HU-MODEL ANALYSIS IN CORRUPTION DETECTION

Haryono Umar[1], Siti Safaria[2], Welda Mudiar[3], Rahima Br Purba[4], Harsono[5], Karyaningsih[6]
Perbanas Institute[1,2,3], Universitas Pembangunan Panca Budi[4], Inspektorat Jendral[5] Kemdikbud Ristek, Universitas Singa Perbangsa[6]
Email: flamboyan24@gmail.com[1], siti.safaria@perbanas.id[2], welda@perbanas.id[3], maapurba@gmail.com[4], harsono.sariyo@kemdikbud.go.id[5], karyamada26@gmail.com[6]

Abstract

The paper discussed the auditors' job of detecting corruption to improve the quality of the audit and the quality of the quality of the audit result by using HU-Model as a corruption detector. By using primary data drawn by STATCAL and CART and secondary data by applying the application that researchers have built themselves. Corruption detection by using HU-Model carried out against the Fraud Star's components. Research shows that the use of HU-Model can cluster an organization into undefined (green), grey, and indications of corruption (red). Furthermore, it also obtained information about the most Fraud Star's components affected the act of corruption of loss of integrity, pressure, opportunity, capability, and justification. The utilization of HU-Model has increased auditors' ability to tackle their obligations of detect the corruption that has been a major problem with the quality of audits and the quality of the audit results on around the world.
Keyword: HU-Model, Fraud Star, auditor, corruption detection, loss of integrity, opportunity, pressure, capability, justification

Indonesia still faces big and complex issues that are always trending on the topic in every public discussion. Corruption is a problem known as a state burden. Corruption can be found in many sectors and thus effect the lives of people such as public service, basic services, the procurement of government goods and services, permits, stakeholders, including the state-owned corporation and the central government, which includes the state-owned enterprise, provincially owned corporation, and the private sector. Indonesia has been treated as a corrupt country by Transparency International and has long been in the red category, therefore it is highly profitable for Indonesia especially in relation to the world economy. According to empirical data, several corruption cases are based on a state and regional finances. Especially in the administration of government goods and services, government spending, and weight management. More than 70 percent of the cases of the corruption handled by law enforcement officials (Corruption Eradication Commission, prosecutors, and police) in recent years have been mainly regarding article 2 and article 3 of law no. 31 of 1999 j.o law no. 20 of 2001 on criminal corruption. Therefore, the eradication and prevention of corruption must be done with the greatest and the best way, effectiveness, and sustainability. Repressive, preventive, and educational measures should be integrated to give maximum result. Indonesia's commitment to eliminating corruption is reflected in its constitutional regulations:

a. Law number 28 of 1999 about the purges of clean, free of corruption, collusion, and nepotism.
b. Law number 31 of 1999 about the eradication criminal corruption.
c. Law number 20 of 2001 about changing the regulation for number 31 of 1999 about the eradication of criminal corruption.
d. Law number 30 of 2002 about Corruption Eradication Commission. That was then written by law number 19 of 1019 about Corruption Eradication Commission.

Until today, there are still very cases of corruption in Indonesia. The efforts to do away with corruption are not left to just force by law enforcement officials. The most important is internal and external surveillance to know the potential for corruption in an instance. Consistent with the importance of the matter, GOA had published a standard that auditors could use in detecting fraud. Audits are directed to be able to detect fraud (Singleton, Singleton, Bologna, & Lindquist, 2006.) SAS no. 99 (AICPA, 2002) according to auditors to make an identification on whether any audit reports are wrong or cheating that would harm the user of the financial report. This affirms about the auditors' obligation to disclose the fraudulent financial report.

The auditors' failure to detect cheating is shown by several financial scandals involving public accountants such as Deloitte Indonesia who failed to prove cheating on SNP Finance (CNN Indonesia), E&Y Indonesia who shown the opinion based on inadequate evidence of audit PT Indosat Tbk financial report (Tempo Jakarta), it is similar with auditors' failure to detect management earning on the PT Garuda Indonesia final report on 2018. Worldwide case like the classic Enron case audited by Arthur Anderson that brought Enron's destruction and closed by Arthur Anderson's accounting firm. Similar with the case of British Telcomm that was for 33 years audited by Pricewater House Coopers who did not find any big fraud. If the auditors has a good performed quality and effectiveness audits in fraudulent detection, there would be no financial harm, nor professional reputation of auditor and accountant.

Problem

Based on the phenomena that have been described, a problem might be formulated:

1. How does the Fraud Star's components (pressure, capability, justification, and lack of integrity) in encouraging criminal corruption?
2. How does an auditor detect corruption by using HU-Model?

Research Purposes

The purpose of this study is to analyze the implementation of auditors' ability to detect corruption by using HU-Model. The act of corruption generated by the pressure of the Fraud Star's component, the pressure, opportunity, capability, justification, and lack of integrity component needs to be detected by auditors using HU-Model to increase the quality of audits and the quality of audit result.

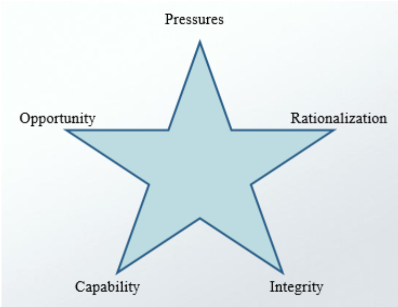
Conceptual Theoretical and Framework

Fraud Star

To detect corruption effectively, it is necessary to know the cause of corruption. The first model causes of corruption is the Fraud Triangle introduced by Thomas Cressey since 1953, which consist of three elements, pressure, opportunity, and justification. Further Wolfe and Hermanson (2004) introduced four drives people carry out the corruption known as "Fraud Diamond Model". There are several fraud in an organization that occurs because a person with the capability of commission or position in the organization makes it easier to fraud and corruption. Further Umar (2016) introduced the lasts model of corruption acts in known Fraud Star. Then, there are five causes or drives of corruption, opportunity, pressures, rationalization, integrity, and lack of integrity.

Siahaan et.al (2019) provides that elements of Fraud Star (opportunity, pressures, rationalization) capability, and integrity) impacting Fraud (misappropriation of assets). As previously explained, digression and corruption are the result of misappropriation of power or misappropriation of authority. The abuse of power administered in article 3 law number

31 of 1999 j.o law number 20 of 2001 on corruption crimes can occur because the perpetrators have malicious intent for personal or class gain. Usually in such a condition, the perpetrators of corruption can commit lawlessness because they have loss integrity values in fulfilling duties and obligations.



Picture 2.1 Fruad Star
Source: Umar2016

The rise of corruption is due to a number of factors: open opportunities, pressures, justification, and with the power that they have (Cressey, 1964; Yusof, Khair, & Simon, 2013) also because they have lost the primary hold in the thinking and acting. Thus, the causes of this corruption can then be referred to as the fraud star. We might also mention that those who commit corruption have mental problems. Because corruption is a crime, thus corruptor can be called criminals. Humanely all people are created to do well to their environment.

Integrity is an admirable attitude and behavior possessed by a person who makes them firm in their duties and obligations qualified under either supervision or unsupervised. Integrity carries the understanding that a person who has understood things that are good and bad is striving to maintain the high value of such goodness despite not supportive environment and a district assessment. A man of integrity is not easily caught up in cajoling and pressure on any side because of his moral and ethical fortitude. They would be illumination in an atmosphere of permissive society so that they could guide the improvement of both the organization and the surrounding community.

According to Business Dictionary.com, integrity is strict adherence to a code, reflected in transparent honestly and complete harmony in what one thinks, says, and does. It can be argued that a person who has integrity will always base all his actions and attitudes on moral values, honest, and more importantly is always consistent between his thoughts, words and actions. Honesty is a master key for a person to build integrity because they will always adjust between what is done and what is said or done will be said for what is said. A man of integrity is that when he works without the supervision of his superiors, he will still work optimally to achieve his best performance. The employee does not really consider for what he has done with a proper reward for himself. He would not to use the situation unsupervised just for his own personal or group advantage. A more evident example is that he would never follow his superiors' commands which in reality strayed from the rules. He would seek to increase the superiors and those around him to remain in the corridor outlined by the provisions. Integrity will lead a person to hold fast to the virtues of goodness and against all badness even if he is alone in a very permissive community (Umar, et all, 2021)

Corruption Detection

Valery G Kumaat (2011:156) states that "fraud detect an attempt to get sufficient initial indications of fraud, while at the same time narrow the fraud perpetrators (that is, when the person realizes it is already known, then it is too late to fraud). According to Simon (2004) , fraud occurs among other thing through unqualified information (report), served irrelevant, invalid, inaccurate, infrequent, or full disclosure (Umar and Purba, 2020)

Development of management accountability for stakeholders and minimization of information gaps requires an independent, professional third party. It is hoped that the third party will be able to present information in accordance with the facts so that rational decision-making processes can be mad. This third party is known as auditors who performed auditory functions to assure various parties that the financial statement issued by management could already be used as a basic for both economic and statistic decision making. Auditors run audit functions both financial audits, operational audits, and forensic audits. Auditing is a systemic process for obtaining and assessing evidence regarding economic activities and transactions objectively. The purpose of auditing is to establish the degree of conformity between the statement and the established criteria and to submit the results to the appropriate consumers (Mesler Jr, 2003 and Whittington et al, 2001). The role of the audit assures us that everything goes according to established commitments. Audits also provides feedback on whether planning for future periods can be done on the basis of examination of previous period activities.

Administration of audits (financial audits, operating audits or investigation audits) should not close your eyes and rule out the potential fraud. Ignoring and not attempting to obtain information in the fraud incident constitutes a fatal error for an auditors. Fraud has already become one of major attention of the auditors in carrying out their professional auditory duties. Given the importance of the matter, GAO has published a standard that auditors can use in detecting fraud.

Auditors are required to be able to participate in substantial contributions in the nation’s activities against fraud especially corruption. Yet unfortunately often the auditor was unable to detect or invent the fraud practice. In some audit activities, it was known that the auditors then issued unqualified opinion, but then, in fact, law enforcement investigated with alleged corruption in the organization. Detecting corruption was done to find preliminary indications of a criminal corruption event. With that initial information, organizations can make the movement difficult for the corrupt and prevent even worse effects. Corruption detection can be made if detectors have adequate competence for the task supported by precise detection tools such as HU-MODEL.

Method

The kind of research used is associated with an associative study in which according to Sugiyono (2016), the purpose is to know relationships, patterns, shapes and deformity between two or more variables. The research also uses a descriptive analysis. This type of data research is the quantitative data, which judging by the method of data analysis used to quantify the likerts scale. The study uses primary data sources of questionnaires deployed random pads auditors and management of government agencies both in central and in the region.

The study carried out with a primary data collection of questionnaires sent to government agencies in the environment of the ministry of education and culture research and technology both in the center and in the region. Government agencies that became research samples included ecelon units one at the center, ecelons unit two and three at the center and area. Besides, the research sample is the state college across Indonesia. Secondary data collection is also conducted with an application (HU-Model) built by research team, which facilitates the process of collecting secondary data, which must be collected of 104 data with 52 formulas.

The data analysis is using the help of the classification and regression tree method program (CART) to form the corrupt detection classification model. The data analysis model used is the economical model with analysis techniques using the smallest quadratic model. The software used in doing data analysis is STATCAL. In the STATCAL software, it provides a variety of data visualization features and the classification and regression tree (CART).

Findings and Discussion

Fraud Star Thruster Corruption Component

Linear regressions aim to calculate the impact of two or more free variables on one related variable and predict variables bound by using two or more free variables. Regression analysis formula can be taken from the following table.

Table 1. Regression Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.106	7.399		-.285	.776
	Pressure (X1)	.177	.204	.087	.869	.387
	Opportunity (X2)	.089	.148	.057	.599	.550
	Rationalization (X3)	.038	.136	.020	.279	.781
	Capability (X4)	.017	.121	.011	.142	.887
	Lack of Integrity (X5)	.821	.081	.684	10.088	.000

a. Dependent Variable: Indication of Corruption

Some of the results listed on table 1 can be taken for the linear regression equation is as follows.

Y = -2,106 + 0,089Op + 0,177Pr + 0,038Rat + 0,017Cap + 0,821LoI

Which means:

Y = Corruption detection
Op = Opportunity
Pr = Pressure
Rat = Rationalization
Cap = Capability
LoI = Lack of Integrity

Research shows that there are three sets of instance associated with the criminal corruption:

- The cluster does not indicate corruption (green) if it’s corrupt value > 3,66
- The grey cluster if the corruption detection value is between 2,33 > X > 3,66
- The cluster indicates corruption (res) if the corrupt detection value < 2,33

Of the 165 respondents who answered the study questionnaires are proved that:

- There are 147 units in the area of the ministry of education and culture the research technology does not indicate corruption or a green cluster.
- There are 17 units in the area of the ministry of education and culture included in the grey cluster.
- There is 1 unit within the area of the ministry of education and culture indicates corruption or a red cluster.

An 8,9% chance to influence corruption. Malice intent that motivates a person to do corruption is not backed up by chance. Malice motivated by pressure both internal and external pressures, neither financial nor non-financial pressure cannot run by itself. In corruption, malice and mounting pressure will be implemented by facilitating both existing opportunities and facilitated their criminal actions. Opportunities need attention so as not to be used by those intent on corruption. An opportunity to support the destruction of a criminal corruption can be a system weakness that makes it possible to penetrate and mistreat those who already have a scheming to commit corruption.

Meanwhile, pressure carries a 17% stake in corruption. Acts of corruption are driven by a need for perpetrators for life-style, daily needs, and other needs. Moreover, the insatiable human nature of greed is increasingly manifest in the growing number of officials (governors, regents, mayors, ministers, representative of the people's council, and others) are caught by law enforcement. Pressures can come from within such a luxurious and honorable life desire that they actually makes it impossible. Other pressure may be demand for special treatment in a public service, to enjoy the facilities of the state both tangible and intangible as a pastime, demanding to be won in an auction to provide government goods and services, persuading public servants to benefit themselves and their group both financial and service benefits, often the staff does not have enough courage to resist the superior's orders to commit deviancy.

While performing rationalize missions also led to 3,8% corruption. Rationalization is an important tool for criminal event to occur. If it is the pressure is the fire and there is a chance is the gasoline, then rationalization is the oxygen that allows the fire to grow. Without oxygen there would be no combustion. Therefore, corruptor constantly seek rationalization for their actions that may seem justified even when they are intrinsically wrong. In other words rationalization become a basis for justifying a course of wrongdoing. Another example of rationalization is that at least the salary received by employees. Employees will tolerate and act of misconduct both related to gratuity and bribery on the grounds that their salaries are insufficient to fulfill the family's monthly needs.

The corruption is complex because it is usually hidden and there is collusion between the parties involved. As a crime of epic proportions, corruption cannot be eradicated by relying solely on law enforcement, but it requires the participation of all parties, including the general public. In order to manage the participation of the society, it would require the management of public complaints or the whistle blower system. A whistle blower system would make it easier, faster, and more effective for handling according to the safety of law no. 14 of 2008, that private information transparency that intimates Indonesian citizens' right and obligations for information. Nevertheless, capability can only contribute to corruption by 1,7%.

Using HU-Model can be proved that the most significant factor affecting correction is the lack of integrity. Lack of integrity affects 82,1% of corruption. Lack of integrity is the main and significant driver of the corruption of an organization. In the arrest operation activities carried out by the commission of corruption, almost all were key officials from ministers, governors, regents, mayors, representatives of the people/local council, the president of the constitutional court of Indonesia, the chairman of the zoning board, and the key officials of various professions who were logically well-off from the economic and financial side. When they accept offers and temptations of bribery, they are losing their integrity.

Auditors detected corruption using HU-Model

To detect corruption while it requires competence, experience, and independence, also it is equally important to use the assistance of detection tools. As discussed earlier, during this time auditors were often unable to detect any fraud or corruption. This is because corruption is the most difficult form of fraud to detect than of an asset misappropriation and fraudulent statement, because acts of corruption other often involve corporation. Based on law no. 31 of 1999, criminal corruption has a board spectrum of 4 elements, including: (1) act against the law, (2) abuse of authority, opportunity, or means, (3) enriching oneself, others, or corporations, and (4) loss of government finance or the economy.

Corruption has many more and more sophisticated variables and modes using a variety of help including information technology. Corruption that is a perversion of authority or action to benefit itself and class arises because of lack of control over the power it has and an open opportunity to channel it in addition to sanctioned uncertainty. Such personal factors as wanting to be rich, more noble and honorable, fancy living patterns, and peer pressure promote corruption is required as well as detection, enabling it to identify indications of corruption in activities, programs, units, labor units, ministry, and local governments. With such complexity, it is necessary to develop a detection device which in this case has been built with a model which is HU-Model (Umar, 2020).

Using HU-Model, auditors could obtain information regarding the administrative condition of the audit listed in the three cluster groups. The grouping includes:

- There is no indication of corruption or green area.
- In the grey area.
- Indications of corruption of red area.

A side form the total cluster of data (green, grey, and red), it can also be obtained information about the most dominant component of fraud star lack of integrity drives corruption in spite of pressure, opportunity, capability, and rationalization.

Conclusions and Suggestions

Audit administration (financial audits, operating audits, or investigation audits) should not become blind and rule out the potential for corruption. To ignore and fail to seek information on the existence of a corruption was a fatal mistake for an auditor. Corruption must be the chief concern of the auditors in caring for their professional duties. In view of the importance of the matter GAO has published a standard that auditors can use in detecting corruption. Audits are directed to be able to detect fraud (Bologna and Lindquist, 1995). SAS no. 99 (2002) stated “the auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud.” This stressed on the auditors’ duty to speak out of consideration for the cheating in the financial report.

Corruption has many of the more advance variables and modes using various information technology. Corruption is a perversion of authority or action to benefit itself and class, resulting from lack of control over the power it has and an open opportunity to channel it in addition to sanctioned uncertainty. The research contribution of this research is localized by contaminated instance of corruption (red), grey, and unindicated corruption (green). Detecting the corruption of the fraud star components by using HU-Model increased the auditors’ ability to perform their duty to detect corruption in their auditory duties.

Many cases of corruption because there are still no tools of detection of the potential and indications of corruption. Corruption crimes are categorized as a special act in view of its complexity and the extraordinary impact of these attempts to conceal themselves from each other as co-conspirators. To perform extremely complicated detection of corruption would require a device named a HU-Model. With the application of this model, auditory auditors could improve the quality of auditory result because of its already being able to display information concerning an indication of corruption that occurred in auditors.

These corruption detection models also benefit management to make efficient and effective prevention efforts. The ongoing prevention of socialization, supervision, and system development has not yet focused on potentially significant sources of problem (corruption). Therefore the application of HU-Model is important to build organizations in building accountability, transparency and clean.

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