterrence of financial data fraud, as financial data fraud has cost investors, creditors, and employees in the capital market nearly

ISSN : 2537-0421 eISSN : 2537-043X

$500 billion in recent years. Market participants expect vigilant and active corporate management to ensure the integrity, transparency, and quality of financial information. The study provides an overview of financial data fraud by reviewing a selective sample of alleged financial data fraud cases. It also presents strategies for preventing and detecting fraud to mitigate incidents in financial data. The study highlights factors that may increase the likelihood of financial data fraud, and it discusses the Sarbanes-Oxley Act of 2002 to enhance corporate governance and the quality of financial reporting. Regarding future research, the researcher recommends developing more comprehensive strategies for preventing and detecting financial data fraud by focusing on the roles and responsibilities of corporate management participants explored in this study. It is also suggested that future research should include the five interacting factors in the decision-making process or auditors model when assessing whether they will book or waive discovered errors.

- **(Albrecht, Albrecht, & Albrecht, 2008). Entitled: "Current Trends in Fraud and its Detection"**

This study aims to discuss the fundamental nature of fraud, including major accounting scandals of the past decade. It also explores the role of auditors and whether auditors should be held accountable for not detecting financial fraud. The study examines standards and rules implemented after major frauds in the 1990s and early 2000s, such as Sarbanes-Oxley, new regulations by NYSE and NASDAQ, and SAS 92. Finally, it considers whether these standards and rules will impact deterring financial fraud in the future. One limitation of this study is its restricted scope, focusing on scandals and regulations in the 21st century. Researcher suggest incorporating aspects of fraud audit in auditor training programs. also recommend enhancing understanding and awareness of fraud schemes and indicators,

ISSN : *2537-0421* eISSN : *2537-043X*

enabling immediate detection and necessary actions to prevent losses.

- **(Yuniati & Banjarnahor, 2019). Entitled: "Determinant Factors Affecting the Ability of External Auditor to Detect Fraud"**

This study aims to provide empirical evidence on the factors influencing the ability of auditors in Jakarta to detect fraud. The study included a sample of 120 auditors from seven public accounting firms in Jakarta. Data were collected in April 2015 through visits to accounting firms willing to participate in the study. The study's results indicate that auditors' experience and fraud training do not impact their ability to detect fraud, while the level of education and professional skepticism have a positive effect on fraud detection. One limitation of this study is the sample size, and the researchers recommends increasing the sample size in future studies. Additionally, the researchers suggests re-examining this study using a sample of internal auditors, including experienced auditors in fraud detection practices. Furthermore, exploring forensic auditing and forensic accounting processes is recommended.

- **(Chimonaki, Papadakis, Vergos, & Shahgholian, 2019). Entitled: "Identification of Financial Statement Fraud in Greece By Using Computational Intelligence Techniques"**

This research paper provides a comprehensive analysis of fraud detection in financial statements using artificial intelligence techniques, with a specific focus on computational intelligence (CI) techniques. The aim is to develop models capable of detecting financial statement manipulation. The researchers collected a sample of 2,469 observations from 2002 to 2015. The results indicate that the seven most significant factors for detecting fraud are the total debt ratio, ownership rights, debt to equity ratio, total asset turnover, net fixed assets to total assets ratio and cash to total assets ratio. Additionally, profitability

ISSN : 2537-0421 eISSN : 2537-043X

ratios, liquidity ratios and financial solvency are important indicators for fraud detection. The researchers highlighted that there is an opportunity to study the performance of current methods by adjusting their criteria, as well as the possibility of studying cost-benefit analysis for detecting accounting fraud. Furthermore, the researchers recommended further research on the differences between types of financial fraud within a general framework that could significantly improve the accuracy of intelligent detection methods.

- **(Syahria, Kusumawati, & Ervanto, 2019). Entitled: "Detecting Financial Statement Fraud Using Fraud Diamond"**

This study aims to detect financial statement fraud using the Fraud Diamond. There are four factors that motivate individuals to commit fraud: pressure, opportunity, rationalization, and capability. This study utilized a quantitative research approach. The population consisted of all the listed banking companies on the stock exchange in the period 2012-2016. The sampling was conducted using purposive sampling and resulted in a sample of 19 banking companies. Data analysis was performed using logistic regression analysis with SPSS software version 16. The results indicate that financial stability and changes in auditors have an impact on financial statement fraud. However, external pressure (pressure), quality of external auditors (opportunity), financial target (rationalization) and managerial changes (capability) have no significant influence on financial statement fraud. One of the shortcomings of this study is its limited scope, as it focused solely on 19 banking companies. This limitation may impact the generalization of its results to the entire population of banking companies listed on the Indonesia Stock Exchange during the specified period (2012-2016).

- **(Ye , Xiang, & Gan, 2019). Entitled: "Detecting Financial Statement Fraud Using Random Forest with SMOTE"**

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This study investigates the comparison of different classification models in detecting financial statement fraud (FFS). An imbalanced data set was addressed by adopting the Random Forest method, and SMOTE sampling was used. Furthermore, more effective performance measures were added. The experimental dataset includes 11,726 Chinese financial disclosures publicly available from 2007 to 2017, with 1,314 of them being accused of fraud by the Securities and Exchange Commission. The results show that the Random Forest algorithm outperforms other algorithms. One shortcoming of this study is the ineffective use of samples containing missing information in detecting financial statement fraud. The researchers also recommended considering different data sets and methods for calculating missing values. Additionally, future studies can enrich the indicators with qualitative information about the data and develop an efficient real-time model based on historical financial information and fraud-related identity transfer for potential fraud prediction.

- **(Ismajli, Perjuci, Prenaj, & Braha, 2019). Entitled: "The Importance of External Audit in Detecting Abnormalities and Fraud in the Financial Statements of Public Enterprises in Kosovo"**

The study focuses on the determinants influencing the audit process for public entities in Kosovo, with an emphasis on the impact of audit quality on transparency and accountability. Additionally, it assesses the effectiveness of information in audit reports issued by the National Audit Office in Kosovo. Data were collected through observations, documents, surveys, and interviews involving internal auditors of public institutions in Kosovo and external auditors from the National Audit Office in Kosovo. Both primary and secondary data sources were utilized, and data were analyzed through statistical methods such as mean absolute deviation, and the algebraic method. The findings

ISSN : 2537-0421 eISSN : 2537-043X

indicate that external auditors perceive high potential risks related to errors and fraud. Results also suggest a negative relationship between errors, fraud, and transparency of financial reporting, with quality positively influencing fraud detection in financial data. While contributing to understanding external audit processes for accounts in public institutions in Kosovo, the study is not without limitations. Explicit mention of the study's sample size and selection procedures is lacking, raising concerns about representation and generalizability. The study also does not discuss the limitations of the chosen statistical analysis methods or alternative approaches.

- **(Svabova, Kramarova, Chutka, & Strakova, 2020). Entitled: "Detecting Earnings Manipulation and Fraudulent Financial Reporting in Slovakia"**

The purpose of the study is to develop a discriminative model for detecting earnings manipulators in the Slovak economic context. The researchers used discriminant analysis to create a model for identifying fraudulent companies based on real data of companies convicted of misleading financial reporting in relation to tax fraud from the years 2009-2018. The model is inspired by the Benish model, which is considered one of the most widely applied fraud detection approaches. The results demonstrate that the model correctly identified 86.4% of fraudulent companies and overall achieved a classification accuracy of up to 84.1%. Both models were applied to experimental data on 1,900 Slovak companies from the years 2016-2018, while their intersection was 32.7% for lending fraudulent companies and 38.4% for non-fraudulent companies. One of the limitations of this study is the use of limited probabilistic models for detecting earnings manipulation and financial reporting fraud, considering the increasing complexity of fraudulent patterns in financial fraud.

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- **(Jan, 2021). Entitled: "Detection of Financial Statement Fraud Using Deep Learning for Sustainable Development of Capital Markets under Information Asymmetry"**

This study examines both the financial data and non- financial data of TWSE/TEPx listed companies in 2001–2019 by sampling a total of 153 companies, consisting of 51 companies reporting financial statement fraud and 102 companies not reporting financial statement fraud. Two powerful deep learning algorithms (i.e., recurrent neural network (RNN) and long short-term memory (LSTM)) are used to construct financial statement fraud detection models. The empirical results suggest that the LSTM model outperforms the RNN model in all performance indicators. The LSTM model exhibits accuracy as high as 94.88%, the most frequently used performance indicator. One drawback of studying is that it has been limited to a specific type of algorithms, such as recurrent neural network (RNN) and long short-term memory (LSTM). The researcher also recommends using other artificial intelligence methods to detect fraud in financial data.

- **(Maniatis, 2021). Entitled: "Detecting the Probability of Financial Fraud due to Earnings Manipulation in Companies Listed in Athens Stock Exchange Market"**

The aim of this paper is to detect whether there are companies listed in the general index of Athens Stock Exchange Market that possibly conduct earnings manipulation during 2017–2018. The paper is based upon the Beneish model (M- score), which consists of eight variables to examine the probability of financial statement fraud related to earnings manipulation for 40 companies listed in the Athens Stock Exchange Market. After calculating the M-score for each company, it was found that 33 (out of 40) companies had M-score values lower than 2.22. Therefore, 82.5% of the sample is considered rather unlikely to conduct earnings manipulation whereas 17.5% of the companies

ISSN : 2537-0421 eISSN : 2537-043X

listed in the general index of Athens Stock Exchange Market is likely to manipulate its earnings. One of the shortcomings is that all institutions related to financial services were left out of the sample because of the fact that M-score cannot provide reliable results when applied on similar companies.

- **(Lim, 2021). Entitled: "Emerging technologies to detect fraud in audit testing: A perception of Malaysian Big Four auditors"**

The aim of this study is to investigate whether there is a relationship between the perceptions of the Big Four external auditors in Malaysia and the detection of fraud in the audit testing phase. An online questionnaire based on a 5-point Likert scale was distributed, and responses were received from 108 external auditors. The data were encoded and entered into SPSS for further analysis. The results indicate that the perception of the Big Four Malaysian external auditors towards emerging technology influences the use of fraud detection in audit testing. The researcher recommended the time constraints or a study of auditors from a similar company should be considered to gain a better understanding of their perceptions, as companies have varying degrees of adoption of emerging technology.

- **(Wahidahwati & Asyik, 2022). Entitled: "Determinants of Auditors Ability in Fraud Detection"**

This study aims to investigate the impact of auditors' experience, ethical behavior, professional skepticism, and personality type on fraud detection. A quantitative approach was utilized to design this research. The data analysis was conducted using the multiple linear regression model with the SPSS software. The population and sample of this study consisted of 156 audit committee members dispersed across various regional entities in East Java Province, comprising 38 city governments and one provincial government. The sampling technique employed was non- probability sampling. The sample size in this study was fifty-seven auditors. The results indicate that auditors' experience, ethical behavior, and professional skepticism have a significant positive impact on fraud detection. One shortcoming of this study is that the research sample only included audit committee members of the Financial Supervisory Board in East Java Province, thus generalizing the findings is still very weak. The researchers also recommended conducting further studies on the impact of other factors on fraud detection, such as workload, auditors' independence, budget pressures, and audit risk.

2.3 Arabic Literature Studies:

- **(Hamshari, Ali, & Alqam, 2021). Entitled: "The Relationship of Professional Skepticism to the Risks of Auditing and Internal Control, and the Discovery of Fraud and Core Errors in the Financial Statements in Jordan"**

The study aims to explore the relationship between auditors' professional skepticism and the detection of fraud and errors in financial statements. The study also examined the relationship between professional skepticism and audit risks, particularly those controlled by management. The target population of the study was all auditing firms in Amman. Approximately 180 randomly distributed questionnaires were given to auditors within these firms. Only 45 questionnaires were retrieved, resulting in a total of 135 returned questionnaires. The study's results indicate that the ability of financial auditors to detect audit risks increases when professional skepticism is employed and diligently applied, based on scientific foundations. The researchers recommended emphasizing the practice of professional skepticism, especially when management and institutional oversight authorities fail to respond to auditors' inquiries. The researchers also advised against reaching final decisions until sufficient, appropriate, and reliable evidence is obtained. One of the shortcomings of this study relates to

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generalization and scope, as it focuses on the Jordanian economy and the practices of Jordanian certified public accountants, especially in Amman, without considering broader international contexts or conducting the study in other Jordanian regions.

- **(Alazzabi, Mustafa, & Karage, 2023). Entitled "Risk Management, Top Management Support, Internal Audit Activities and Fraud Mitigation"**

This paper aims to examine the effect of top management support (TMS) and risk management (RM) on the internal audit activities (IAA) and fraud mitigation (FM) in the Libyan banking sector. The data was collected using a survey questionnaire of 16 commercial banks in Libya and analyzed using a structural equation modeling. The study shows positive and significant relationships between RM and employees' FM and TMS and employees' FM. The study also demonstrates a significant mediating effect on the relationship between RM, TMS and FM. The study is conducted in the Libyan banking sector. Further research is needed in other contexts and sectors to understand the contribution of the RM and TMS on FM, including the impact of technology and internal audit characteristics in terms of experience, education and professional certificates on FM.

2.4 Saudi Literature Studies:

- **(Alghofaili, Albattah, & Rassam, 2020). Entitled: "Financial Fraud Detection Model Based on LSTM Deep Learning Technique"**

This study aims to enhance current detection techniques and improve detection accuracy in light of big data. A real dataset of credit card fraud operations was used, and the results were compared with an existing deep learning model called the Auto-encoder model and other machine learning techniques. The experimental results demonstrated the performance of the LSTM model, achieving an accuracy of 99.95% in less than a minute. The researchers recommended developing an algorithm to

ISSN : *2537-0421* eISSN : *2537-043X*

perform different tasks, such as calculating the time of fraud occurrence and identifying the location of the fraud.

- **(Hakami, Rahmat, Yaacob, & Saleh, 2020). Entitled: "Fraud Detection Gap between Auditor and Fraud Detection Models: Evidence from Gulf Cooperation Council"**

This study examines the fraud detection gap in audit firms (FDG) in Gulf Cooperation Council (GCC) companies by comparing the results of fraud detection models (namely Beneish M-score, Dechow F-score, and Altman Z-score) with the actual opinion provided by auditors. The data consists of 365 companies operating in GCC countries for the period from 2015 to 2017, totaling 1,095 observations. The study found that the fraud detection success rate in financial statement fraud using the Dechow F model is significantly higher than the Beneish M or Altman Z models. The result also indicated that the highest FDG results were obtained through the Dechow F model. One limitation of this study is that it only includes non-financial firms listed in GCC countries for a three-year period (2015-2017). The researchers also recommends examining financial firms and variables that affect FDG, such as corporate governance, auditors' industry expertise, and auditor tenure.

CHAPTER THREE: THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3.1 Introduction:

This chapter will discuss the theoretical framework of the research, providing a definition of the theory utilized, outlining the research variables. moreover, it will offer an overview of the digital audit tools employed by the Big Four firms in the Kingdom of Saudi Arabia. Finally, this chapter will review the development of the research hypotheses.

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3.2 Accounting Theory:

The theory refers to an assumption or a set of interconnected ideas aimed at explaining a certain phenomenon, which can be formulated as a tool to predict potential events.

Accounting theory can be defined as a set of interconnected concepts, definitions, and propositions that provide a logical description of accounting phenomena. Accounting theory can be classified into: normative accounting theory and positive accounting theory. Normative accounting theory aims to prescribe a specific accounting practice, while positive accounting theory aims to explain and predict accounting practice. Below is a detailed explanation of both types with mention of the prominent theories and their relationship to study variables.

3.2.1 Normative Accounting Theory:

Normative accounting theory focuses on prescriptions and what should happen under certain conditions, for example: the conceptual framework of accounting, where it defines the principles, characteristics, and concepts upon which accounting standards should be based.

Therefore, stakeholder theory will be presented as one of the prominent theories falling within the normative approach. This is to understand the relationship of this theory with the study variables.

- ***Stakeholder Theory:***

Stakeholder theory addresses the relationship between the organization and various stakeholders such as (customers, suppliers, employees, etc.) who have a direct or indirect interest in the organization. The theory suggests that the company should strive to meet the needs of various stakeholders, not just shareholders. As defined by (Freeman & Reed , 1983) stakeholders are any specific group or individual who can

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influence the organization's goals or be affected by the organization's goals.

The theory is based on a strong ethical foundation, where it helps to consider the interests of all those who influence or are affected by the organization's goals. Based on this approach, the organization strives to manage itself for the benefit of all stakeholders.

- ***The Impact of Digital Auditing on Stakeholders:***

In the context of digital transformation, companies seek to keep pace with the rapid changes and continuous evolution in the external environment. They are turning to adopting effective digital tools that contribute to enhancing transparency and accuracy in the reports provided to stakeholders. This includes digital auditing tools that help uncover errors and unethical practices such as fraud and manipulation. This positively affects the level of trust among stakeholders and helps maintain the company's reputation and market value, benefiting all stakeholders.

(Watts & Zimmerman, 1978) clarify that the logical basis for analyzing accounting theory in a normative approach is very simplistic and does not provide a strong theoretical foundation. To address the gap in normative accounting theory, Watts and Zimmerman develop a more experimentally oriented positive approach to justify some of the techniques or accounting methods currently used or to explore new models for the development of accounting theory in the future.

3.2.2 Positive Accounting Theory:

Positive accounting theory is based on explaining and predicting specific accounting practices. According to (Watts & Zimmerman, 1978) positive accounting theory emphasizes explaining accounting practice. Additionally, positive accounting theory aims to predict and explain the effects of managers' decisions regarding contractual arrangements or agency

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relationships. For example, positive accounting theory explains why some companies use the straight-line depreciation method instead of the reducing balance method when depreciating assets.

After reviewing positive accounting theory and its role in explaining and predicting accounting practices, the following sections will now introduce the prominent theories falling within the positive approach. The following paragraphs discuss agency theory, legitimacy theory, institutional theory, as well as human capital theory, to understand the relationship of these theories with the study variables.

- ***Agency Theory:***

Agency theory, also known as delegation theory, is one of the most popular theories in accounting and management literature. It addresses issues between agent and managers within companies and organizations. The theory assumes that managers contract with a third party to perform specific services on their behalf, often involving the delegation of decision-making authority to the agent.

The primary aim of agency theory is to resolve conflicts of interest between the two parties (agent and manager), arising from differences or clashes in objectives and goals. These conflicts often lead to biased decision-making favoring one party over the other, impacting neutrality and objectivity. Conflicts of interest are a major driver of manipulation and fraud in financial transactions, as individuals exploit their positions for personal gain at the expense of the public interest.

Agency theory is a fundamental and crucial basis for analyzing the relationship between managers and agents. Managers delegate tasks to agents, expecting them to execute these tasks in their favor. The theory relies on two important assumptions: self-interest and wealth maximization. This, in turn, incentivizes agents to act opportunistically, especially when their interests conflict with those of the managers.

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Aligning interests between the parties in an agency relationship is challenging due to the differing roles, tasks, and positions. This directly leads to what is known as the agency problem. To address this issue, administrative and organizational measures must be implemented to resolve conflicts and mitigate risks.

The agency problem primarily involves motivating one party (the agent) to act in the best interest of the other party (the manager) and addressing issues of efficiency and information asymmetry between the two. This results in what is termed agency costs, which will be discussed in more detail in the following paragraphs.

- Agency Costs:

Agency costs arise due to the agency problem resulting from the inequality between the two agency parties in several aspects: differences in interests and goals, variations in tasks and roles, and cognitive disparities due to information asymmetry. These costs encompass monitoring cost, bonding cost, and residual losses.

- ***The Relationship between Agency Theory and the Study's Variables:***

The relationship between agency theory and research variables involves numerous dependent and independent variables. The focus is on the profession of external auditing, which entails an agency relationship between external auditors and the management of the audited company, comprising both managers and agents. The engagement letter, defining the tasks and responsibilities of external auditors as well as management duties, serves as an agency contract where managers involve auditors to perform specific services on their behalf.

Agency theory provides a principle to understand and address issues related to the agency relationship in companies and organizations. The research links variables to agency theory

ISSN : *2537-0421* eISSN : *2537-043X*

through the lens of agency costs, as illustrated in the figure below:

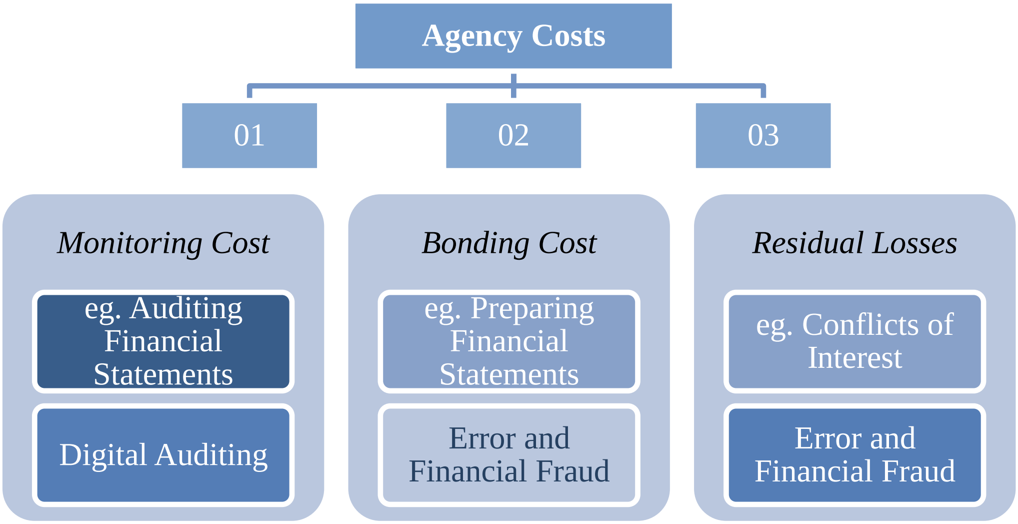

Figure 2: The Relationship between Agency Theory and the study's variables.

- ***Legitimacy Theory:***

Legitimacy theory is widely used in management and accounting literature, as it is considered a social concept used in organizational and institutional contexts. Legitimacy theory helps explain how companies can obtain and maintain their legitimacy in the communities in which they operate.

Advocates of legitimacy often refer to legitimacy theory as being based on the existence of a relationship between the organization and society, known as the social contract. The social contract represents society's expectations of the organization. As is customary, in the case of a contract, there are conditions between the parties involved, with the first party "society" expecting the second party "the organization" to fulfill its explicit and implicit expectations. Similarly, the organization expects acceptance and legitimacy from society in order to survive and continue.

ISSN : *2537-0421* **eISSN : *2537-043X***

- ***Understanding legitimacy theory in the context of detecting errors and fraud:***

In the context of societal expectations, which may be explicit or implicit, they are often linked to the surrounding circumstances affecting the life and prosperity of society. Therefore, these expectations are not fixed and change with changing circumstances. Society expects organizations to provide financial reports free from material errors, fraud, and other unethical practices that may affect the transparency of financial statements.

In the age of digital revolution and technological transformation we are currently experiencing, organizations are adopting digital auditing tools to provide highly accurate and transparent financial reports by detecting financial errors and fraud. Digital auditing tools are crucial in this field due to their tangible contributions in detecting abnormal transaction patterns, which often indicate errors or attempts of financial fraud and manipulation. These tools enhance the accuracy, reliability, and transparency of financial data, which directly impacts investors' confidence levels and thus influences societal prosperity.

Conclusion:

In summary, the role of digital auditing in enhancing error and financial fraud detection is pivotal, especially in the context of Saudi Arabia's Vision 2030 and its emphasis on digital transformation. This research highlights the importance of digital tools in improving the accuracy, reliability, and transparency of financial reporting. By addressing various theoretical and practical perspectives, the thesis underscores digital auditing's potential to strengthen stakeholders' confidence and contribute to a more stable and transparent financial environment. This work not only enriches academic and professional knowledge but also supports ongoing efforts to enhance financial integrity and accountability.

ISSN : *2537-0421* eISSN : *2537-043X*

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ISSN : *2537-0421* **eISSN : *2537-043X***