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A Proposed Frame work for External Auditor using of Root Cause Analysis in Fraud Detection and Analysis

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Abstract:

The research objective is to provide a proposed model for External auditor using of root cause analysis in fraud detection and analysis. The research used (fishbone) diagram as one of root cause analysis tools, which based on multiple causes (Fraud Hexagon Elements) and Effect (Fraudulent financial Reporting) as a type of fraud. The research finds that external auditor using of fishbone diagram helping in detection and analysis of major causes of fraudulent financial reporting. Moreover, stimulus is measured by financial stability and external pressure; it has positive effect on fraudulent financial reporting. Opportunity is measured by number of audit committee members and it has significant impact on fraudulent financial reporting. Capability peroxide by change of directors has positive effect on fraudulent financial reporting.

Ego and collusion has significant impact on fraudulent financial reporting, the higher level of collusion will lead to fraud.

<u>Key Words:</u> Root Cause Analysis, External Auditor and fraud detection

1. Introduction

The final step in the accounting cycle is obtaining the results in the form of financial statements, which give users decision-making information about the company's performance and financial situation (Roza, and Mega, 2021). Presenting attractive financial statements to investors piques managers' attention; therefore they alter some data to highlight exceptional financial success. (Yulia and Reskino, 2023).

Cheat Committed by companies is often called fraud, which is divided to fraudulent financial reporting, asset misappropriate and corruption. The Global 2016 Fraud Study (ACFE, 2016) mentioned number of losses resulting from fraudulent financial statements around\$975,000.More over in 2022, fraud problem covering 2,110 cases from 133 countries causes losses of \$3.6billion with average loss per case \$1,783,00(ACFE,2022).

Financial statement fraud is a phenomenon that can hurt a lot of people and have an impact on a company's long-term viability and reputation. As a result, fraud needs to be stopped as soon as feasible. (Ni putu and Winda, 2021). The auditor can assess and consider from various points of view, dimensions and indicators called Fraud elements.

SASNo.99 introduced a conceptual frame work called "Fraud Triangle" based on three elements pressure, opportunity and Rationalization. (Wolfe and Hermanson, 2004) transformed the fraud triangle into the "Fraud Diamond" by including capability as a component that generates the possibility for fraud.

In 2011, Crowe Howarth developed the second development, known as the "Fraud pentagon," by equating competence with capability and including arrogance as a further component. "Fraud Hexagon "is the latest development by (Vousinas, 2019), who transforms pressure and arrogance into stimulus and ego, adding collusion as a new element.

The study provides a proposed frame work for External auditor using of (fishbone) diagram as one of root cause analysis tools for fraud detection and analysis, which based on multiple causes (Fraud Hexagon Elements) and Effect (Fraudulent financial Reporting) as a type of fraud.

2. Literature Review and Hypothesis development

2.1.1 Fraud Hexagon Elements

Stimulus

Stimulus is pressure to commit fraud both financially and non-financially (Irwandi, 2019). Statement on auditing standards (SAS) No.99 states that there are four common conditions of pressure that can trigger fraud include financial stability, financial targets, external pressures and individual financial needs.

Opportunity

Companies with weak internal controls will have many loopholes that can present an opportunity for management to manipulate transactions or accounts (Maresellia, 2018).

Companies require a supervisory unit that can keep an eye on the business's operations in order to prevent this manipulation. The audit committee is the supervisory body that the company typically forms to carry out supervision. (Taufiq Akbar, 2017).

Capability

Capability is how much power and capacity of a person to commit fraud in the company environment (Wolfe and Hermanson, 2004). The term "capability" describes fraudsters who possess sufficient intelligence to recognize the gaps in the organization's internal controls and who use their position, function, or authority to further their own financial interests (Ni and Putu, 2019).

Ego

According to (Nidia and Reskino, 2023) (pedneault et al, 2012) humans have basic traits like being selfish, self-interest, bounded rationality and risk aversion. A person must have a strong sense of self-worth and a strong conviction that they won't be caught committing fraud. Additionally, ego appears to be a recurring theme in some white-collar crimes.

Collusion

Collusion is a deceptive compact or agreement between two or more persons for one party to act on behalf of the other party for a negative purpose, such as defrauding a third party for personal gain (Vousinas, 2019). Collusion is related to the hexagon fraud elements because it allows management to manipulate financial reporting to appear fraudulent by taking advantage of the company's privileges and ease of use. (Achmad and Imang, 2023).

2.1.2 Types of fraud

A third classification Scheme divided fraud according to victims as follow:

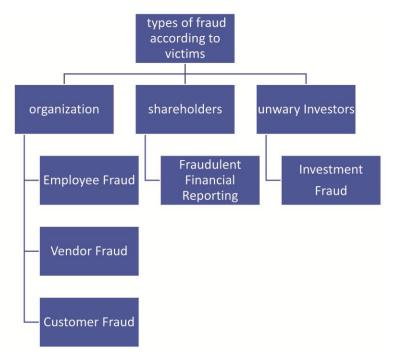


Fig (1): types of fraud (W. Steve Albrecht, Chad O. Albrecht, Conan C. Albrecht, Mark F. Zimbelman, (2012), "Fraud Examination", Fourth Edition, South-Western, Cengage Learning p.9)

Fraudulent Financial Reporting

According to (Alvin Arens, 2008) fraudulent financial reporting refers to the purposeful omission of information or intentional manipulation in order to deceive people who require clear financial statements.

financial statements fraud is divided into the following actions: (Fera and Nawang, 2022)

- a) Misrepresentation or intentional deletion of events, transactions or other important information in the financial statements.
- b) Willful manipulation of accounting rules, including groupings, disclosure patterns, and presentation styles.
- Manipulation or alteration of accounting information and supporting evidence on which the financial statements are based.

2.1.3 Root cause Analysis

(CAAF, 2020) defines Root cause analysis as "an approach to understand why something happened or how a situation developed".

"The American Society for Quality" (ASQ, 2020) identifies root cause analysis as a contributing factor to nonconformance that needs to be eradicated completely through process improvement. It covers a wide range of methods, instruments, and strategies for determining the root causes of issues. The Institution of Internal Auditors provides techniques and tools that can be used in the root cause analysis including: (Dona Ramadhan, 2020)

- a) Five Why's
- b) SIPOC analysis (Suppliers, Inputs, process, Outputs and Customers)
- c) Fishbone/ Ishikawa diagram
- d) Statistical procedures such as correlation or scatter diagram

Fishbone/ Ishikawa diagram

The Fishbone Diagram (Ishikawa diagram) is a tool for figuring out the underlying causes of issues with quality. Mainly represents a model of suggestive presentation for the correlations between an event (effect) and its multiple happening causes (Gheorghe and Carmen, 2010). Because of the function of the fishbone diagram, it may be referred to as a cause and effect diagram.

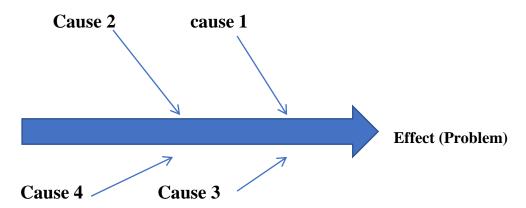


Fig (2): "the Cause and Effect Diagram by Kerri Simon"

The design of the diagram looks like "Fish Skeleton" consists of bevel line segments which lean on a horizontal axis, suggesting multiple causes and sub causes that produce them. Benefits of using fish bone (Cause and Effect) diagram: (Luca Liliana, 2016)

- a) Helps to determine root causes
- b) Encourages group participation
- c) Indicates possible causes of variation
- d) Provides a complete picture of all potential causes

2.2 Hypothesis development

To achieve the research objective, the following hypotheses are mentioned below:

- 1. External auditor using of Root Cause analysis helping in fraud detection.
- 2. External auditor using of Root Cause analysis helping in fraud analysis.

3. Proposed frame work

The proposed frame work based upon External auditor using of (fishbone) diagram as one of root cause analysis tools in fraud detection and analysis through multiple causes represented in (Fraud Hexagon Elements) and Effect (Fraudulent financial Reporting) as a type of fraud.

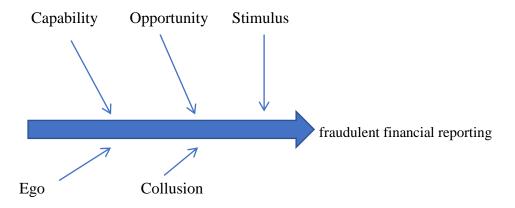


Fig (3): Cause and Effect diagram in fraudulent financial reporting detection and analysis

Effect of Stimulus on Fraudulent Financial Reporting

Trisanti(2021), (sukmadilagae, 2022) and (Nidia and Reskino, 2023) Demonstrate how managers are empowered to take all necessary steps to ensure that the company's finances remain transparent, even in the event of a business failure that could jeopardize financial stability. This includes the potential for engaging in fraudulent financial reporting. There for stimulus has positive effect on fraudulent financial reporting.

Effect of opportunity on Fraudulent Financial Reporting

Aviantara(2021), Riyanti and Trisanti(2021), Larum (2021) have demonstrated that opportunity has a significant impact on fraudulent financial statements, thus, if the company's independent board of commissioners has little internal oversight, some parties will have an opportunity to carry out fraudulent financial statements.

Effect of Capability on Fraudulent Financial Reporting

(Triyanto,2019) and (Naomi and Dedik,2020) stated that the company's efforts to remove directors who are deemed aware of fraud by the performance of the company are aided by the change of directors, which takes time for new directors to adjust to cultural

changes.. So that, Capability peroxide by change of directors has positive effect on fraudulent financial reporting.

Effect of Ego on Fraudulent Financial Reporting

(Larum, 2021), (sukmadilagae, 2022) and (Nidia and Reskino, 2023) have shown that managerial ownership is a good way to measure ego. This ownership, however, can increase a person's sense of arrogance because they believe they have rights to the company. Thus, the greater the managerial level, the greater likelihood of fraudulent financial reporting and ego has significant impact on fraudulent financial reporting.

Effect of Collusion on Fraudulent Financial Reporting

Management is able to manipulate financial reporting through fraudulent means by taking advantage of the company's convenience and privilege. This manipulation results from the mismatch in goals between agents and principles. Even though management is aware of the existence of information that is known but not shared with the principles, agents can commit fraud by using the resources that politicians provide. (Achmad and Imang, 2023). It can be concluded that the stronger the connections within a company, the higher the level of collusion that will lead to fraud.

4. Research Results

The research results are summarized in external auditor using of root cause analysis helping in detection and analysis of major causes of fraudulent financial reporting. As well as, stimulus has positive effect on fraudulent financial reporting; it allows managers to make decisions to do everything possible to keep the company's finances visible including the possibility of committing fraudulent financial reporting.

Opportunity has significant impact on fraudulent financial reporting, if Internal Supervision by audit committee of the company is low, the situation will be an opportunity for some parties to carry out fraudulent financial statements. Capability peroxide by change of directors has positive effect on fraudulent financial reporting, as well

as Change of directors is one of the company's efforts to eliminate directors, who are considered aware of fraud by the company performance. Moreover, Ego and collusion has significant impact on fraudulent financial reporting, the greater the managerial level, the greater likelihood of fraudulent financial reporting and the higher level of collusion will lead to higher level of fraud.

5. Research Recommendations

After using of (fishbone/ cause and effect diagram) as a tool of root cause analysis in detection and analysis of major causes of shareholders fraud (fraudulent financial reporting), the researcher recommended using of (fishbone/ cause and effect diagram) in detection and analysis of organization fraud (Employee Fraud, Vendor Fraud and customer fraud) and Investment fraud based up on multiple causes represented in (Fraud Hexagon Elements).

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