

## Role of Accounting Thought in the Evolution of Forensic Accounting: The Past, Present and Future

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### Abstract

*This paper examined the role of accounting thought in the evolution of forensic accounting linking it with what forensic accounting was in the past, what it is in the present and what it will be in the future. The study also examined the challenges of forensic accounting. Hints and clarifications are offered by accounting thoughts for most of the noteworthy events that shaped the progress of forensic accounting. Also, the need for forensic accounting came about due to the failure of traditional auditing practices in detecting frauds and the increase in financial crimes in both private and public sectors all over the world. Forensic accounting has experienced a lot of changes recently due to the growth of global remote and automated accounting solutions which has led to increase in the demand for forensic accounting solutions. However, forensic accounting lacks public recognition about the nature of its services. Most forensic accountants also lack the necessary technological skills. All these limitations have posed a serious challenge to the growth of the profession. The conclusion drawn from this study is that forensic accounting has improved compared to what it was in the past, the future of forensic accounting depends on its integration with modern accounting tools and advanced technologies. This study recommends that the public should be enlightened on the nature of forensic accountants' services. Forensic Accountants should have up-to-date knowledge about the current trends in their profession.*

**Keywords: Accounting thought, forensic accountants, forensic accounting tools, professionals, technological skills**

### 1. Introduction

Accounting thought is regarded as theories and guesses that arises from empirical and pragmatic review of accounting in order to guide accounting practices (Sanchez-Matamoros et al., 2015). Accounting thought does not only play a significant role in reporting but attempts to solve problems associated with accounting. It also ensures the growth of other branches of accounting such as financial and management accounting. Forensic accounting is a specific aspect of accounting that examines whether companies engage in financial reporting misdemeanors or not. The advancement of forensic accounting as a profession is linked to historical occurrences that illustrate the differences in accounting examinations and their methodologies across various countries with distinct legal systems (Liodorova & Fursova, 2018). Forensic accounting is not a recent field of accounting; the practices and competencies associated with forensic accounting have existed for many years.

The opportunity available to accountants and accounting students to apply the knowledge of accounting, auditing, and experience in investigating and the prevention of financial crimes has created a lot of excitement among accounting professionals and students who major in accounting. This has potentially geared more students to acquire a degree in

accounting (Golden, et al., 2011). There are lawyers who undergo training in the accounting field and also progress to write accounting professional examinations to be able to practice as forensic accountants. Also, the effects of COVID-19 pandemic caused economic misbalance which further fueled the need for forensic accounting and the need to have a cloud based forensic accounting solutions.

More so, no forensic investigation can be carried with the absence of accounting principles. Most of the cases of fraud usually focused on the manipulation of financial results. For example, the happenings involving WorldCom, Enron, Adelphia, Computer Associates and others occurred as a result of manipulation of financial statements. All these events in no doubt have led to increased public scrutiny of accountants and have also brought the accounting profession to the front line (Howard, et al., 2012). The responsiveness to forensic accounting become widespread in USA and England in the 20th century while the awareness of forensic accounting started late in developing nations (Abdulrahman, 2019). The recent financial accounting scandals in some Nigeria banks and the failure of some Nigeria banks such as Continental Bank and Eagle Bank in the past bring about forensic accounting investigations. Forensic accounting however has started to gain attention in Nigeria, forensic accounting is now taught in schools and its knowledge is now being examined in Nigeria accounting professional examinations. Today's accountants are required to have forensic accounting knowledge (Bhavani, 2018).

Furthermore, the contribution of accounting thought to the evolution and understanding of forensic accounting is very impressive. The improvement in accounting as a distinct discipline is linked with the growth and expansion of industry and the evolution from manufacturing to capitalist production (Mukhametzyanov, et al. 2017). The capitalist production however led to the explosive growth in financial activities and production. According to Ushakova and Mukhametzyanov (2015) this development also brings about the emergence of different branches of accounting such as forensic, management accounting, auditing and other social sciences such as statistics, economic analysis and marketing.

Forensic accounting is different from auditing. Auditing is an independent examination of financial statements with making an independent statement or report on whether the financial statement shows the true state of the firm, auditors also check if the firm complies with accounting principles as well as standards while preparing their financial statements (Bhasin, 2016). Whereas, Loper, (2013) stated that forensic accounting is a financial investigation carried out inside the judicial scheme which identifies, records, extract, report and verify past financial data and other accounting transaction in order to settle legal disputes (Crumbley, et al. 2013). For a trained accounting professional to become a good financial investigator, the professional must possess some qualities such as; having a great intuition, good knowledge of human conduct, common sense, and the capability to identify the implication of shreds of evidence (Howard, et al., 2012).

However, accounting professional bodies and standard setters have been busy over the years setting up new standards, reviewing and updating standards. Much emphasis has been placed on developing internal control measures, audit procedures and evidence. This study contributes to knowledge by reviewing succinctly how forensic accounting started, the significance of forensics to the accounting profession and the challenges of forensic accounting. Several researchers such as Benina et. al (2022), Hashem (2021), Julia and Valeriya (2018), have worked on the state, perspectives, strength and weaknesses of forensic accounting development but very few have reviewed the role of accounting thought in evolution of forensic accounting, the recent study on accounting thought and forensic accounting is the study of Idris et al. (2022) which focused only on the gap between demand for accounting education and practice. This research bridges the gap by observing the role of

accounting thoughts in forensic accounting, the relevance, challenges, and relative trends of forensic accounting and the theories utilized by forensic accountants to discover fraud. The study does not only focus on the evolution of forensic accounting, it also focused on the present and future prospects of forensic accounting which most of the researchers such as Benina et. al (2022), Hashem (2021), Idris et al. (2022), Julia and Valeriya (2018) have failed to consider. The key objective of this study is to examine the role of accounting thought in the evolution of forensic accounting.

## **2. Conceptual Review**

### **2.1. Accounting thought and Forensic Accounting**

Thought is regarded as the drift of notions and theories that can result in in to a reasonable conclusion (Agbi, et al., 2017). Accounting thought is a set of ideas, principles which is a body of knowledge that have been approved to aid the guidance of accounting practices. (Olaoye et al., 2020). According to Onuoha and Enyi, (2019), the excavations that was carried out in the past have revealed that accounting thought is a component of preliminary civilization. The explosive growth in production and the need to solve different accounting problems in several organizations bring about the emergence of different branches of accounting (Ushakova & Mukhametzyanov, 2015). The widespread in the occurrence of fraud, misrepresentation and alteration of financial statements and the incidences of fraud led to the introduction of forensic accounting investigation which is also one of the branches of accounting. Accounting thought is essential in forensic accounting because no forensic inquiry can be carried out in the absence of accounting knowledge and principles.

### **2.2 Evolution of Forensic Accounting: Forensic Accounting in the Past**

The explosive growth in financial activities and production in capitalist production led to growth of different subdivisions of accounting such as forensic accounting, management accounting, auditing and so on (Ushakova & Mukhametzyanov, 2015). The contribution of accounting to the evolution and understanding of forensic accounting is very remarkable. The history of forensic accounting can be traced back to 1817 when an expert witness who is regarded as the first forensic accountant Frank Wilson was asked to testify in court and examine the transactions of the notorious mobster Al capone in 1930 (Aktaç & Kuloğlu, 2018). The term forensic accounting was originally published by Maurice E. Peloubet in 1946 (Howard, et al., 2012). The popularity of forensic accounting grew extensively in the USA and England during the twentieth century, while some Africa countries like Nigeria and Namibia experienced a delayed interest in forensic accounting (Abdulrahman, 2019). During the World War II the FBI used forensic accounting in their investigations and employed close to 500 accountants. The growth in forensic accounting continues as tax laws and generally accepted accounting practices became mandatory and popular (Loper, 2013).

The demand for forensic accountants has increased greatly in recent times, the discovery of the prominent accounting scandals such as Enron and its auditor Arthur Anderson in 2001 which led to the demise of the firms has brought the need for forensic accounting into the limelight. The fall of Eron led to the enactment of new laws and guidelines across the world, which result into an upsurge in financial reporting requirements and transparency for publicly traded companies (Liodorova & Fursova, 2017). The demise of several firms due to fraudulent or financial statement fraud has reduced the confidence most people have in accounting and auditing. Lately, the COVID-19 pandemic has led to the sky rocked growth in the call for the services of forensic accountants owing to the point that there is a noteworthy rise in the evasion of taxes and financial fraud cases across the globe

during the period. The pandemic period also led to the growth of global remote and automated accounting solutions which in turn led to the request for forensic accounting solutions. The prospect of forensic accounting now hinges on its dominant and vigorous amalgamation with advanced technologies and contemporary accounting tools like machine learning and artificial intelligence (Keshav, et al., 2022).

### **2.3 Forensic Accounting in the Present: Relative Trends in Forensic Accounting**

Forensic accounting has developed beyond what it was in the past. The growth in technology, the increase in financial statement fraud, cyber-crimes and tax evasion have resulted into the high demand for cloud based forensic accounting solutions. One of the cloud-based accounting tools used by forensic accountants is the FraudFindr forensic accounting software, this software is used to solve financial exploitation cases quickly with less effort, other forensic accounting tools are Encase, computer aided audit tool, Digital investigation manager and Forensic Toolkit (which is the leading forensic tools used to perform email analysis) (Qureshi, 2015). The relative trends in forensic accounting are artificial intelligence, preventive accounting, digital forensics, data analytics and cloud forensics.

Further, artificial intelligence improves data entry practices; In other to prevent cyber-crimes forensic accountants deal with machine learning which is a further evolution of artificial intelligence (Qureshi, 2015). Artificial intelligence will allow employees to utilize their abilities for the most worthwhile tasks (Adenle et al. 2020). Forensic accountants work with team of software developers to create programs that track trends in cyber-crimes and to forecast the extent to which the crime will be committed. Preventive accounting entails decreasing the chance of errors and fraud before they occur. Preventative accountants evaluate trends in exposed accounts so cyber security teams can work to strengthen them.

Digital forensics encompasses the processes of safeguarding, extracting, identifying, and documenting digital evidence, which can serve as legal proof of a committed crime in a court of law (Oludare et al., 2022). As per Cassey (2011), digital evidence refers to information of digital nature that substantiates or refutes crucial elements of a crime, such as motive. Data analytics are used to increase awareness, improve the growth of business sectors, and reduce fraud risks in the 21<sup>st</sup> century. Forensic accountants today that want to advance themselves in their field needs to have a deeper understanding of data analytics. Forensic data analytics allow the forensic accountant to make more targeted and informed decisions. Cloud forensics entails the convergence of network forensics and cloud computing. The main objectives of cloud forensic is to investigate cybercrimes, data breaches and entails regulations are being followed (Oludare, et. al, 2022). Forensic accountants need to work together as a team with the cloud service providers, and cloud service administrators to track data needed within the cloud environment (Jangjou & Sohrabi, 2022).

### **2.4 Relevance of forensic to the accounting profession**

The emergence of forensic in accounting can be attributed to the widespread corruption prevalent in the business realm. Due to its focus on legal disputes and issues requiring expertise in both accounting and law, forensic accounting has been recognized as a fundamental branch of accounting (Kasum, 2009). It serves as a vital tool in detecting and preventing various forms of fraud, particularly financial statement fraud. Moreover, forensic accounting aids in the investigation of cybercrimes, including telecommunication fraud, online gambling, computer privacy theft and online extortion (Pearson & Singleton, 2008). In the discovery, prosecution and prevention of individuals involved in illicit activities like

money laundering, theft, and financial statement fraud, forensic accountants play a crucial role (Honigsberg, 2020).

Forensic accountants need to have knowledge of accounting in order to be able to detect financial statements fraud. Contrary to the old sayings and the public perspective that accountants are only bookkeeper who only record debit and credit transactions, forensic accounting has brought a change in this perspective. The public now has a better understanding that accounting has different branches where accountants can specialize and that there is more to accounting than debit and credit. The knowledge of forensic accounting helps the forensic accountant to appropriately advises management in the area of business finance, minimize losses, reduce risk and avoid legal issues, and assess the work of accountants and other professionals in the organization.

## **2.5 Forensic Accounting Practices in the Future and the Way Forward**

Forensic accounting has emerged as a prominent field within accounting, playing a vital role in combating the escalating cases of economic and financial crimes worldwide (Okoye & Ndah, 2019). The demand for forensic accounting arose due to the limitations of traditional auditing methods in detecting fraud, coupled with the surge in financial misconduct across both public and private sectors on a global scale. More so, the interest in forensic accounting amplified after the economic breakdown of several global economic establishments because of fraud, which augment judicial cases before courts (Bhasin, 2013). Due to the economic imbalance fueled by the COVID-19 pandemic there has been a fueled in the demand for forensic accounting and the need to have a cloud based forensic accounting solutions.

According to Keshav (2022), the international forensic accounting market size in 2021 was valued at \$5.13 and it is projected to reach \$11.68 billion by 2031. As the accounting profession continues to grow and improve due to the influx of technology there is need for forensic accountants to get acclimatized with the growth in technology and learn to use the various accounting and forensic accounting tools in the detection and investigation of fraud. Artificial intelligence and machine learning will play an important role in the forensic and other accounting profession in the future because it ensures cost effective services are delivered and because of its accuracy. Other technologies predicted to play a key role in forensic accounting in the future are blockchain, bots, predictive analysis, and robotics. The way forward for forensic accountants is to blend with the current and future changes in technologies, to acquire new technological skills and to master the new skills beyond numbers (Adenle et al. 2020).

## **2.6 Forensic Accounting Theories**

According to forensic accounting theory, the approach and strategies employed in fraud detection typically depend on both accounting and non-accounting factors considered by the forensic investigator. The complexity of fraud detection has increased in recent times due to technological advancements and the frequent modifications in accounting methods and policies adopted by organizations for financial statement preparation (Peterson, 2020). Among the commonly used theories for fraud detection by forensic accountants are fraud triangle and fraud diamond theory. The fraud triangle theory, credited to Donald Cressey (1953), is one of the prevailing theories in this field. Forensic accountants rely upon the fraud triangle to discover alleged fraud, the reasons and the weak spot in the system that fraud has been perpetrated. Fraud triangle has been put forward to provide an explanation for the superiority of fraud in a company.

More so, Adebisi, et. al, (2016), opined that fraud triangle is employ to detect vulnerable factors and feasible suspects in an organisation in any occurrence of fraud. It also revolves around three essential elements: opportunity, rationalization and pressure. Pressure denotes the motivating factors that might lead an individual to involve in duplicitous activities, which can stem from personal issues like addiction, financial hardships, or workplace-related pressures (Gamlath et al., 2018). The motive for opportunity was created by pressure, the perpetrator takes the chance of the pressure to engage in deceitful activities. This professed opportunity to commit fraud comprises of two elements according to Cressy (1953), which are technical skills and general information. General information is the knowledge acquired by the perpetrator which makes it easier for the fraud to be committed. While technical skill is the ability or capability needed to commit fraud. Rationalization is described as an indispensable component of a crime before it occurs (Gamlath, et. al, 2018).

Furthermore, the fraud diamond theory expands upon the fraud triangle theory and was proposed by Wolfe and Hermanson in 2004. According to, Wolfe & Hermanson (2004) this theory suggests that the presence of pressure, rationalization and opportunity is insufficient to cause fraud unless the individual has the ability to engage in the fraudulent activities. It consequently indicates that, for financial fraud to arise in any organization, pressure, opportunity, justification, and capability should have been present (Okoye & Ndah, 2019). Wolfe and Hermanson (2004) stated that the position or function of a person within a company may give them the power or ability to abuse the opportunity so as to engage in fraudulent activities.

## **2.7 Challenges of Forensic Accounting**

Forensic accounting has several drawbacks irrespective of its many benefits. According to Tarr. et al., (2017) the regulation governing the forensic accounting profession and the requirements for becoming a forensic accountant differs across countries. More so, lack of public awareness about the differences in the responsibilities of an auditor and forensic accountant is a serious challenge to forensic accounting (Muehlmann et al., 2012). Forensic investigation is also time consuming and expensive; it requires forensic accountants to review all relevant documents to ensure that their investigation is complete. In addition, lack of highly qualified forensic accountants is also a serious challenge in forensic accounting profession. For instance, in Nigeria, only few specialize in this area. Accountants who are not versatile with the knowledge of accounting and law may find it difficult to specialize in forensic. More so forensic accounting needs great communication skill which some accountants lack.

Furthermore, lack of information technology skills by some forensic accountants has posed a great challenge to the utilization of cloud forensic accounting solutions, since it has a robust integration with advanced technologies and modern accounting tools, forensic accountants are now required to be technology savvy, they also need to have knowledge of AI and data analytics (Keshav, et. al, 2022). Also, increase in cyber-crimes is another challenge, forensic accountants are now using cloud forensic accounting solutions to conduct forensic investigations, cyber-crime has become a major problem for them, forensic accountants should be able to stay ahead of cyber-crime through the use of forensic accounting tools that allows conduct their duties effectively (Qureshi, 2015).

### 3. Data and Methods

This study is conceptual research and it is conducted by reviewing existing literature via the internet by reviewing the literatures that focused on accounting thought, forensic accounting and emerging technologies that will affect the future of forensic accounting practices. The reviewed literatures are journals and articles published in developed countries, Nigeria, and other developing countries reviewed with the aid of desk study research.

### 4. Conclusions and Recommendations

The significance of accounting cannot be overstated, as it has evolved to cater for the needs of an increasingly complex economic system. The origins of accounting principles provide valuable perceptions and explanations for many significant milestones in growth of modern accounting (Olaoye et al., 2020). Forensic accounting entails the adoption of auditing techniques, investigative techniques and skills to handle legal matters related to financial reports (Dhar & Sarkar, 2010). Based on the extensive literature review done in this research work, this study concludes that forensic accounting has improved compared to what it was in the past, and its future now depends on its integration with modern accounting tools and advanced technologies. This study also concludes that the role of accounting thought to the evolution and understanding of forensic accounting is very impressive. Despite the many benefits of forensic accounting the field still has some limitations that have bedeviled it over the years some of which are absence of public acknowledgement which often create misperception among the public about the nature of forensic accountant services (Alshurafat, et. al., 2021). It is time consuming and expensive, lack of experienced forensic accountants, lack of information technology skills by some forensic accountants and the increase in cyber-crimes across the globe. All these limitations have created a lot of challenges to the effectiveness, growth, and development of forensic accounting.

Based on these limitations this study therefore recommends that there should be globally recognized regulations on the conduct of forensic accounting services worldwide, the public should be enlightened on the differences in the role of auditors and forensic accountants. Also, accountants who specialized in forensic accounting should be well trained, versatile and technology savvy, they should be up-to-date on the current trends in their profession, they should be able to use the cloud based forensic accounting tools effectively and efficiently. Forensic accountants are advised to amplify their occupation status because it determines the success of their career. The study also recommends that forensic accountants must ensure that they stay ahead of cyber-criminals. The limitation of this study is that it fails to review cloud based forensic accounting tools exclusively, based on this limitation further researcher can review extensively the effect of cloud based forensic tools on forensic accounting.

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