



# Techniques Of Forensic Accounting- A Systematic Review

Megha Virender Kumar Balyan<sup>1</sup> and Dr. Hemali M. Shah<sup>2</sup>

<sup>1</sup> Research Scholar, S. D. School of Commerce, Gujarat University, Ahmedabad

<sup>1</sup> Research Guide, Gujarat University, Ahmedabad

## Abstract:

In today's intricate financial landscape, maintaining financial integrity is vital for trust in economic systems. Financial fraud poses a persistent threat, and forensic accounting has emerged as a potent tool to combat it. This literature review explores multifaceted forensic accounting techniques, including data analysis, financial statement analysis, interviews, forensic auditing, digital forensics, document examination, and fraud risk assessment. These techniques act as powerful deterrents to financial misconduct and provide critical support in legal proceedings. Forensic accountants, armed with investigative acumen, legal knowledge, and modern technology, uncover unusual patterns in financial data, laying the foundation for justice. In an era where financial misconduct could undermine economic stability, forensic accounting and skilled professionals are indispensable guardians of financial integrity. As financial landscapes evolve, these techniques adapt, ensuring ongoing transparency and accountability. Forensic accountants must remain vigilant and adapt to combat fraud, preserving trust in economic systems effectively.

**Key Words:** Forensic Accounting; Techniques; Fraud Detection; Application

## 1. Introduction

The cornerstone of trust and confidence in modern economic systems lies in financial integrity. However, this integrity constantly faces threats in today's world, characterized by intricate financial instruments, global transactions, and advanced financial strategies. Financial fraud remains a persistent and intricate challenge,

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<sup>1</sup> Research Scholar, S. D. School of Commerce, Gujarat University, Ahmedabad, Email Id: [meghabalyan7@gmail.com](mailto:meghabalyan7@gmail.com)

<sup>2</sup> Research Guide, Gujarat University, Ahmedabad, Email ID: [hemali.shah@gujgov.edu.in](mailto:hemali.shah@gujgov.edu.in)

endangering the stability of financial markets, eroding investor trust, and inflicting substantial economic harm on businesses and society. Consequently, forensic accounting has emerged as a critical discipline within the broader accounting field, gaining significant importance in recent years. It extends beyond traditional financial record-keeping, encompassing the skill and science of uncovering financial irregularities, fraud, and mismanagement. In an era marked by increasingly complex financial transactions and the proliferation of sophisticated fraudulent schemes, forensic accountants play a vital role in preserving financial integrity, ensuring corporate accountability, and upholding the rule of law. Forensic accounting has evolved into a complex discipline, combining financial expertise, investigative acumen, legal knowledge, and modern technology. Present-day forensic accountants employ a diverse range of methods to uncover fraud, embezzlement, money laundering, and other financial misdeeds.

Forensic accounting is a dynamic and ever-evolving field, continually adapting to the changing landscape of finance, technology, and regulations. Proficiency in the techniques applied in this field is not only critical for practitioners but also invaluable for policymakers, educators, and researchers. These techniques encompass various aspects, including data analysis methodologies, investigative interviewing approaches, and the integration of digital forensics and Benford's law. By conducting a thorough analysis of peer-reviewed literature, books, and reputable sources, this research aims to provide a comprehensive understanding of the tools and best practices that form the foundation of forensic accounting. It's important to note that the specific techniques employed in forensic accounting may vary depending on the unique circumstances and the expertise of the forensic accountant. As per **Association of Certified Chartered Accountants** "Forensic accounting is the term used to describe the type of engagement. It is the whole process of carrying out a forensic investigation, including preparing an expert's report or witness statement, and potentially acting as an expert witness in legal proceedings." According to **American Institute of Certified Public Accountants** "Forensic accounting is the application of accounting principles, theories, and discipline to facts or hypotheses at issues in a legal dispute and encompasses every branch of accounting knowledge."

## **2. Literature Review**

Akinadewo, Akinkoye, & Y. E.(2020) discussed and explored into the investigation of forensic accounting methods employed in detecting tax evasion within Nigeria. A survey method was used in the form of structured questionnaires and a sample of 301 was taken from the population of 1,387 of forensic accountants and tax officials for the study. The findings unveiled the application of all 13 identified forensic accounting techniques, albeit with varying preferences among respondents. Notably, techniques like Benford's Law, Identifying Anomalies, Document Review, Revenue Approach, Business Intelligence, Trend Analysis, Net Worth Comparative Method, Data Mining Tools, and Expenditure Approach were frequently used. The study recommended the ongoing use of forensic accountants in tax evasion cases, emphasizing the need for experts to disclose the tools they employ in their engagement letters. Furthermore, they also suggested the development of a national tax evasion discovery technique as a government policy.

Suleiman & Ahmi (2018) studied about the efficacy of forensic accounting tools to deal with the issue of corruption by using qualitative research methodology which was based on the interviews of experts of anti-

corruption agencies. The research highlighted that forensic accounting investigation is considered an effective approach for uncovering and prosecuting corruption cases, emphasizing the importance of capacity building and access to modern tools for investigators. This study was based on interviews with experts from anti-corruption agencies, there were two key findings - firstly, that forensic accounting investigation is a suitable method for addressing public sector corruption, and secondly, it is court-appropriate for prosecuting corrupt individuals. The findings finally concluded that the tools and techniques of forensic accounting are appropriate and suitable for public sector corruption investigations.

Sorunke (2018) discussed in his research whether corruption cases can be prosecuted successfully in court if the procedures of forensic accounting are followed for the investigation of corruption. This research investigated the impact of employing forensic accounting investigation techniques on corruption cases and their subsequent successful prosecution in Nigeria. The findings suggested that using forensic accounting methods greatly assisted corruption prosecutors in constructing robust cases against corrupt individuals. Furthermore, forensic accounting reports aided in clarifying and effectively conveying corruption charges in court proceedings. The study recommended establishing forensic accounting units within anti-corruption agencies and involving forensic accounting experts from professional firms to bolster corruption cases and secured convictions in Nigerian courts. It was revealed that forensic accounting helped the prosecutors in making a strong case against corrupt officials. The evidence collected through forensic accounting techniques made the process of conviction speedy and aided in pressing charges against the guilty.

Ibrahim (2016) elaborated on the use of various forensic tools and techniques which can be effectively used by an internal auditor to ensure the deterrence of fraud. The author has laid emphasis on the use of forensic procedures and adequate use of technology by the auditors. He also discussed that the techniques such as forensic data analysis, and digital/frequency testing has been the need of the hour to sniff fraud as the complexity of fraud has taken a rise. He suggested that computer-assisted techniques are crucial. He also discussed that the scope of a forensic accountants have been wide so they have to be equipped themselves with legal requirements, investigative techniques, forensic auditing, etc.

Oyedokun & Emmanuel (2016) discussed in his paper about various techniques of forensic accounting. It has been stated that abnormalities in the financial system can be detected by a forensic accountant by making wise use of several techniques such as studying the background, analysis of ratios, benchmarking, assessing risk, system analysis, usage of special software, exceptional reporting, and mathematical modelling. Further he also mentioned that other techniques like data mining, data matching, Benford's law, and computer-assisted reviews can also be used as they play huge role in the detection of fraud.

Blessing (2015) examined whether forensic accounting can aid in fighting back against creative accounting. It was revealed that hard evidence exists which clearly shows that forensic accounting techniques are capable of curbing fraud. In addition to that, it was also found that forensic accounting has gotten better with time and because of that its services to various organizations, lawyers, legal proceedings, regulatory institutions, etc. can be rendered in examining and preventing fraud. It was further added that to excel in this field, forensic accountants must possess strong accounting and auditing knowledge, maintain independence

and impartiality, excel in communication and investigative skills, and have expertise in information technology.

Akinbowale, Klingelhöfer, & Zerihun (2020) have analysed forensic accounting as a tool to fight against fraud. He also discussed that the framework which can be used by a forensic accountant for implementation in an organization that consists of certain main steps which begin with a Preliminary Survey that acts as a base for the investigation of fraud. They also mentioned that the second step is to carry out a Detailed Investigation by looking into the details of the case which is followed by the Gathering of Information, in which relevant data and documents would be collected to back the case. They also stated that forensic accounting tools and techniques could be helpful to scrutinize data, Document Review and Comprehensive Data Analysis. It was also discussed in the paper that using forensic accounting clear, precise, and transparent Report would be prepared which can be useful to forensic accountant as a witness in the court.

### **3. Techniques of Forensic Accounting**

In our contemporary globalized and technology-driven financial environment, the significance of forensic accounting techniques cannot be emphasized enough. The specialized investigative methodologies and tools also play a central role in upholding financial honesty, revealing concealed fraudulent activities, and provide crucial assistance in legal proceedings. Without any doubt, forensic accounting techniques are indispensable for identifying financial wrongdoing and fraud. Through the application of forensic accounting techniques, forensic accountants can disclose unusual patterns or deviations within financial data. These distinctive indicators often serve as the initial warning signs of potential misconduct, enabling organizations and authorities to take swift action and to prevent from further harm. Techniques of forensic accounting are discussed below:

- 1. Data Analysis and Data Mining:** Data analysis and data mining represent foundational methods in forensic accounting Nigrini (2020). Forensic accountants employ these approaches to meticulously explore extensive datasets, aiming to identify unusual patterns or irregularities in financial transactions.
- 2. Benford's Law:** This technique is elucidated by Nigrini (2012), serves as a prominent statistical tool employed to uncover anomalies in the distribution of initial digits within financial data. Through the application of this technique, forensic accountants are equipped to unveil concealed financial misconduct or fraudulent activities.
- 3. Financial Statement Analysis:** Wells (2014) discussed that in forensic accounting, the scrutiny of financial statements is a precise and comprehensive process. Forensic accountants meticulously analyse balance sheets and income statements, diligently to investigate any disparities or inaccuracies. This technique helps forensic accountants to evaluate closely critical financial ratios, trends, and anomalies, seeking indications of financial irregularities. The Altman Z-score model, originally introduced by Altman (1968), stands as a widely recognized tool for assessing the fiscal stability and bankruptcy risk of corporations. This method enables forensic accountants to assess the financial well-being of organizations under investigation.

4. **Interviews and Interrogations:** Inbau, Reid, Buckley, & Jayne (2011) mentioned that effective communication skills are imperative for forensic accountants when conducting interviews and interrogations. Forensic accountants employ techniques such as the Reid Technique to elicit information from individuals involved in financial investigations. These interviews serve as pivotal mean for accumulating evidence and evaluating the credibility of provided information. Diligent and skilful interviewing often unveils crucial details related to financial misconduct.
5. **Forensic Auditing:** Singleton & Singleton, (2010) discussed that forensic auditing constitutes a methodical process within the forensic accountant's toolkit. It involves a meticulous examination of financial records and transactions. Hopwood, Leiner, & Young, (2008) mentioned in their book that forensic auditors employ techniques such as "tracing" and "vouching" to meticulously trace fund flows, identify discrepancies, and assemble evidence for legal proceedings. This approach ensures a comprehensive inspection of financial transactions, eliminating opportunities for fraudulent activities to remain undetected.
6. **Digital Forensics:** Casey (2011) said that in the digital era's emergence, digital forensics has become indispensable for forensic accountants. Forensic accountants employ specialized software and expertise to analyse electronic financial records, emails, and digital communication. Nelson, Phillips, & Steuart (2018) mentioned that techniques such as data recovery and digital evidence preservation empower forensic accountants to reveal financial improprieties involving electronic records and cybercrimes.
7. **Document Examination:** Saferstein (2018) said that document examination is a meticulous process which aim to assess the authenticity and integrity of both physical and electronic documents. Forensic document examiners employ a variety of techniques, including microscopy, spectroscopy, and handwriting analysis. Through the application of these methodologies, forensic accountants can verify document legitimacy and uncover any attempts at forgery or fraud.
8. **Fraud Risk Assessment:** COSO Internal Control–Integrated Framework (2013) said that forensic accountants actively evaluate the risk of fraud within organizations. They construct fraud risk matrices and pinpoint internal control vulnerabilities. This technique empowers organizations to proactively address potential weaknesses related to financial misconduct, ultimately strengthening their fraud prevention efforts.

#### 4. Conclusion

Forensic accounting techniques play a multifaceted role, beginning with their role as a potent deterrent. The knowledge that skilled forensic accountants are poised to uncover irregularities and fraudulent activities serves as a powerful deterrent. Forensic Accounting techniques are instrumental in providing invaluable support in legal proceedings. Forensic accountants are not just number-crunchers; they are expert investigators who meticulously uncover evidence of financial irregularities. Their findings, often presented in court, become the foundation upon which justice is built. These professionals are the architects of truth, constructing compelling narratives backed by solid evidence. In a courtroom, their testimony can make or break a case, ensuring that those responsible for financial misconduct are held accountable. In essence, forensic accounting techniques are not just techniques; they are the embodiment of vigilance and dedication. These techniques safeguard the trust and confidence upon which our economic systems depend, serving as unwavering guardians of financial integrity. In an era where financial misconduct could erode the very foundations of our economies, these techniques and the skilled professionals who wield them are not just essential but indispensable. It is ensured that our financial systems remain robust, honest, and accountable, preserving the bedrock upon which prosperity and progress are built. Forensic accountants will be continued to evolve, ensuring that the pursuit of financial integrity and accountability remains an ongoing and unyielding endeavour. Hence, forensic accountants must keep evolving with time and circumstances, and they must use forensic accounting techniques effectively to keep frauds at bay.

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