Internal Control, Organizational Culture, and Quality of Information Accounting to Prevent Fraud: Case Study From Indonesia's Agriculture Industry

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Abstract

This research wants to find out how far internal control, organization culture and the quality of accounting information system will help the small-medium enterprises (SMEs) to prevent fraud, by applying the case study approach in achieving its aims and objectives. This study is done by a used case study from SMEs in the agriculture industry in Lampung province, Indonesia. The data were collected through observations and semi-structured interviews with employed and managerial staff. This research applied a mixed method in collecting and analyzing data, which were document analyses and interviews. Applying more than a single method in collecting data enables the researcher to compare and to verify the information accuracy (Brewer and Hunter 2006). This method can increase the credibility and validity of the findings because the final bias will depend on one method which later can be avoided (Yin 2012). This type of research is quantitative descriptive research. The purpose of this descriptive research is to provide a descriptive, systematic, factual and accurate description of the facts, properties, and relationships between the phenomena investigated. All data that will be used in this study is sourced from the results of respondents' answers to the questionnaire given to employees at PT. XYZ as many as 70 respondents with the unit of analysis are part of Business Control, Human Capital, Finance, Marketing, and Operations. The sampling technique that uses saturated sampling, which is a sampling technique where all members of the population will be used as samples. The results of the study show that some weaknesses of the internal controls have been identified as one of the factors of fraud. The results show that Internal Control Organizational Culture and Quality of Information Accounting have a positive significant effect to prevent fraud.

Keywords: internal control, organizational culture, quality of information accounting, fraud

1. Introduction

Fraedrich, Ferrell, and Ferrell (2017) generally define fraud as any purposeful action that deceives, manipulates, or conceals facts to create a false impression). According to the ACFE (Association of Certified Fraud Examiners), fraud can be classified into three main blocks: fraud in financial statements, embezzlement or misappropriation of assets, and corruption, with fraud in the financial statements generating the highest costs, although it is less common than the misappropriation of assets (ACFE, 2014). Poor internal controls have been identified as one of the causes of fraud (Siregar and Tenoyo 2015; Zakari, Nawawi, and Salin 2016). A company must possess effective internal controls (KPMG 2004) to prevent fraud which can lead to a big loss. Internal controls can be described as policies or procedures regulated to convince that a certain purposed entity will be achieved. The main purpose of internal controls is to support the entity in administering the risks to achieve the purposed entity being built and to maintain the work ethics. Fraud is a form is intentionally done so it can cause losses unnoticed by the injured party and cause benefits for the perpetrators of fraud. Fraud generally occurs because of pressure to commit fraud or encouragement to take advantage of opportunities. A working system that is not transparent is an opportunity for perpetrators of fraud. Fraud by tricking the system is precisely possible because the culprit is an "insider" or involving people who have authority over the system. A non-transparent system closes the opportunity for many people to supervise and provide input on the current system. Research-related

Research about the effect of internal control on fraud prevention has done by Hermiyeti (2010), Soleman (2013),

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Chairun Nisak et al (2013), Sukadwilinda and Ratnawati (2013) concluded that internal control has a positive effect on fraud prevention. Internal control is applied in the organization to provide certainty in achieving organizational goals. Research also conducted by Zulkarnain (2013) shows that there is a negative influence between the effectiveness of the internal control system and fraud in the government sector. This means that the effectiveness of the employee's high internal control system in an agency can prevent fraud in the government sector. Mirinaviciene (2014) mentions strong internal control is a factor that affects fair financial reporting and fraud prevention and detection.

Research by Dimitrijevic *et al* (2015) concluded that the main task of internal control is not to find the cause of fraud, but rather to detect and stop further expansion of fraud. An internal control system, if designed and functioning properly, will ensure that fraud will not occur. For this goal to be achieved, internal controls must cooperate with other controls such as external audit and forensic accounting in applying new methods and techniques for fraud prevention. the weaknesses of internal controls lead to fraud (Lokanan 2014; Skaife, Veenman, and Wangerin 2013), cause a tendency of increasing credit loss (Cho and Chung 2016), decrease the sales (Su, Zhao, and Zhou 2014), reduce future work ethics (Weiss 2014), improve the association which creates higher benefits of individual controls (Gong, Ke, and Yu 2013), reduce company's market values and the relevance of accounting information values (Hu et al. 2013), create low-quality of financial reports (Ghosh and Lee 2013), cause higher loans, loss of backups and provisions in the banking company (Cho and Chung 2016), and trigger negative.

Corporate culture represents the personality of an organization and its shared beliefs, values, behaviors, the way things are done and it's explicit and implicit rules (Bouwman, 2013). Organizational cultures are both visible and invisible, formal and informal (Weiss, 2014). Culture is often expressed informally through passing comments, gestures, and behaviors of especially top management. KPMG International (2017) also explains that corporate culture is not aspirational value ... but the unwritten rules that drive the thousands of decisions employees make (*p*.4). Culture can be an antidote to many organizational problems and can significantly affect how an organization is run every day throughout the company. (Warrick, 2017).

Research by Awadh and Saad (2013) states that organizational values and norms are based on employee relations. A positive relationship between culture and performance will help in increasing organizational results. Organizational work performance has a strong impact on a strong organizational culture because it leads to increased productivity. Organizational norms and values based on different cultures affect workforce management. A strong cultural organization enables effective and efficient employee management. Net profit in an organization helps in improving employee performance. Organizational culture is very helpful in enhancing and providing a competitive advantage. Employee commitment and group efficiency help in improving performance based on organizational sustainability. The nature and strength of organizational culture influence the organization's sustainability and effectiveness. In research by Surjandari dan Martaningtyas (2015) mentions that there is a negative correlation between work culture and fraud. Types of fraud committed by government officials are counterfeiting and/or stamping, taking office equipment, taking small money boxes, not recording transactions and taking money, recording incorrectly or inaccurately and manipulating the amount and price of materials purchased, making purchases that do not conform with specifications. And the most common types of fraud are Counterfeiting by Muhammad et al (2017) in his research concluded that the implementation of the accounting information system harms fraud on the BPR (Bank Perkreditan Rakyat) of Banda Aceh City. This means that the higher the application of its accounting information system, the more it will minimize fraud at BPR Kota Banda Aceh.

2. Literature Review and Hypotheses

2.1 Internal Control

According to Arens *et al* (2015: 340), internal control is a policy and procedure that is designed to provide management with reasonable certainty that the company has achieved its goals and objectives, namely the reliability of financial reporting, efficiency and effectiveness of operations and compliance with laws and regulations."

According to the Indonesian Institute of Accountants (2015: 38), internal control is a process implemented to produce an adequate level of confidence so that the following control objectives can be met, namely asset protection, maintaining detailed records to report company assets accurately and fairly, providing accurate information accurate and reliable, compile financial reports following the criteria/standards required, support and improve operating efficiency, encourage compliance with established management policies, and comply with applicable laws and regulations.

COSO (Committee of Sponsoring Organization of the Treadway Commission) in 1992 introduced an internal control framework that included 5 (five) components, namely the control environment, risk assessment, control activities,

communication and information, and monitoring.

2.2 Organizational Culture

According to Robbins et al (2018: 2), organizational culture is a study that investigates the impact that individuals, groups, and structures have on organizational behavior, to increase organizational effectiveness.

Kinichi et al (2018: 453) defines organizational culture is a set of assumptions of a group that determines how to perceive, think and react to various environments that include 3 characteristics namely organizational culture passed on to employees through a process of characteristics, organizational culture affects employee behavior in the workplace and the culture of the organization will be different for each level.

2.3 Quality of Accounting Information Systems

Accounting information systems according to Diana and Lilis (2011: 4) is a system that aims to collect and process data and report information relating to financial transactions.

Lilies Puspitawati and Sri Dewi Anggadini (2011: 57) define accounting information systems as a system that functions to organize forms, records, and reports that are coordinated to produce financial information needed in making management decisions and company leadership and can facilitate company management.

According to Romney and Steinbart (2012: 30) states that the function of accounting information systems is :

- 1. Collect and store data about organizational activities, resources, and personnel. Organizations have several business processes, such as making a sale or purchasing raw materials, which are repeated frequently.
- 2. Transform data into information so management can plan, execute, control and evaluate activities, resources, and personnel.
- 3. Provide adequate controls for safeguarding the organization's assets and data.

According to Lilis Puspitawati and Sri Dewi Anggadini (2011: 13), quality information has the following characteristics:

- 1. Accurate, meaning that information must reflect the real situation, meaning that information must be free from unbiased or misleading mistakes. Accurately can be interpreted that the information can reflect its purpose.
- 2. On-time, information must be available when the information is needed. Information that comes to the recipient must not be too late. If the information is late, it will cause the decision to be late and it can be fatal for the company.
- 3. Relevant, meaning that the information provided must be by what is needed. The information submitted must be related to the problem to be discussed with the information and must also be useful for the wearer.
- 4. Complete, meaning that the information provided must be complete as a whole in the sense that there are no things that are reduced in conveying the information.

2.4 Fraud Prevention

There are 4 main pillars in combating fraud, namely fraud prevention, early fraud detection, fraud investigation and law enforcement or follow-up legal action. According to Arens (2014: 398), three conditions cause fraud called the fraud triangle, which are pressure, opportunity and attitude/rationalization.

Based on the literature review above, the thought framework can be described as follows:

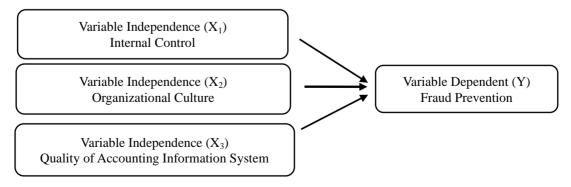


Figure 1. Research framework

2.5 Hypothesis

Research on the effect of internal control on fraud prevention conducted by Hermiyeti (2010), Soleman (2013), Chairun Nisak et al (2013), Sukadwilinda and Ratnawati (2013) concluded that internal control has a positive effect on fraud prevention. Internal controls are applied in the organization to provide certainty in achieving organizational goals. Research also conducted by Zulkarnain (2013) shows that there is a negative influence between the effectiveness of the internal control system and fraud in the government sector. This means that the effectiveness of the employee's high internal control system in an agency can prevent fraud in the government sector. Mirinaviciene (2014) mentions strong internal control is a factor that affects fair financial reporting and fraud prevention and detection. In the journals, Hamdani and Albar (2016) and Alfian et al (2017) mention that weak internal control is one reason for fraud. The application of good internal control is expected to prevent fraud. Management can strengthen the role of internal control by adding to its employees, and there are not several important positions that are filled by the same employee. Albar and Fitri (2018), Akhsani (2018), Siregar and Hamdani (2018) in their research stated that the internal control system harmed fraud. This means that increasing the internal control system will reduce fraud. Through internal control, it can be seen whether the employees have done the job according to their duties and functions efficiently and effectively. Good internal control can increase employee compliance with applicable rules and reduce cheating practices, as in the fraud triangle theory, namely the opportunity for anyone to commit fraud. However, by reducing opportunities (opportunity) can reduce the tendency of cheating practices and can be easier to detect fraud early on.

Research on the influence of organizational culture on fraud conducted by Siregar et al (2018) and Albar and Fitri (2018) results in the conclusion that organizational culture harms fraud. This means that the higher the value of ethical culture that is applied to the work environment will affect the decline in the occurrence of fraud in the organization. However, the results of this research are not in line with research conducted by Akhsani (2018) that organizational culture does not affect the tendency of cheating practices. This means that the higher the ethics in organizational culture may not necessarily reduce the tendency to practice fraud, because fraud can be committed by anyone even by employees who initially had good norms and ethics. There is an opportunity (opportunity) to commit fraud that encourages someone's actions to do so. In the research of Surjandari and Martaningtyas (2015), there is a negative correlation between work culture and fraud. Types of fraud committed by government officials are counterfeiting and/or stamping, taking office equipment, taking small money boxes, not recording transactions and taking money, recording incorrectly or inaccurately and manipulating the amount and price of materials purchased, making purchases that do not conform with specifications. And the most common types of fraud are Counterfeiting and / or Cap.

Muhammad et al (2017) in their research concluded that the implementation of the accounting information system harmed fraud on the BPR of Banda Aceh City. This means that the higher the application of its accounting information system, the more it will minimize fraud at BPR Kota Banda Aceh. While research Animah (2018) states that the application of accounting information systems has a positive effect on trends in accounting fraud. This is caused by the low competence of employees, resulting in a lack of knowledge and understanding of the use of accounting and bookkeeping systems. Due to the low level of knowledge and understanding of employees of the system, it will be difficult for employees to find loopholes to cheat even if there is an opportunity.

Based on the above, the hypothesis is taken as follows:

H1: Internal Control has a positive effect on fraud prevention.

H2: Organizational Culture has a positive effect on fraud prevention.

H3: The Quality of Accounting Information Systems has a positive effect on fraud prevention.

3. Research Method

This type of research is quantitative descriptive research. The purpose of this descriptive research is to provide a descriptive, systematic, factual and accurate description of the facts, properties, and relationships between the phenomena investigated.

All data that will be used in this study is sourced from the results of respondents' answers to the questionnaire given to employees at PT. XYZ as many as 70 respondents with the unit of analysis are part of Business Control, Human Capital, Finance, Marketing, and Operations. The sampling technique that uses saturated sampling, which is a sampling technique where all members of the population will be used as samples. The research period is from May to September 2019.

4. Research Results

4.1 Analysis of Statistical Descriptions

Before the data from the research questionnaire results are further analyzed, the validity and reliability tests of the research measuring instruments are first performed. A validity test is conducted to determine the ability of research instruments to measure what should be measured (Cooper et al, 2013: 257). So that the process of testing and processing of data can be done quickly and precisely, the data processing uses the help of SPSS version 25. The method is to compare the amount of r count with r table. If r count is greater than r table then the statement is declared valid. With the number of respondents (n) of 70 and $\alpha = 0.05$ then using the distribution table r table values will get r tables of 0.235. The results of testing the validity of the internal control variables are presented in Table 1 below.

Table 1. Questionnaire validity test results

Item	R	Result	Item	R	Result	Item	R	Result	Item	R	Result
X _{1.1.1}	-0,018	Not Valid	X _{2.1.23}	0,644	Valid	X _{3.1.35}	0,550	Valid	Y _{1.1.54}	0,775	Valid
X _{1.1.2}	0,377	Valid	X _{2.1.24}	0,083	Not Valid	X _{3.1.36}	0,273	Valid	Y _{1.1.55}	0,699	Valid
X _{1.1.3}	0,599	Valid	X _{2.1.25}	0,583	Valid	X _{3.1.37}	0,767	Valid	Y _{1.1.56}	0,823	Valid
X _{1.1.4}	0,565	Valid	X _{2.2.26}	0,558	Valid	X _{3.1.38}	0,654	Valid	Y _{1.2.57}	0,545	Valid
X _{1.1.5}	0,578	Valid	X _{2.2.27}	0,346	Valid	X _{3.1.39}	0,853	Valid	Y _{1.2.58}	0,611	Valid
X _{1.1.6}	0,605	Valid	X _{2.3.28}	0,673	Valid	X _{3.1.40}	0,506	Valid	Y _{1.2.59}	0,245	Valid
X _{1.2.7}	0,320	Valid	X _{2.4.29}	0,591	Valid	X _{3.1.41}	0,260	Valid	Y _{1.2.60}	0,390	Valid
X _{1.2.8}	0,606	Valid	$X_{2.4.30}$	0,751	Valid	X _{3.2.42}	0,766	Valid	Y _{1.2.61}	0,454	Valid
X _{1.2.9}	0,659	Valid	X _{2.5.31}	0,542	Valid	X _{3.2.43}	0,756	Valid	Y _{1.3.62}	-0,130	Not Valid
X _{1.2.10}	0,509	Valid	X _{2.6.32}	0,583	Valid	X _{3.2.44}	0,730	Valid	Y _{1.4.63}	0,745	Valid
X _{1.2.11}	0,433	Valid	X _{2.7.33}	0,317	Valid	$X_{3.2.45}$	0,695	Valid	Y _{1.4.64}	0,423	Valid
X _{1.3.12}	0,534	Valid	X _{2.7.34}	0,306	Valid	X _{3.3.46}	0,700	Valid	Y _{1.4.65}	0,713	Valid
X _{1.3.13}	0,608	Valid				X _{3.3.47}	0,325	Valid	Y _{1.5.66}	0,463	Valid
X _{1.3.14}	0,429	Valid				X _{3.3.48}	0,690	Valid	Y _{1.5.67}	0,447	Valid
X _{1.3.15}	0,672	Valid				$X_{3.3.49}$	0,330	Valid	Y _{1.5.68}	0,567	Valid
X _{1.3.16}	0,559	Valid				$X_{3.3.50}$	0,585	Valid	Y _{1.6.69}	0,371	Valid
X _{1.3.17}	0,238	Valid				$X_{3.3.51}$	0,559	Valid	Y _{1.6.70}	0,710	Valid
X _{1.4.18}	0,619	Valid				$X_{3.3.52}$	0,544	Valid	Y _{1.6.71}	0,721	Valid
X _{1.4.19}	0,567	Valid				X _{3.3.53}	0,858	Valid			
X _{1.4.20}	0,379	Valid									
X _{1.5.21}	0,615	Valid									
X _{1.5.22}	0,172	Not Valid									

Source: Primary data processed, 2019

Based on Table 1, statements $X_{1.1.1}$, $X_{1.5.12}$, $X_{2.1.34}$, and $Y_{1.3.62}$ are invalid because r count for the statement is -0,018; 0.172; 0.083 and -0.013 under r table (0.235). For further, the four statements will no longer be used to measure the variables of Internal Control, Organizational Culture and Fraud Prevention. Furthermore, a valid questionnaire will

be carried out on a reliability test that aims to see whether the questionnaire has consistency if the measuring instrument is used repeatedly. The condition is that the reliability coefficient > 0.7 then overall the statement is declared reliable. The reliability coefficient is seen from the Cronbach-alpha value.

Table 2. Questionnaire reliability calculation results

Item	Variable	Reliability Coefficient	Critical Value	Conclusion
X_1	Internal Control	0,861	0,70	Reliable
X_2	Organizational Culture	0,760	0,70	Reliable
X_3	Quality of Accounting Information System	0,906	0.70	Reliable
Y	Fraud Prevention	0,872	0,70	Reliable

Source: Primary data processed, 2019

Internal control variables have 5 (five) dimensions, namely (1) control environment consisting of 5 indicators, (2) risk assessment consisting of 5 indicators, (3) control activities consisting of 6 indicators, (4) communication and information consists of 3 indicators and (5) monitoring consisting of 1 indicator. So the total number of indicators used to measure the internal control variable is 20 indicators, which are represented by 20 question items on the questionnaire. Based on the average score of respondents' responses, internal control variables are included in the "very good" category.

Organizational culture variables have 7 (seven) dimensions, namely (1) innovation and risk tasking consisting of 2 indicators, (2) attention to detail consisting of 2 indicators, (3) outcome orientation consisting of 1 indicator, (4) people orientation consisting of 2 indicators, (5) team orientation consists of 1 indicator, (6) aggressiveness consists of 1 indicator and (7) stability consisting of 2 indicators. Thus, the overall number of indicators used to measure organizational culture variables is 11 indicators, represented by 11 question items on the questionnaire.

The accounting information system quality variable has 3 (three) dimensions, namely the service system dimension consisting of 7 indicators, the quality system dimension consisting of 4 indicators and the information quality dimension consisting of 8 indicators. So the total number of indicators used to measure the variable quality of the accounting information system is 19 indicators, which are represented by 19 questions on the questionnaire.

The fraud prevention variable has 6 (six) dimensions, namely (1) creating a healthy, honest, open and mutual assistance culture consisting of 3 indicators, (2) an honest recruitment process consisting of 5 indicators, (3) a positive work environment which consists of 3 indicators, (4) a clear, easy to understand and obeyed code of ethics consisting of 3 indicators, (5) sanctions for all forms of fraud consisting of 3 indicators. Thus, the overall number of indicators used to measure fraud prevention variables is 17 indicators, which are represented by 17 question items on the questionnaire.

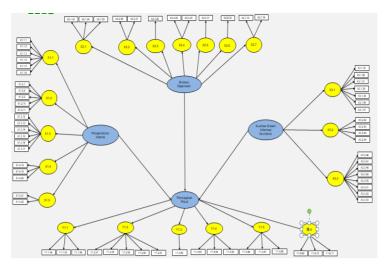


Figure 2. Conceptual diagram of the PLS Model

4.2 Measurement Model (Outer Model)

Evaluation of the measurement model or outer model is carried out to assess the validity and reliability of the model. Validity testing aims to ensure that each item in the research instrument can measure the variables specified in the study. There are 2 validity tests, namely convergent validity, and discriminant validity.

The convergent validity of the measurement model with the reflective indicator is assessed based on the loading factor of each indicator forming latent constructs. A latent contract is considered to have a good convergent validity of the loading factor value is more than 0.7 and is significant. However, for the initial stages of bookkeeping scale research development, loading values of 0.5 to 0.6 are considered sufficient (Chin, 1998 in Ghozali and Kusumadewi, 2016: 37). Invalid statements will be dropped from the table. The final results of the convergent validity test can be seen in the following table.

Table 3. Convergent validity test results

Item	Loading Factor						
X _{1.1.3}	0,640	X _{2.1.23}	0,683	X _{3.1.35}	0,682	Y _{1.1.54}	0,852
$X_{1.1.4}$	0,821	X _{2.1.25}	0,799	X _{3.1.37}	0,825	Y _{1.1.55}	0,864
$X_{1.1.5}$	0,783	X _{2.2.26}	0,799	X _{3.1.38}	0,784	Y _{1.1.56}	0,927
$X_{1.1.6}$	0,546	$X_{2.2.27}$	0,729	X _{3.1.39}	0,932	Y _{1.2.57}	0,831
X _{1.2.7}	0,571	$X_{2.4.29}$	0,767	$X_{3.1.40}$	0,547	$Y_{1.2.58}$	0,827
X _{1.2.8}	0,833	X _{2.4.30}	0,842	X _{3.2.42}	0,886	Y _{1.2.61}	0,610
X _{1.2.9}	0,839	X _{2.7.33}	0,759	X _{3.2.43}	0,779	$Y_{1.3.62}$	1,000
X _{1.3.12}	0,621	X _{2.7.34}	0,611	X _{3.2.44}	0,824	Y _{1.4.63}	0,879
X _{1.3.13}	0,822			X _{3.2.45}	0,796	Y _{1.4.64}	0,733
X _{1.3.14}	0,559			X _{3.3.46}	0,700	$Y_{1.4.65}$	0,802
X _{1.3.15}	0,751			X _{3.3.48}	0,774	Y _{1.5.66}	0,660
X _{1.3.16}	0,698			X _{3.3.50}	0,667	Y _{1.5.67}	0,741
X _{1.4.18}	0,810			X _{3.3.51}	0,682	Y _{1.5.68}	0,758
X _{1.4.19}	0,728			X _{3.3.52}	0,686	Y _{1.6.69}	0,589
X _{1.5.22}	1,000			X _{3.3.53}	0,888	Y _{1.6.70}	0,929
						Y _{1.6.71}	0,887

Source: Data processed by PLS-XLStat, 2019

Based on the table above, the indicator already shows the loading factor value> 0.50, this means the indicator is valid.

The way to test discriminant validity with reflective indicators is by comparing the square root of AVE for each construct with the correlation value between constructs in the model. Good discriminant validity is shown from the square root AVE for each construct greater than the correlation between constructs in the model (Fornell and Larcker in Ghozali, 2016: 21). For variables that only have 1 (one) or a single indicator in the construct, it can be said as a formative indicator so that it does not require a validity and reliability test. Evaluation of measurements is carried out with a significant weight (Ghozali, 2016: 24).

While reliability testing is done to prove the accuracy, consistency, and accuracy of the instrument in measuring the construct of the reflective indicator construct, it is declared to be reliable if it has a Cronbach's Alpha and D.G Rho value if the value is> 0.60. (Ghozali, 2016: 87). The results of discriminant validity testing are presented in Table 4 below.

Table 4. Discriminant validity test results internal control construct

	Internal Control	$X_{1.1}$	X _{1.2}	X _{1.3}	X _{1.4}	X _{1.5}	AVE
Internal Control	1	0,712	0,597	0,715	0,610	0,062	0,361
X _{1.1}	0,712	1	0,296	0,392	0,287	0,011	0,632
X _{1.2}	0,597	0,296	1	0,216	0,272	0,105	0,574
$X_{1.3}$	0,715	0,392	0,216	1	0,367	0,000	0,543
X _{1.4}	0,610	0,287	0,272	0,367	1	0,064	0,593
X _{1.5}	0,062	0,011	0,105	0,000	0,064	1	
AVE	0,361	0,632	0,676	0,543	0,543		0

Source: Data processed by PLS-XLStat, 2019

Table 5. Discriminant validity test results organizational culture construct

	Organizational Culture	X _{2.1}	$X_{2.2}$	X _{2.4}	X _{2.7}	AVE
Organizational Culture	1	0,726	0,338	0,729	0,213	0,322
$X_{2.1}$	0,726	1	0,143	0,455	0,172	0,552
$X_{2.2}$	0,338	0,143	1	0,266	0,000	0,585
$X_{2.4}$	0,729	0,455	0,266	1	0,087	0,649
X _{2.7}	0,213	0,172	0,000	0,087	1	0,475
AVE	0,481	0,589	0,676	0,543	0,543	0

Source: Data processed by PLS-XLStat, 2019

Table 6. Discriminant validity test results: quality of accounting information systems construct

	Quality of Accounting Information System	X _{3.1}	X _{3.2}	X _{3.3}	AVE
Quality of Accounting Information System	1	0,793	0,844	0,809	0,481
X _{3.1}	0,793	1	0,573	0,444	0,589
X _{3.2}	0,844	0,573	1	0,558	0,676
X _{3,3}	0,809	0,444	0,558	1	0,543
AVE	0,481	0,589	0,676	0,543	0

Source: Data processed by PLS-XLStat, 2019

Table 7. Discriminant validity test results fraud prevention construct

	Fraud Prevention	$Y_{1.1}$	$Y_{1.2}$	$Y_{1.3}$	$Y_{1.4}$	$Y_{1.5}$	$Y_{1.6}$	AVE
Fraud Prevention	1	0,823	0,493	0,078	0,638	0,557	0,565	0,377
Y _{1.1}	0,823	1	0,350	0,026	0,414	0,429	0,351	0,777
Y _{1.2}	0,493	0,350	1	0,001	0,201	0,154	0,185	0,582
Y _{1.3}	0,078	0,026	0,001	1	0,021	0,067	0,096	
Y _{1.4}	0,638	0,414	0,201	0,021	1	0,299	0,240	0,652
Y _{1.5}	0,557	0,429	0,254	0,067	0,299	1	0,150	0,520
Y _{1.6}	0,565	0,351	0,184	0,096	0,240	0,150	1	0,666
AVE	0,377	0,777	0,582		0,652	0,520	0,666	0

Source: Data processed by PLS-XLStat, 2019

Based on Tables 4, 5, 6 and 7 above it can be seen that the AVE value of each construct is greater than the square value of the correlation between constructs. Thus fulfilling good discriminant validity.

Table 8. Cronbach's Alpha dan composite reliability

Latent Variables	Dimensions	Cronbach's Alpha	D.G Rho (PCA)	AVE
Internal Control	13			0,385
$X_{1.1}$	3	0,706	0,837	0,632
$X_{1.2}$	3	0,619	0,798	0,574
$X_{1.3}$	4	0,716	0,825	0,543
X _{1.4}	2	0,317	0,745	0,593
X _{1.5}	1			
Organizational Culture	11			
$X_{2.1}$	2	0,192	0,712	0,552
$X_{2,2}$	2	0,292	0,739	0,585
$X_{2.3}$	1			
$X_{2.4}$	2	0,462	0,788	0,649
X _{2.5}	1			
$X_{2.6}$	1			
X _{2.7}	2			0,475
Quality of Accounting Information System	15			
$X_{3.1}$	5	0,817	0,875	0,589
$X_{3,2}$	4	0,839	0,893	
$X_{3.3}$	6	0,829	0,876	
Fraud Prevention	16			
$Y_{1.1}$	3	0,856	0,913	0,777
Y _{1.2}	4	0,688	0,810	0,511
Y _{1.4}	3	0,737	0,851	0,650
$Y_{1.5}$	3	0,544	0,767	0,521
Y _{1.6}	3	0,744	0,857	0,665

Source: Data processed by PLS-XLStat, 2019

Table 9. Test of validity and reliability formative indicators

Laten Variable	Manifest Variable	Outer Weight	Critical Ratio (CR)
X _{1.5}	X _{1.5.21}	1,000	1322,317
X _{2.3}	X _{2.3.28}	1,000	1479,778
X _{2.5}	X _{2.5.31}	1,000	1479,778
$X_{2.6}$	X _{2.6.32}	1,000	1479,778
Y _{1.3}	Y _{1.3.62}	1,000	1414,330

Source: Data processed by PLS-XLStat, 2019

Based on the table above, formative indicators have a critical ratio value above 1.96, this shows that the indicator is valid.

4.3 Structural Model (Inner Model)

The structural model or inner model aims to predict the relationship between latent variables that are hypothesized. To assess the structural model, look at the value of R-Squares for each endogenous latent variable as an interpretation of OLS Regression (Ghozali, 2016: 25).

Table 10. R-Squares (R2) fraud prevention

R ²	F		R ² (Bootstrap)	Standard error	Critical ratio (CR)	Lower bound (95%)	Upper bound (95%)
0,721	56,789	0,000	0,759	0,077	9,418	0,602	0,908

Source: Data processed by PLS-XLStat, 2019

Based on Table 10, obtained an R² of 0.721, this means that the fraud prevention construct is influenced by 72.1% by the internal control construct, organizational culture and the quality of the accounting information system while 27.9% is influenced by other constructs not contained in the study.

To see the significance of the model can be seen from the t-statistic value compared to the t table value. With a confidence level of 95%, df = 67 we get at a table of 1.67. Ho will be rejected if the t-statistic value > 1.67 and Ho will be accepted if the t-statistic value < 1.67. For the direction of the influence of exogenous variables to endogenous variables can be seen from negative or positive signs on the t-statistic value.

Table 11. Path coefficient

Relationship Between Variables	t-statistic	Value	Note
Internal Control → Fraud Prevention	1,983	0,217	Significant
Environment Control → Fraud Prevention	12,648	0,838	Significant
Risk Assessment → Internal Control	10,252	0,779	Significant
Control Activities → Internal Control	13,004	0,845	Significant
Communication and Information → Internal Control	10,261	0,779	Significant
Monitoring → Internal Control	2,235	0,262	Significant
Organizational Culture → Fraud Prevention	1,982	0,202	Significant
Innovation & Risk Task → Organizational Culture	13,978	0,861	Significant
Attention to detail → Organizational Culture	5,261	0,538	Significant
Outcome Orientation → Organizational Culture	10,011	0,772	Significant
People Orientation → Organizational Culture	13,069	0,846	Significant
Team Orientation → Organizational Culture	3,744	0,413	Significant
Agressiveness → Organizational Culture	7,536	0,675	Significant

Stability → Organizational Culture	4,575	0,485	Significant
Quality of Accounting Information System → Fraud Prevention	4,290	0,501	Significant
Service System → Quality of Accounting Information	16,415	0,894	Significant
Quality System → Quality of Accounting Information	19,217	0,919	Significant
Information System → Quality of Accounting Information	16,682	0,896	Significant

Source: Data processed by PLS-XLStat, 2019

4.4 Hypothesis Test

Table 12. Hypothesis testing results

	t-count	t-table	H _o	H _a
Internal Control to Fraud Prevention	1,983	1,67	Rejected	Not Rejected
Organizational Culture to Fraud Prevention	1,982	1,67	Rejected	Not Rejected
Quality of Accounting Information System to Fraud Prevention	4,29	1,67	Rejected	Not Rejected

Source: Data processed by PLS-XLStat, 2019

4.4.1 Internal Control Has a Positive Effect on Fraud Prevention

Based on table 12. the calculated value of the internal control variable is 1.983 and is positive. This value is above the t-table value of 1.67, meaning the hypothesis (Ho) which states that internal control does not affect fraud prevention is rejected and instead accepts the alternative hypothesis (Ha) which states that the internal control variable has a positive and significant effect on the fraud prevention variable.

This study is in line with research conducted by Hermiyeti (2010), Soleman (2013), Chairun Nisak et al (2013), Sukadwilinda and Ratnawati (2013), Zulkarnain (2013), Agung (2015), Joseph et al (2015), Sujandari and Martaningtyas (2015), Yuliana (2016), Sumbayak (2017), Albar and Fitri (2018), Akhsani (2018), Siregar and Hamdani (2018) who concluded that internal control ha a positive effect on fraud prevention.

4.4.2 Organizational Culture Has a Positive Effect on Fraud Prevention

Based on Table 12, the calculated t value for the organizational culture variable is 1.982. This value is above the t-table value of 1.67, meaning the hypothesis (Ho) which states that organizational culture does not affect fraud prevention is rejected and instead accepts an alternative hypothesis (H2) which states that organizational culture variables have a positive effect on fraud prevention.

This research is not in line with research conducted by Akhsani (2018) that organizational culture does not influence the tendency of cheating practices. This means that the higher the ethics in organizational culture may not necessarily reduce the tendency to practice fraud, because fraud can be committed by anyone even by employees who initially had good norms and ethics. There is an opportunity (opportunity) to commit fraud that encourages someone's actions to do so.

The results of this study are in line with research conducted by Siregar et al (2018) and Albar and Fitri (2018), Surjandari and Martaningtyas (2015) which concluded that the higher the organizational culture, the lower the fraud in the organization.

4.4.3 Quality of Accounting Information System Has a Positive Effect on Fraud Prevention

Based on Table 12, the calculated t value for the variable quality of the accounting information system is 4.29. This value is above the t-table value of 1.67, meaning the hypothesis (Ho) which states the quality of the accounting information system does not affect the prevention of fraud is rejected and instead accepts the alternative hypothesis (H1) which states that the quality of the accounting information system affects fraud prevention.

The results of this study are in line with research conducted by Muhammad et al (2017), Animah (2018).

5. Conclusions and Suggestions

Based on the results of the research conducted and through several hypothesis tests, the following conclusions are obtained:

- 1. Internal control has a positive effect on fraud prevention. The higher or better internal control in a company, the better the prevention of fraud in the company.
- 2. Organizational culture has a positive effect on fraud prevention. The higher or better organizational culture that is applied in a company, the better the prevention of fraud in the company.
- 3. The quality of the accounting information system has a positive effect on fraud prevention variables. The higher or better the quality of accounting information systems in a company, the better the prevention of fraud that is in it.

References

- ACFE. (2014). Report To the Nations (p. 31). Association of Certified Fraud Examiners: Austin, TX, USA.
- Agung, M. (2015, December). Internal Control Part Of Fraud Prevention in Accounting Information System. *International Journal of Economics, Commerce and Management, III*(12), 724-737.
- Akhsani, N. (2018, September). Pengaruh Pengendalian Internal, Kesesuaian Kompensasi dan Budaya Organisasi terhadap kecenderungan Praktek Kecurangan (Studi Empiris pada Perusahaan Kontraktor Ketenagalistrikan). *Jurnal AKuntansi Berkelanjutan Indonesia*, 1(3).
- Albar, T. M., & Aida, F. F. (2018). Pengaruh Komitmen Organisasi, Etika Organisasi, Keadilan Kompensasi dan Sistem Pengendalian Internal terhadap *fraud* (Studi Empiris pada SKPD Pemerintah Kota Lhokseumawe). *Jurnal Ilmiah Mahasiswa Ekonomi AKuntansi, 3*(3), 527-537.
- Alfian, N., & Tarjo dan Haryadi, B. (2017). The effect of anti fraud strategy on fraud prevention in banking industry. *Asia Pasific Fraud Journal*, 2.
- Animah. (2018). Pengaruh Sistem Informasi Akuntansi dan Efektivitas Pengendalian Internal terhadap kecenderungan Akuntansi. *Prosiding 4th Seminar Nasional dan Call for Papers Fakultas Ekonomi Universitas Muhammadiyah Jember*.
- Arens, A. A., *et al.* (2014). *Auditing dan Jasa Assurance: Pendekatan Terintegrasi*. Edisi lima belas. Jilid satu. Penerjemah Herman Wibowo & Tina Perti. Jakarta: Erlangga
- Awadh, A. M., & Saad, A. M. (2013). Impact of Organizational Culture on employee performance. *International Review of Management and Business Research*, 2.
- Bouwman, C. H. S. (2013). The role of corporate culture in mergers & acquisitions. In E. Perrault (Ed.), *Mergers and acquisitions: Practices, performance, and perspectives. NOVA Science Publishers.* Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2307740
- Cho, M., & Chung, K. H. (2016). The effect of commercial banks' internal control weaknesses on loan loss reserves and provisions. *Journal of Contemporary Accounting and Economics*, 12(1).
- Cooper, D. R., & Schindler, P. S. (2013). *Business Research Methods* (12th ed.). New York: McGraw Hill/Irwin Diana, A., & Setiawati, L. (2011). *Sistem Informasi Akuntansi: Perancangan, Proses dan Penerapan*. Jakarta: Andi.
- Dragomir, D., Vesna, M., & Stancic, V. (2015). The role of a company's internal control system in fraud prevention. *Financial Internet quarterly*, 11.
- Fraedrich, J., Ferrell, O. C., & Ferrell, L. (2017). *Ethical decision making for business* (11th ed., electronic version). Retrieved from https://bookshelf.vitalsource.com/#/books/9781305856233/cfi/3!/4/2@100:0.00
- Ghazali, I., & Kusumadewi, K. A. (2016). *Model Persamaan Structural PLS-PM, GSCA, RGCCA menggunakan program XLStat-PLS*. Semarang: Yoga Pratama
- Ghosh, A. A., & Lee, Y. G. (2013). Financial Reporting Quality, Structural Problems and The Informativeness of Mandated Disclosure on Internal Controls. *Journal of Business Finance and Accounting*, 40(3-4), 318-349.
- Gong, G., Ke, B., & Yu, Y. (2013). Home country investor protection, ownership structure and cross-listed firms' compliance with SOX-mandated internal control deficiency disclosures. *Contemporary Accounting Research*, 30(4), 1490-1523.
- Hermiyetti. (2010). Pengaruh Penerapan Pengendalian Internal terhadap Pencegahan Fraud Pengadaan Barang. *Jurnal Akuntansi dan Auditing Indonesia*, 14(2).
- Hu, N., Qi, B., Tian, G., Yao, L., & Zeng, Z. (2013). The impact of ineffective internal control on the value relevance of accounting information. *Asia Pacific Journal of Accounting & Economics: APJAE*, 20(3), 334.

- Ikatan Akuntan Indonesia. (2015). Pernyataan Standar Akuntansi Keuangan. Jakarta: Ikatan Akuntan Indonesia.
- Joseph, O. N., & Albert, O. (2015, January). Effect of Internal control on Fraud Detection and Prevention in District Treasuries of Kakamega County. *International Journal of Business and Management*, 4(1).
- Kinichi, A., & Fugate, M. (2018). *Organizational Behaviour: A Practical, Problem-Solving Approach* (2nd ed.). Newyork: McGraw-Hill Education.
- KPMG International. (2017). Driving corporate culture from the top: Global boardroom insight. Retrieved from www.kpmg.com
- KPMG. (2004). Fraud survey report. Retrieved from www.kpmg.com.my/kpmg/publications/fas/fsurvey 2004.pdf
- Lokan, M. (2014). How senior managers perpetuate accounting fraud? lessons for fraud examiners from an instructional case. *Journal of Financial Crime*, 21(4), 411-423.
- Mirinaviciene, S. (2014). Internal control and fraud prevention research analysis.
- Muhammad, R., & Ridwan. (2017). Pengaruh kesesuaian kompensasi, penerapan system informasi akuntansi dan efektivitas pengendalian internal terhadap kecurangan akuntansi studi pada BPR di kota Banda Aceh. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*.
- Prasetyono, C. N., & Kurniawan, F. A. (2013, April). Sistem Pengendalian Intern dalam Pencegahan *Fraud* pada satuan kerja perangkat daerah (SKPD) pada Kabupaten Bangkalan. *JAFFA*, 1.
- Puspitawati, L., & Anggadini, S. D. (2011). Sistem Informasi Akuntansi. Edisi Pertama. Yogyakarta: Graha Ilmu.
- Rizki, H., & Albar, A. R. (2016). Internal Controls in Fraud Prevention Effort: A Case Study. *Jurnal Akuntansi dan Auditing Indonesia*, 20(2).
- Robbins, S. P., Judge, T. A., & Breward, K. E. (2018). *Essentials of Organizational Behaviour* (Canadian Edition). Canada: Pearson
- Romney, M. B., & Steinbart, P. J. (2012). Accounting Information Sistems (12th ed.). England: Pearson Education.
- Siregar, M. I., & Hamdani, M. (2018). Kesesuaian Kompensasi, Keefektifan Sistem Pengendalian Internal, Budaya Organisasi dan Kompetensi terhadap Fraud (Studi Kasus pada Satuan Kerja Vertical Kementrian Keuangan Propinsi Lampung). *Global Masa Kini Mandiri*, *9*(1), 30-37.
- Siregar, S. V., & Tenoyo, B. (2015). Fraud awareness survey of private sector in Indonesia. *Journal of Financial Crime*, 22(3), 329-346.
- Skaife, H. A., Veenman, D., & Wangerin, D. (2013). Internal control over financial reporting and managerial rent extraction: evidence from the profitability of insider trading. *Journal of Accounting and Economics*, 55(1), 91-110.
- Soleman, R. (2013, Juni). Pengaruh Pengendalian Internal dan Good Corporate Governance terhadap Pencegahan Fraud. *JAAI*, 17(1).
- Su, L. N., Zhao, X. R., & Zhou, G. S. (2014). Do customers respond to the disclosure of internal control weakness?. *Journal of Business Research*, 67(7), 1508-1518.
- Sukadwilinda, & Aryanti, R. R. (2013). Pengendalian Internal terhadap Kecurangan. Jurnal Akuntansi Riset.
- Surjandari, D. A., & Martaningtyas, I. (2015). An Empirical Studi: The Effect of Performance Incentive, Internal Control System, Organizational Culture on Fraud of Indonesia Government Officer. *Mediterranean Journal of Social Sciences*, 6(5), 71-76.
- Warrick, D. D. (2017). What leaders need to know about organizational culture. Business Horizons, 60(3), 395-404.
- Weiss, D. (2014). Internal controls in family-owned firms. European Accounting Review, 23(3), 463-482.
- Yuliana, A. (n.d.). Pengaruh Keadilan Organisasi, SPI dan Komitmen Organisasi terhadap Kecurangan (Fraud) (Studi Empiris pada Kantor Cabang Utama Bank Syariah di Kota Pekan Baru). *JOM Fekon*, *3*(1).
- Zakari, K. M., Nawawi, A., & Salin, A. S. A. P. (2016). Internal controls and fraud empirical evidence from oil & gas company. *Journal of Financial Crime*, 23(4), 1154-1168.
- Zulkarnain, R. M. (2013). Analisis Analisis Faktor yang mempengaruhi terjadinya fraud pada Dinas Kota Surakarta. *Accounting Analysis Journal*, 125-131.