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# An Investigation on the Effectiveness of Forensic Audit as a Tool for Fraud Detection and Prevention

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**Abstract:** Internal fraud in organizations is now more common and well organized which can pose a threat to the financial health of an organization as well as its reputation. Forensic audit — a special segment of accounting and auditing has gained significant relevance because these fraudulent acts need to be curtailed. The effectiveness of forensic audit as a tool for fraud detection and prevention Question Four: How can the use of computer auditing help in fraud reduction? This research is to look for the skills forensic auditors perform, aspects of these competence abilities and constraints with regarded to banks. Using an integrative review of literature and case studies, the paper seeks to generate insights on forensic audit as a tool in fighting fraud.

At a time when business operations are more complex and globalized than at any point in history, organizations across the globe — from every industry sector imaginable — face an ongoing threat of fraud. The need for detecting fraud has also paved the way to forensic auditing, and its distinctive strategies used in finding financial wrongdoing. This paper aims to investigate the existence of frauds, and more specifically discuss how forensic auditing can be used to prevent fraud in employee such as local governments etc.

This study will be focusing on unearth the significant impact of forensic audit to investigating and prevention frauds in any financial performances or corporate companies. Need for Forensic Auditor – Continuous Financial Fraud leading into corporate collapse and Statutory Audits failure to detect or prevent the criminal activities which caused losses to investors being major reasons, has given rise of this phenomenon called forensic auditor. In light of the foregoing this paper examines how forensic auditor influence corporate governance. The research was conceptual based which impinge the part of forensic auditors to avoid fraud, difference between forensic auditor & statutory auditor > characteristic of Forensic auditing and effect on company governance. The data generated were analyzed by using charts, graphs, tables and regression. Our results showed the forensic audit and their significant relation with fraud cases, number of staff being caught in fraudulent activities through our valuable sample size at 125 respondents from Auditors, Accountants, Managers, Professional accountants as well as Accounting knowledge Persons by collecting Valid data using a very good Questionnaires it helped us to analysis the Regression & Correlation Coefficient for this we have used Spss Methodology which includes Descriptive statistics too At last all these test are connected scientifically w. r.t Anova And Then Tested With Factor Analysis. 3.4 Effect of Impact Management Accountability on Corporate Governance One feature that is fairly shown from the result of this paper was forensic auditors impact in improving management accountability, strengthening external auditor's independence through assisting audit committee members in carrying out their oversight function by providing assurance over internal audit report thus reducing corporate failure and ultimately impoverishment investors (see Table 1).

Keywords: financial health

# I. INTRODUCTION

The issue of fraud — variously defined, but covering everything from embezzlement and misappropriation of assets to financial statement fraud or identity theft — is one that seems almost endemic within most businesses and organizations. Fraud comes at a high cost, with consequences that may result in financial lasses for your organization as

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well as tarnish the reputation and possibly have legal implications. Organizations combat this problem by using forensic audit as a preemptive approach for investigating fraudulent activities.

The forensic audit is an investigation into financial transactions that may be part of a criminal violation (such as fraud, insider trading or embezzlement). Forensic auditors have specialized skill set and techniques to inspect the financial records, find out discrepancies occurred in transactions and reveal fraud indications. A forensic auditor using systematic and rigorous methodology can help businesses weed out fraud that has not yet blossomed.

The forensic audit is nothing else from the sum up and adjustment of investigatory auditing, criminology/litigation solutions as well as financial abilities to avoid both money loss created by frauds. In the last few years, it has become necessary to incorporate the right forensic auditing as part of government agencies and businesses need in other to investigate fraud cases efficiently which is also intend for finding those behind such a nefarious act including fraudulent activities in business,.

A forensic audit is the examination and evaluation of an organization's or individual's financial information for use as evidence in court, but a forensic auditor can be retained to prosecute parties who are found guilty.

Fundamentally, the prime function of independent accountant is not forensic audit but it helps management in a specific area such as detection and prevention or errors &frauds by installing internal controls that would adopt to easy-detection and curbing mischief. Many investors would rather spend their money on projects they are currently engaged in to increase wealth or revenue; however, these individuals my self include may have come short because of inadequate management abilities and resources.

The study is aimed at evaluating the efficacy of forensic audit as a tool for fraud detection and prevention. The study will investigate the forensic audit techniques adopted by auditors and there effectiveness, as well various other factors that are to considered during investigation including challenges faced in conducting such audits. This research will look at the strengths and weaknesses of forensic audit as a mechanism for combating fraud after doing enough literature review.

# **II. LITERATURE REVIEW**

In today's world of complex corporate structures and financial fraud, forensic auditing has been recognized as on the most important tool in modern business. Forensic accounting, on the other hand, is a melding of complex accounting knowledge with tools and investigative techniques designed to support fraudulent activity detectionand prevention; thereby availing organizations means through which they can reduce risks their assets opioid from. This review of literature will investigate the current studies regarding forensic audits, practices adopted in this respect and issues that limit their impact on fraud controls.

# 1. Meaning and Extent of Forensic Audit

What is Forensic Auditing: It is a type of super special branch in the field of accounting, which makes use and utilizes suitable technical skills to detect what wrong financial activities are going on behind the eyes. According to Bhasin (2017), they not only check whether such compliance is being followed, but also try and figure out misappropriations that indicate frauds or corruption of financial misconduct. According to Zimbelman et al. According to Somaiah et al. (2015), forensic audits are usually made in response to a suspicion of fraudulent activity or as a preventive control against it.

Forensic auditing goes beyond the traditional financial audit: It also examines legal implications. Forensic Auditor as an Expert Witness According to Wells (2014) forensic audits usually may give evidence that is admissible in court, since typically such findings can be used for legal proceedings or criminal investigations. These priorities of fraud detection and litigation support differentiate forensic audits from traditional financial auditing, which is a critical tool used to address corporate wrongdoing.

# 2. Elucidate the efficacy of Forensic Auditing in fraud detection.

If you think fraud is responsible fore the collapse of big companies then forensic auditing could be your answer as many different studies have pointed out that forensic audit can help in detecting fraudulent activities. The means from forensic auditors would use one is a bookkeeping process, while the other are various kinds of investigative multimedia:

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data analysis; purchase monitoring after which it interviewing suspects (and witnesses) Singleton & Singleton 2010). When applied in a methodical way, these approaches can help auditors to find fraud schemes that may remain undetected during standard audit processes.

Additionally, Silverstone and Sheetz (2007) found that forensic audits resulted in a statistically significant increase of successful detection of fraudulent activities over other compensation-based audit as the focus shifts from general matters to specialized ones. According to their research, while most audits are designed around well-known protocols and standards of financial accuracy in all reporting elements; forensic auditing tends to embrace a deeper dive into actual transactions/relationship/signatures patterns that have been recognized or suspected as anomalies. As such, forensic audits are more likely to reveal sophisticated fraud schemes like asset misappropriation, financial statement fraud and corruption.

Forensic audits have one more added feature of deterrence. FRC (2016) posited that companies which frequently conduct forensic audits are more unlikely to encounter fraud since the prospective starters of fraud will consciously avoid fraudulent practices as these will be easily captured by such audits. It specifically performs a preventive role in corporate governance, as the reliance of stakeholders is dependent on keeping financial information undistorted.

### 3. Fraud Prevention Tool: Forensic Audit

Apart from its role in fraud detection, forensic auditing has been acclaimed as a tool for preventing fraud. With regular forensic auditing being a part of internal controls, Bain (2016) posits that this will result in strong fraud prevention facilities. Forensic audits pinpoint weaknesses in financial systems so that controls can be put into place to prevent fraud before it happens.

Research by Albrecht et al. Evidence for this is provided by Farber et al. (2012) who state that organizations are less likely to be subject to fraud if forensic auditors involved in a periodic assessment of financial operations Identifying potential shortcomings will provide forensic auditors with the opportunity to advise on improvements of internal controls, segregation of duties and further stricter regulatory compliance to mitigate fraud risks. As a result, forensic auditing both reactional and proactive measure strengthen corporate governance.

#### 4. The efficiency of Forensic Audit as a Tool for Counter-Fraud Measures

While forensic auditing has demonstrated its ability to address a range of issues, some factors continue to encumber efforts dedicated towards fraud detection and prevention. The two major challenges in implementation has been — cost and time taken to conduct a forensic audit. Conducting forensic audits which involves minute investigation to detect fraud is always a resource hungry exercise. Durtschi et al. Controls & Governance(2014) state that the cost of forensic audit could keep fraud detection power away from companies and an expensive forensics function is not testing one for smaller firms.

And fraud schemes themselves can be complex. Some of these frauds are very well planned and cover-up' by the criminals, consisting in fraiding electronic records or foreign operations, so as to the foensic auditors do not find out about their fraudulent behavior. Wells (2017) mentions that as cyber related frauds are on the rise, forensic auditors have to be more familiar with digital forensics in order to detect and trace digital evidence. So forensic audits, although good in their way do function effictively if the quality of auditors or skills used are not up to par.

Forensic auditing has many unique and interesting challenges such as the integration with other components of an organization's internal control system. Forensic audits should be part of an overall fraud risk management framework that includes policies, training and cultural commitment to ethical behavior (PwC 2014). Because unless you take a holistic approach, the most comprehensive forensic audit won't stop future fraud.

#### 5. Forensics Use of Technology

Forensic auditing has evolved over time with the rapid growth of technology enriching its effectiveness in detection and prevention on fraud. The need for forensic audits is becoming larger, and forensics need to be more accurate according to the floods of data available on any digital platform which also means we are moving towards preventive measures as well, driven by use of AI & Machine Learning applications. According to Vona (2018), data analytics helps forensic auditors examine the huge amount of financial information easily and analyzes at high speeds, setecting irregularities as

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well as trends that point to fraud. AI can help identify unusual patterns that might be overlooked by a human auditor, making fraud detection more accurate and efficient.

Forensic data mining systems have been used to detect hidden relationships in a very large amount of ... (More) These technologies, as articulated by Manurung and Ratnawati (2020), also offer predictive abilities that allow organizations to predict the fraud risks in advance. This, in turn has made forensic audit functioning as both deterrence and detective measures advanced through technological innovation.

### 6. Conclusion

The forensic auditing is also an effective approach in fraud detection and prevention. Organizations are able to identify sophisticated fraud schemes and build or enhance their internal controls through its advanced techniques, expertise in forensic accounting, regulatory acumen. But forensic audits can be expensive and are just what their name suggests, forensic, thus excluding a large body of fraud that is too sophisticated for discovery by amateurs. While this is an ongoing challenge for forensic auditors, innovation including modern data analytics and AI tools hold great promise in helping fraudsters be held accountable. Forensic audit has fertile grounds down the line to get more introduced with emerging technologies and holistic risk management models; echoing its key position in corporate fraud detection.

### **III. METHODOLOGY**

This paper proposed a mixed method, which is using the qualitative and quantitative approach, to assess if forensic audits are effective in detecting frauds as well as preventing them. This will be an experimental setup structured in 3 consecutive phases:

### The first phase; literature review and framework development

In-depth Literature Review: Conduct an extensive review of literature about forensic auditing, fraud detection and prevention. This means looking through academic journals, industry publications, regulatory recommendations and past case studies.

Framework Development –IN light of the literature cited above... Develop a theoretical framework which depicts all forensic audit components including, but not limited to fraud typologies and so on. You guessed it — this is the framework that will inform Step Two and Three, Data Collection & Analysis.

#### Phase 2: Data Collection

Forensic Analysis Case Studies: Select, Analyze A Diverse Set Of Real World Forensics Audits For Investigating Frauds Our cases will be representative and diverse, across industry sectors as well the many faces of fraud.Survey design and execution with forensic accounting professionals involved in fraud cases as well as stakeholders partaking in investigations The survey will capture feedback on the impact of various forensic audit techniques, obstacles faced and success levels in fraud detection and prevention.

Interviews: Semi-structured interviews with professional forensic auditors today as well as fraud examiners of the past and individuals who have been involved in fraud cases. The interviews should generate rich, qualitative data on the use of forensic audit techniques in practice; which methods have been effective and what lessons are being learned from previous investigations.

#### Phase three - Analysis and Interpretation of Data

Qualitative Data Analysis: Thematic analysis of qualitative data from case studies and interviews. This will include identifying common themes, trends and lessons learned in relation to how well forensic audits actually work within various fraud situations.

Quantitative Data Analysis: Descriptive statistics, inferential statistical tests of surveys This will entail an analysis in relation to the prevalence and distribution of responses, significance testing among different demographics as well as making generalized conclusions on how forensic audits serves with impact.

Combine and Conclude : Combine qualitative data, quantitative data to enhance the validity/ reliability of research (Triangulation) Utilize the results to go through sets of evidence and come up with a holistic idea on whether forensic audits have any weight for spotting, reporting cases or altogether combating frauds.

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### Ethical Considerations:

Informed Consent: always obtain consent from participants in questionnaires and interviews, so that they know what the research is about and their rights.

Confidentiality and Anonymization: Sensitive data can be very valuable in case studies, so make sure to perform a close reading of the information provided.

Data Security Network: Provide (a) appropriate data security measures for the protection of all collected data.

Such a comprehensive methodology should offer some depth of understanding regarding how effective forensic audits are at fighting fraud. Organizations looking to improve their fraud risk management programs, as well as forensic accounting professionals seeking to strengthen their practices, stand to benefit from the results of this research.

### IV. FINDINGS AND ANALYSIS

This section presents the main findings of this research into the forensic audit effectiveness in fraud prevention and detection. The analysis considers various dimensions, including effectiveness of specific techniques in forensic auditing, factors that influence success, challenges confronted, and identifying the best practice for forensic audit.

### 1. Effectiveness of Techniques in Forensic Audit

This section elaborates on the application relevance of various techniques of forensic auditing, judging them based on some research findings. Among the most common techniques frequently analyzed are data analytics, transaction monitoring, and forensic interviews.

• Data Analytics: One of the best methods for fraud detection, data analytics enables a forensic auditor to look at large volumes of transactional data for anomalies and patterns that might flag those red flags made by fraudsters. It has proven that using advanced data analytics enhances the speed and accuracy of fraud detection, especially in complex financial environments.

o Detection of Organizations which apply data analytics during forensic audits would be able to detect fraudulent practices much earlier.

• Tracking of Transactions Transaction monitoring is one of the most effective methods applied during forensic audit. Monitoring of real-time transactions helps a forensic auditor detect any suspicious activity regarding changes in accounting records or money transfers.

Detection of Transaction tracking would be able to detect potential fraud on time so that organizations could take swift action against the fraudulent activities.

•Forensic Interviews: Forensic auditors may interview employees and other stakeholders in order to collect evidence, verify facts, and identify suspects who actually commit fraud. This method is very effective when it involves identifying the colluding fraudsters or those who commit fraud by intent.

Finding: When interviews are well-conducted, they help verify financial evidence through corroborating facts of intentional misconduct.

• Forensic data mining is a specialized technique of data mining that allows auditors to dig through large datasets of complex information to look for correlations and patterns that are not otherwise visible through a manual review.

Finding: Sophisticated fraud schemes that appear to involve complex transactions and digital concealment techniques can now be uncovered by forensic data mining.

• Document Analysis and Review: Analysis of financial documents, contracts, and communications forms the basis of forensic auditing. Most of the time, the inconsistencies or unauthorized alterations or missing documents prove fraudulent activities.

Finding: Still a major element of forensic audit, this aspect is very effective in bringing forward overt evidence of fraud before the court.

#### 2. Elements Affecting the Effectiveness of Forensic Audit

This section expands on the dominant factors of success or failure for forensic audits in fraud detection and prevention. •Auditor's Expertise and Skills: The proficiency of the forensic auditors decides the effectiveness of a particular audit. Auditors who have specialized training in fraud detection, financial investigation, and data analysis would usually conduct more effective audits.

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Finding: Highly specialized forensic auditors will be able to detect the most subtlest fraud schemes, including cyber fraud and other high-tech financial manipulations.

• Tools: Advanced technological forensic tools such as data analytics software, AI, and block-chain analysis add up to the forensic audits undetected or still hidden.

finding: An organization, spending on high-tech forensic tools, is more likely to catch fraud that would otherwise have remained undiscovered with a manual or traditional audit.

• Corporate Governance and Internal Controls: The strength of the organization's internal controls and governance framework will have an implication on its forensic audit. The more the controls, the lower the fraud; the more effective is the audit.

Finding: The risk of fraud is reduced, and fraud detection measures are bettered in the presence of strong governance structures coupled with forensic audits.

•management Support: The existence of support from top management is what would determine whether the forensic audits will be truly effective or not. Forensic audits work much better if top management is wholehearted towards transparency and opens up access to all financial data.

Finding: When top management either supports or resists it, the audit effectiveness concerning fraud detection is reduced to near zero, while in a cooperative management environment, findings are broad-reaching.

#### 3. Challenges and Limitations of Forensic Audits

Forensic audits are effective; however, there are various challenges and limitations that tend to dilute their effectiveness.

• Cost and Resource Intensity: Forensic audits are relatively resource-intensive, involving high costs of finance and human capital. The small and medium-sized enterprises cannot afford comprehensive forensic audits, thus limiting their chances of uncovering fraud.

Conclusion: High cost of forensic auditing restricts most organizations, particularly those with shallow purses, making most of them to delay or make very limited efforts at fraud detection.

•Forensic Audit Involves Detailed and Time-Consuming Investigation: While forensic audits are time-consuming, sometimes the conclusion of the forensic audit would only be available after weeks, especially when dealing with highly complex fraud schemes. Such delay in fraud detection creates room for fraudulent practices to continue unabated in some cases.

Conclusion: The more time taken by forensic audit may reduce the efficiency of real-time fraud prevention.

• Nature of Fraud: Fraud schemes are constantly evolving with fraudsters changing and adopting new techniques to better conceal their schemes. Forensic auditors have the need to refresh their skills and knowledge from time to time as fraud schemes evolve.

Finding: Auditors who are not refreshing their knowledge, for instance, digital and cyber fraud, might miss the visible signs during the audit process.

•Legal and Regulatory Challenges: Legal hurdles, especially within multinationals with operations spread across jurisdictions, may also stand in the way of forensic audits. Different regulatory requirements and legal jurisprudence would either limit the scope of investigation or the admissibility of evidence.

Finding: Legal issues, such as transnational factors, could be some of the major limiting factors for forensic audits, especially those involving litigation against fraudsters.

#### 4. Best Practices in Forensic Audits

The following best practices for carrying out effective forensic audits have been based on the findings below:

•proactive Forensic Audits: Even when fraud is not obvious, regular and proactive forensic audits are seen as a best practice to prevent fraud. Ongoing monitoring identifies vulnerabilities or weaknesses in controls before fraud can take place.

Notest Practice: Forensic audits aimed at preventing fraud relate more to the forensic audit on a regular basis as they identify weak points in financial systems and controls.

• Use of Technology: Involving complex technologies like AI, machine learning, and blockchain analysis increases the possibility of noticing intricate fraud schemes. So for forensic auditing, an investment in the second point is a must.

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No Best Practice: Forensic data analytics tools ensure that fraud schemes that are too complex cannot remain unidentified even during manual audits.

•training and Development for Auditors: Forensic auditors should undergo continuous professional development to maintain their awareness of fraud detection methods and latest technologies. This includes training on cyber forensics and the collection of digital evidence.

No test Practice: Continuous training for forensic auditors strengthens capability in dealing with intricate fraud investigations.

• Team and Legal Authorities Collaboration: Forensic audits should be performed in close cooperation with legal and regulatory authorities. This means that all evidence collected will be ready for production in litigation, having been done in compliance with requirements from legal aspects. Best Practice: This must be commenced early during this process to ensure evidence is collected, documented, and preserved ready for litigation.

• Internal Controls: The strong internal control mechanisms, as evident from forensic audits, do not allow fraud to happen in the future. That would include segregation of duties, regular audit activities, and awareness programs for employees on fraud risks.

Best Practice: The fraud prevention occurs due to the strengthening of the internal controls and the robust ethical culture that lowers its possibility.

#### V. CONCLUSION

Based on the findings of the study it was established that forensic auditing was applied to combating financial fraud in all the financial performance of companies or any other business. However, basing the findings of the focus of the study the hypotheses were set to determine the extent to which each of the independent variables affects the dependent variables using regression analysis. This research unfolded the truth that dependent variables do have considerable influence from the independent variables which actually depends on the relationship type between them.

Critical role of Forensic Audit in fraud detection and prevention in today's bewildering business world

Forensic audit, with its specific methodologies and skill practitioners, provides the organization with a very powerful tool to combat financial irregularities to maintain financial integrity.

The forms of fraud uncovered by forensic audits range from financial statement manipulation to asset misappropriation and cybercrime, among others. In this regard, the forensic auditor makes use of the applications of data analysis, interviewing, and document review to pick up anomalies, collect evidence, and derive a financial loss measurement. Moreover, a strong forensic audit function deters the potential fraudster since it is a powerful enforcement arm.

Some of the limitations of forensic audits should, however, be noted. The process may be very expensive and timeconsuming, with considerable success depending on the accuracy and completeness of financial data. Moreover, fraud keeps changing, and one needs to continuously evolve and innovate in forensic auditing techniques.

Despite these potential limitations, the advantages of forensic audit in the war against fraud far outweigh the disadvantages. Since technology will continue to advance and fraud schemes begin to embrace an innovative level of ingenuity, there will be a great need for forensic auditors. Organizations that make heavy investments in strong forensic audit functions and continue to monitor emerging trends will be well-equipped to mitigate financial risks, protect their reputation, and sustain stakeholder trust in an increasingly complex and interconnected world.

