

BRIBERY DETECTION STRATEGY: A CONCEPTUAL MODEL

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Abstract

Bribery is a type of corruption with a high number of cases almost every year, including in Indonesia. This condition is getting worse because most bribery occurs in government circles. Therefore, finding an effective solution to detect bribery is the focus of many parties, especially the government. By seeing this solution in the future, the number of bribery cases can decrease significantly. This research aims to develop a holistic model that includes potential factors for detecting bribes. This research will use a literature review to obtain data. The results of this research indicate that three potential factors effectively detect bribery. The factors are forensic audit and internal audit, which are potentially effective methods to detect bribery. In addition, another factor is big data, which has the potential to increase the role of forensic audits and internal audits to detect bribery.

Keywords: Big Data, Bribery, Forensic Audit, Internal Audit,.

I. INTRODUCTION

Indonesia can be called a country with relatively high corruption cases compared to several other countries. Based on data released by Transparency International, Indonesia has never obtained a corruption perception index score in the last ten years exceeding 40. However, based on data obtained from Transparency International, the number of corruption cases that have occurred in Indonesia is still relatively high because the score obtained is still classified as low and far from a score of 100. The corruption perception index, with a score of 100, is the highest score a country can obtain and indicates that the country is getting cleaner from corruption cases [1] [2], [3], [4], [5].

The high rate of corruption cases will make many parties concerned. Conditions worsened after discovering that most corrupt practices occurred in government institutions, with bribery being the most frequent type of corruption. Even more surprising is that most perpetrators are civil servants [6][7]. In addition, based on data published by the KPK [8], over the last 12 years, bribery has consistently been ranked first as a type of corruption, with the highest number of cases occurring in Indonesia.

Indonesia's high number of bribery cases has encouraged various parties to find an effective model to detect bribery acts. Meanwhile, based on several previous research [9][10][11], forensic and internal audits can solve these problems.

A forensic audit has proven to have its advantages as an effective method for detecting fraud, including bribery [12] [13]. One of the advantages is that specific standards do not limit the process of carrying out a forensic audit. So that it will then encourage and provide flexibility to the forensic auditor to use various proactive and reactive methods; the approach will usually adjust to the forensic auditor's investigation case. In addition, another advantage is that forensic auditors are required to master many types of knowledge to support their performance while working. Therefore, when it is reasonable because forensic auditors are required to obtain evidence that must be legally recognized and capable of being proven in the litigation process [12] [13] [14].

Besides forensic audits, internal audit is another effective method of detecting fraud [15]. Based on a report from ACFE Indonesia, internal audit has taken the second position as a source of fraud discoveries in various agencies. Therefore, it makes sense that many agencies rely on internal audits as an early detection tool to reveal the occurrence of fraud, including bribery. In addition, red flags are usually easier to detect by an internal auditor when carrying out their duties, compared to other types of audits. Therefore, red flags will make it easier for the auditor to detect the potential occurrence of fraud [11][16].

Other factors, such as big data, can also influence forensic and internal audits' effectiveness in detecting bribes. Previous research [17][18] has shown that forensic and internal auditors can take advantage of big data by using data analytics tools to make their work easier. One of them is related to the process of quickly analyzing unstructured and non-financial data. So it is clear that big data has a role in increasing the effectiveness of forensic and internal audits to detect fraud [19].

Based on the previous explanation, it is necessary to conduct a study to examine more deeply the influence of forensic and internal audits in detecting bribes. In addition, it also required further investigation of the role of big data in increasing the effectiveness of forensic and internal audits in detecting bribes. This research will use a literature review to obtain data. The final target is to develop a holistic model that includes potential factors for detecting bribes. The results of this research are the latest source of reference for future researchers interested in

conducting similar research. In addition, future researchers may consider using a quantitative approach (e.g., a survey) to empirically test the proposed model resulting from this study.

II. LITERATURE REVIEW

A. Agency Theory

Agency theory explains a cooperative relationship between company owners as principals and management as agents. In this relationship, the company owner will delegate authority to the agent to manage his company [20]. However, some conditions cause conflicts between owners and agents. These conflicts usually arise because the agent does not carry out his duties according to the owner's expectations and even tends to act against the law, which becomes a potential loss for the company managed by the agent. In addition, the illegal actions carried out by the agent mostly lead to actions taken intentionally to fulfill the needs and personal interests of the agent [21]. Therefore, a conflict between the owner and the agent is an agency problem [22].

In this research, agency theory is a guideline for providing solutions to solve the agency problems that occur in a company. An example of an agency problem referred to in this research is bribery. The following are some previous research [23] [24] that also define the relationship between agency theory which is used as a solution to eradicate acts of bribery (agency problem).

B. Institutional Theory

The institutional theory explains that an institution can develop and survive in a competitive environment [25]. However, a competitive environment threatens the company, encouraging it to carry out various business forms to survive. In addition, through institutional theory, it can also be explained that a company will tend to do any business to satisfy stakeholders [25] [26]. Therefore, through this theory, it can also be explained that a company will always take any means to combat fraud acts, such as bribery, to meet its stakeholders' expectations. The following are some previous research [25] [27] that also use this theory to explain the linkage of this theory with fraud prevention and detection activities.

C. Fraud

Fraud is an unlawful act committed by someone utilizing specific expertise to gain an unfair advantage from another party [28]. Fraud is also an action taken intentionally by the perpetrator against the victim to gain a financial advantage [29].

According to ACFE [30], there are three types of fraud: corruption, theft of assets, and acts of manipulating financial reports. In addition, referring to Tuanakotta's explanation, bribery is a type of activity that includes acts of corruption [31]. The following are definitions of each type of fraud referred to:

- Corruption is the act of using a position held for personal gain. In addition, actions taken to collect money for a service that should be free or an activity that utilizes the authority possessed to obtain specific goals but in a way that is against the law can also be interpreted as an act of corruption [32].
- Asset theft is an act of misusing and using an asset owned by a company to fulfill personal interests illegally [33]
- Manipulation of financial statements is an intentional error in presenting the financial condition of an entity through misstatement with a specific purpose, omission of certain amounts, and or disclosure in financial statements to deceive users of these financial statements [34].

Based on developments from several previous studies, six leading causes encourage someone to commit fraud. The six factors in question are opportunity, rationalization, collusion, capability, stimulus, and ego. These six factors are also called "Fraud Hexagon." The emergence of the fraud hexagon is a development from various theories on the causes of fraud by the previous researcher, such as the fraud triangle [35], fraud diamond [36], and fraud pentagon [37].

D. Definition of Bribery

According to Andresen & Button [38], *bribery* is offering something that is financially profitable to fulfill a specific need. However, fulfilling that need is carried out illegally [38]. Meanwhile, bribery is also interpreted as offering or promising something or asking for or obtaining something illegally for personal gain [39].

E. Forensic Audit

A *forensic audit* is an activity consisting of several stages, from data collection, processing, and analysis, to reporting data to obtain several facts and legally valid evidence for an illegal act such as fraud [40]. In addition, according to Astuti [41], a forensic audit is the process of testing evidence on a statement or disclosure of financial information by determining its relationship to specific standard measures that are adequate to prove it in the litigation process.

BPKP RI [42] explained that a forensic audit must be carried out to prove the truth of an act of fraud, which in the process must use the principle "without evidence, there is no justice." Therefore, it is concluded that a case suspected of being an act of fraud will not be recognized as an act of fraud if it is not accompanied by adequate

evidence. Therefore, in the process, someone appointed to become a forensic auditor must have various skills and supplements to support his work.

F. Audit Internal

An internal audit is a systematic and objective assessment by the auditor of the operational implementation and control activities that vary within a company [43]. Six things usually need to be ascertained and assessed by an internal auditor when carrying out their duties, including [43]: (1) ensuring that financial and operational information is accurate and reliable; (2) the risks faced by the company have been identified and minimized; (3) external regulations and internal policies and procedures have been running well; (4) meets satisfactory operating criteria; (5) use company resources efficiently; and (6) the goals expected by the company have been achieved effectively.

G. Big Data

Big data is a collection of data that is very large, complex, and difficult to use traditionally. Therefore, to be able to take advantage of it requires very sophisticated technology [44]. However, Tabesh, Mousavidin, and Hasani [45] stated that big data could be recognized easily through its characteristics. The main characteristics of big data are (1) volume, which refers to the creation of extensive data; (2) variety, which refers to very varied data types; (3) velocity, which refers to the rapid creation of data; and (4) veracity, which refers to the accuracy and reliability of data.

III. THE PROPOSED MODEL AND DISCUSSION

Bribery is a fraud that always exists in almost every type of company. However, the emergence of this phenomenon certainly makes many parties worry because this illegal practice has started to be considered a reasonable behavior and makes the perpetrator never feel guilty for repeating the action.

There are quite a several specific methods and approaches to detect various types of fraud, including bribery. However, searching for the most effective model to see these actions still needs to be done today. Based on various literature reviews in this research, the conclusion is that three factors have the most potential as methods that can be used to detect bribery. The three factors are big data, forensic audit, and internal audit. Based on this research, a conceptual model can be proposed to detect bribery acts effectively. The model is based on big data, forensic audit, and internal audit factors. The proposed model is in Figure 1.

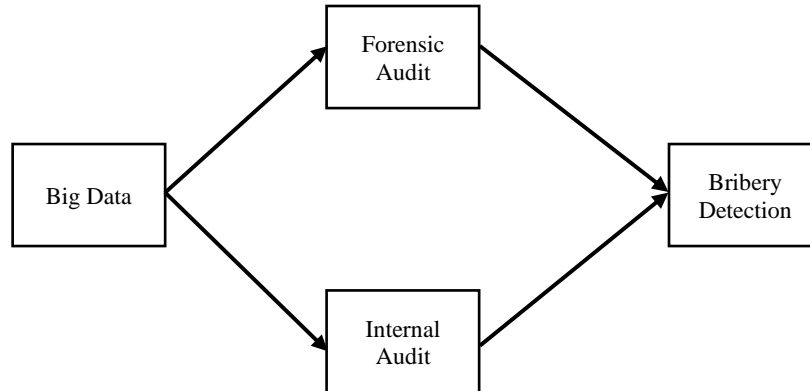


Figure 1. Proposed Model

A. Big Data, Forensic Audit, and Internal Audit

The characteristics of big data are a set of data that has the following features: (1) a massive amount of data (volume); (2) the data has a variety of variations (variety); (3) a high level of accuracy and reliability (velocity); (4) a set of data that has specific values if processed properly (value); and a set of data that can only be accessed by authorized parties, which means it can be accounted for (veracity) [46]. Seeing the enormous potential of big data, it is not surprising that it has a significant role in detecting bribery through various types of audits, such as forensic and internal audits [17][18][47]. Especially with technological developments and currently increasingly diverse types of data (digitization), big data can be efficiently utilized by auditors as a sophisticated tool to help make their work easier, faster, and more accurate, especially in the context of detecting fraud, including acts of bribery [48] [49]. Previous research [18] has shown that the internal audit function, whose process is assisted by using big data utilizing data analytics tools, can make this audit more effective in detecting various types of fraud. Likewise, other previous research [17] [48] [50] also shows that big data can facilitate auditors, including forensic auditors, to analyze quickly and accurately large amounts of data, both structured and unstructured data, so that

the success rate of detecting fraud increases. Moreover, unstructured data is always an obstacle for the auditor during the audit process [51].

B. Forensic Audit dan Bribery Detection

A forensic audit is a specific activity consisting of data collection, verification, processing, and analysis of data reporting. The results will be used as legal evidence in litigation [40].

Based on the previous explanation, the results of the forensic audit process will always be legal evidence in the litigation process. Therefore, the assigned auditor team must be able to master and combine various types of disciplines such as criminology, information technology, law and litigation, communications, and other branches of knowledge, not limited to accounting and auditing, and will adapt to the cases. Another thing that later made this audit very effective in detecting bribery was that specific standards and time did not limit the assigned auditor. So that the auditor is free to choose particular methods and approaches, adjusting to the case and its implementation if possible until the legal evidence sought exists. It is reasonable that much previous research [52] [53] has proven the effectiveness of this audit.

C. Internal Audit and Bribery Detection

An internal audit is an independent activity by the auditor (representing company management) to examine or evaluate various activities that have occurred or been implemented in the company [54]. In addition, internal auditors also have the responsibility to monitor or supervise the effectiveness of the implementation of the company's internal control system.

Internal auditors have privileges, unlike other auditors. The privilege, namely more access to carry out inspections, and other access related to obtaining data and information on the company, differs from different audits. Internal auditors have privileges because they are part of an agency in the audit process. Therefore, internal auditors often find red flags when carrying out their duties because they can access more related data and obtain information. This information will lead the auditor to detect fraud or acts of bribery that occur in the company. So it is not surprising that many agencies rely heavily on the role of internal auditors to detect early on various types of fraud that occur (including bribery) [11] [16].

IV. CONCLUSION

Through this research, there are three potential factors which in the future could be considered by various parties to utilize these factors to detect acts of bribery. These three factors are forensic audit, internal audit, and big data.

Based on the results of this research, it was concluded that forensic and internal audits have their respective advantages in detecting bribes effectively. However, to maximize these two types of audits, big data is needed as a factor that can play a role in further increasing the effectiveness of forensic audits and internal audits to detect bribery.

This research has conceptually developed an effective model for detecting bribery. It is recommended that further researchers continue this research using a quantitative approach (e.g., a survey) to test the proposed model of this research empirically. The following study can make auditors who work at BPK, BPKP, and Inspektorat become potential respondent candidates.

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