

The Influence of the Effectiveness of Accounting Information System and Leadership on Employee Performance with Work Motivation as Moderating Variable at PT.Tiger Duaribu

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Abstract:

Background: This research aims to determine the influence of the Effectiveness of Accounting Information System and Leadership on Employee Performance with Work Motivation as moderating variable at PT. Tiger Duaribu. Every organization and company will always strive to improve employee performance, with the hope that what the company's goals will be achieved. Employee performance is the result of work in quality and quantity achieved by an employee in carrying out its function. Employee performance can be assessed from the way the employee works in doing his job and is also an important thing for the company or organization and the employee itself. Companies should pay more attention to the ability of employees in mastering information technology, so that training is needed to improve employee capabilities. An accounting information system can be said to be effective if the system is able to produce acceptable information and is able to meet information expectations in a timely, accurate and reliable manner. If the accounting information system is used effectively, employee performance can improve. With monitoring from a leader, employees will be more active in their work so that employee performance will increase. In conditions where the use of an effective accounting information system is accompanied by high work motivation of an employee, the employee's performance will also be better. The work will be better if there is motivation provided by the leadership to employees which is can improve employee performance.

Materials and Methods: Total of population in this research are 55 employees at PT. Tiger Duaribu. The sampling method used in this research is simple random sampling, and the number of samples obtained are 55 employees. Data collection techniques used is through a questionnaire. The questionnaire is a data collection technique which is done by giving a set of written questions to the respondent. Analysis of data method used is Structural Equation Modeling (SEM) method using smartPLS application.

Results: The effectiveness of accounting information system has a significant effect on employee performance at PT. Tiger Duaribu. Leadership has a significant effect on employee performance at PT. Tiger Duaribu. Meanwhile, work motivation is not able to moderate the relationship between the effectiveness of accounting system information on employee performance at PT.Tiger Duaribu and work motivation is not able to moderate the relationship between leadership on employee performance at PT. Tiger Duaribu.

Conclusion: The management company of PT. Tiger Duaribu should maintain the use of an effective accounting information system because if the accounting information system in the company has been used effectively, it can facilitate and accelerate the work of employees so that employee performance can increase. In addition, the leader of the company PT. Tiger Duaribu should maintain leadership characteristics in the company because with a leader in a company, he is able to direct, influence, organize and supervise his employees properly so that employee performance increases. The effectiveness of accounting information system and leadership have a positive effect on employee performance.

Key Word: employee performance; the effectiveness of accounting information system; leadership; work motivation

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I. Introduction

In carrying out operational functions in an effort to achieve company goals, it does not only depend on capital, machinery and equipment, but also depends on the workforce or employees of the company to play an active and productive role in the production process. Employees who play an active and productive role will

greatly assist the company in achieving its goals. Employee performance is reflected in work performance in carrying out the duties and jobs assigned by the company. Every organization and company will always strive to improve employee performance, with the hope that what the company's goals will be achieved. Companies need employees who are able to work better and faster, so employees who have high job performance are needed. However, in today's era, there are many employees who do not prioritize company goals. More employees act as they wish so that most of the company's goals are not achieved. The performance of employees in each company greatly determines the performance of the company concerned. Research Director of the Indonesian Center of Reform on Economics (Core) Mohammad Faisal said the average performance of the manufacturing sector in that period only reached 4% supported by the domestic market ^[1].

Manufacturing companies generally play a big role in the industrial world. Manufacturing companies need to consider technology management as a functional strategy. Measurement of employee performance based on output (such as productivity, sales, market share, etc.) is appropriate for the manufacturing industry. The output can include financial reports generated from the company's accounting information system. As for productivity, sales and market share it may depend on the leader of the company.

PT Tiger Duaribu is a manufacturing company engaged in the motorcycle industry which distributes motorcycle to consumers. In addition to motorcycle distributors, PT Tiger Duaribu also provides service and replacement of motorcycle spare parts. The company has implemented an accounting information system to produce corporate financial reports and also has a company leader to carry out business processes. As a company engaged in manufacturing, the supporting data used in this study are from the closing date of the company's books. From the supporting data below, it can be seen how the employee's performance in completing each job until reaching the closing book target that has been set at PT Tiger Duaribu. The following is a supporting table for employee performance variables for the 2018 and 2019 periods.

Table no 1 : Closed Book Data for 2018 and 2019

Month	2018 Target	2018 Real	2019 Target	2019 Real
January	15 Feb	10 Mar	15 Feb	23 Feb
February	15 Mar	3 May	15 Mar	29 Mar
March	15 Apr	15 May	15 Apr	26 Apr
April	15 May	29 May	15 May	7 June
May	15 June	5 July	15 June	28 June
June	15 July	28 July	15 July	23 July
July	15 Aug	25 Aug	15 Aug	2 Sep
August	15 Sep	19 Sep	15 Sep	18 Sep
September	15 Okt	20 Okt	15 Oct	18 Oct
October	15 Nov	29 Nov	15 Nov	21 Nov
November	15 Dec	23 Dec	15 Dec	31 Dec
December	15 Jan	22 Jan	15 Jan	16 Jan

From table 1 it can be seen that the accounting department of the company was unable to close the books according to the predetermined time. Employee performance in the company is classified as very low even though the company has implemented an accounting information system so that financial reports cannot be completed on time. If the employee is more performing in doing the job then there should be no delay in carrying out the company book closing process. This shows that the performance of employees is not optimal. Employees have not done their job well. From the phenomenon, the performance of these employees is also influenced by several factors, namely how the effectiveness of the use of accounting information systems and leadership factors that support the sales of a company.

Companies should pay more attention to the ability of employees in mastering information technology, so that training is needed to improve employee capabilities. Financial-related information data will be recorded in the accounting system, making it easier for you and your employees to measure the condition of the company. So, you should make books and regularly update the data. An accounting information system can be said to be effective if the system is able to produce acceptable information and is able to meet information expectations in a timely, accurate and reliable manner. If the accounting information system is used effectively, employee performance can improve. The leader oversees how the employees in the office are performing. Without the supervision of the leader, employees may be indifferent to their work, because it requires monitoring from the company leader. With monitoring from a leader, employees will be more active in their work so that employee performance will increase.

In conditions where the use of an effective accounting information system is accompanied by high work motivation of an employee, the employee's performance will also be better. Without giving encouragement to employees to trigger the emergence of high work motivation, employees will tend to be less enthusiastic in working, especially in the use of accounting information systems, so that no matter how effective the system will be, it will not have too much effect on employee performance. With the motivation and support provided by

company leaders, the performance of employees can increase because employees are more motivated to do their jobs. The better the work motivation provided by the leadership to employees, the better it can improve employee performance.

This research was conducted because the application of the accounting information system in the company has not been effective, has not run optimally and has not been able to support the work of employees, leaders who lead the company have not done their duties properly or lack of supervision or motivation from company leaders, the time required to close the book has not been able to meet the standards set by the company. Lack of employee motivation in achieving company goals, lack of employee discipline in carrying out their work which is supported by existing information technology and low employees in terms of carrying out their respective roles.

II. Material And Methods

Performance is a work achievement (performance) both in quantity and quality that is achieved by a person during a certain period, usually within one year. Performance is work behavior that is what employees do. A person's performance can be measured if that person has clear responsibilities ^[2]. Performance can be seen from:

1. A person's ability to achieve goals
2. Persistence to work hard
3. Punctuality in completing work
4. Use of fees according to design
5. Independence in work
6. Ability to overcome problems / obstacles

There are 3 factors that affect employee performance, namely ^[3]:

1. Individual factors are the ability and skills to do work. A person's competence is influenced by several factors which can be grouped into two groups, namely ability and work skills as well as motivation and work ethic.
2. Organizational support factors. In carrying out their duties, employees need the support of the organization where they work. This support is in the form of organization, provision of work facilities and infrastructure, a comfortable working environment, and working conditions and conditions. Organizing is meant to provide clarity for everyone about the goals that must be achieved and what must be achieved and what must be done to achieve these goals.
3. Management support. The performance of the company and the performance of each person also greatly depends on the managerial ability of the management or leadership, either by building a safe and harmonious work system and industrial relations or by developing worker competence, as well as fostering the motivation of all employees to work optimally.

There are six criteria for assessing employee performance, namely ^[2]:

1. Quality (Quality) is the level where the process or adjustment in the ideal way in carrying out activities or fulfilling activities as expected.
2. Quantity, namely the amount produced is realized through the currency value, the number of units, or the number of completed activity cycles.
3. Timeliness, namely the level at which the activity has been completed in a time that is faster than determined and maximizes the time available for other activities.
4. Cost Effectiveness, which is the level at which the use of company resources in the form of human, financial and technology is maximized to obtain the highest yield or reduction in losses from each unit.
5. Need for Supervision, which is the level at which an employee can do his job without asking for help or guidance from his superiors.
6. Personal Impact (Interpersonal Impact), which is the level that shows an employee feels confident, has good desires, and works together among colleagues.

The accounting information system is a network of all procedures, forms, records, and tools used to process financial data into a form of report that will be used by management in controlling its business activities and then used as a management decision-making tool ^[4]. With the help of an accounting information system, employees should be able to shorten their work in order to produce maximum results. Qualitative characteristics of financial statements which include relevance, reliability, comparability and understandability can be generated from a quality accounting information system, therefore there is a positive relationship between the quality of accounting information and company performance.

According to Marshal B. Romney and Paul John Steinbart, the accounting information system consists of 5 components ^[4]:

1. The people who operate the system and perform various functions

2. Both manual and automated procedures involved in collecting, processing and storing data about the activities of the organization
3. Data about the organization's business processes.
4. Software used to process organizational data
5. Information technology infrastructure including computers, supporting equipment and equipment for network communications

There are three functions or roles of accounting information systems that are used to achieve the main objectives above. These three functions are closely related to one another, so they must be seen simultaneously. The three roles or functions are ^[5]:

1. Supporting the daily activities of the company. In order for a company to continue existing, it must continue to operate by carrying out a number of business activities, which events are referred to as transactions, such as purchasing, storing, producing and selling.
2. Support the decision making process. Information that cannot be obtained from an Accounting Information System but which is required in the decision-making process is usually in the form of non-monetary quantitative information and qualitative data.
3. Assist company managers in fulfilling their responsibilities to external parties. Every company must fulfill its legal responsibilities. One of the important responsibilities is the obligation to provide information to users outside the company or stakeholders including suppliers, customers, shareholders, creditors, large investors, trade unions, financial analysts, industry associations, or even the general public.

The effectiveness of the accounting information system is a success in using accounting information systems in producing quality information so that it can support the right decision making for an organization ^[6]. The effectiveness of the accounting information system is a measure that provides an overview of the extent to which targets can be achieved from a set of resources that are arranged to collect, process and store electronic data, then turn it into useful information and provide the required formal reports both in quality and time.

Information systems are said to be effective if the information generated by the system can serve the needs of users of the system ^[7]. An effective accounting system will provide accurate and complete feedback. Therefore, the better the accounting system, the better management can assess and control operations. An ineffective accounting system is likely to result in inaccurate or incomplete reports, leading to difficulties in properly controlling activities. An effective system must achieve the following objectives:

1. Identification of all relevant financial events (transactions) of the organization
2. Capture important data from this transaction
3. Recording and processing data through classification, summary, and collation as appropriate
4. Communicating information that has been summarized and combined as needed for internal and external purposes.

Indicators of the effectiveness of the accounting information system are ^[8]:

1. Time measurement, is the time speed required by the system to process the output both periodically and non-periodically.
2. Data security, is the level of the system's ability to anticipate in the event of unexpected events that can disrupt the system's running process.
3. Relevance, is the data presented by the system in accordance with what is needed by the user.
4. Accuracy, is the system's ability to process data carefully and free from errors and can present information precisely and accurately.
5. Variation report or output, is the level of the system's ability to create various reports so that the report can be useful for information users.

According to Hughes et al, leadership is a complex phenomenon which involves elements of people or humans as leaders, followers and situations ^[2]. Hughes explains in a very broad perspective, complemented by views that are the results of previous research on leadership that the main focus is on the personality, the unique character inherent in the leader and his behavior. This view becomes a "big picture" when the elements of leadership are combined and their relationships are explored, for example the relationship between leaders and followers, or between leaders and situations. The elements of leadership consist of ^[9]:

1. The element of the leader or person who influences
2. The element of the person being led as the party being influenced
3. Elements of interaction or activities or efforts and influencing processes
4. The element of the goal to be achieved in the influencing process
5. Elements of behavior or activities carried out as a result of influence.

The leadership indicators are as follows ^[10] :

1. Integrity, is one of the most important / key attributes a leader must possess in relation to consistency in actions and the values of the vision to be achieved for the company.

2. Competency, are the skills needed by a leader, which is shown by his ability to consistently provide a high level of performance in a function as a leader.
3. Consistency, meaning consistency and stability in acting on policies that reflect consistency in dealing with the problems that the company is experiencing.
4. Loyal (loyalty), which means the quality of the attitude of being loyal (loyal) by the act of giving or showing strong and constant support and obedience from a leader to his subordinates.
5. Open (openess), which means the openness of the leader and his subordinates in receiving input, suggestions in making decisions so that a good cooperative relationship is created.

Motivation is defined as a driving or impulse in humans that can cause, direct, and organize behavior. As'ad in Ancok, work motivation is something that causes a strong work motivation and a weak work motivation for a worker to determine the size of his or her achievement ^[11]. Wexly and Yulk in Pasalog say that work motivation is the giving of encouragement or something that causes someone to do something or behave. Winardi stated that work motivation is the desire in an individual who stimulates him to take actions. Meanwhile, Meier in Rivai and Sagala said that work motivation is a factor that causes an organism to do what it does.

According to Ibrahim, the factors that influence motivation can be divided into ^[12]:

1. Factors within the individual (internal), namely: (1). Age, (2). Maturity, (3). Education level, (4). Personal wishes and expectations, (5). Needs, (6). Fatigue and boredom, (7). Job satisfaction.
2. Factors outside the individual (external), namely: (1). Fun work environment, (2). Adequate compensation, (3). Good supervision, (4). There is an award for achievement, (5). Status and responsibilities, (6). Applicable regulations, (7). Organizational culture

The indicators of work motivation include ^[7]:

1. Feeling Safe and Comfortable at Work

Having a sense of security at work is a demand that human instincts always need. This can be caused by several factors. Security that may be generated by company leaders and security in the workplace, such as the provision of security services and so on.

2. Reward

Reward have an understanding of the rewards / rewards that the organization provides to its members, whether they are financial, non-financial, or psychological or non-material in nature. The form of the award can be in the form of basic salary / basic wage, variable salary, incentives, achievement fees (bonus), career / promotion opportunities, holidays, retirement

3. Office Tool Completeness

Work tools or work protective equipment is the organization's obligation to provide them. Knowledge of the benefits of using a complete work tool will also greatly assist the organization / company in providing employee comfort and security.

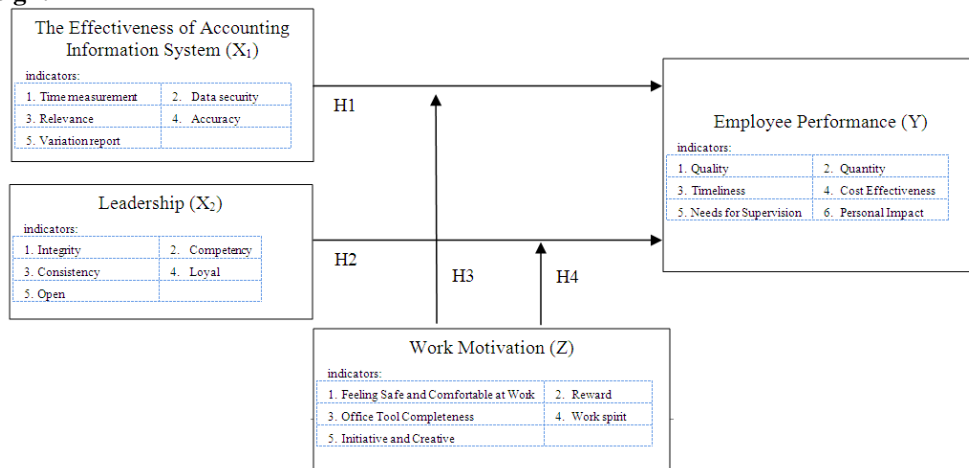
4. Work spirit

Work spirit is an attitude of willingness to feel that allows an employee to produce more and more work without increasing fatigue. Passion and employee morale are very important, this can improve employee performance.

5. Initiative and Creative

Initiative is a person's ability to produce something new. Creativity is an ability that is very meaningful in the performance process.

Study Design:



Study Location: PT. Tiger Duaribu is used as the research location.

Study Duration: November 2019 to August 2020.

Sample size: 55 employees.

Sample size calculation:

Table no 2 : Sampling Criteria

Sampling criteria	Count of Employee
Research population : All employees at PT.Tiger Duaribu	55
Criteria:	
1 Employees who are contract employees	(0)
2 Employees who have not passed the 3 month working period	(0)
Employees who are the research sample	55

Exclusion criteria:

1. Contract employees
2. Employees who have not passed 3 months working period

Procedure methodology

Data collection techniques used is through a questionnaire (questionnaire). The questionnaire is a data collection technique which is done by giving a set of written questions to the respondent. The questionnaire was distributed to respondents to find out the respondent's opinion about the research variables. Researchers make a questionnaire in the form of a list of questions by including 5 (five) alternative answers and each respondent is expected to only choose one (1) number of answers that are considered the most correct or the most appropriate to the respondent's choice.

With a Likert scale, the variables to be measured are translated into variable indicators. Then the indicator is used as a starting point for arranging instrument items which will be in the form of statements or questions. The score for the answer assessment of each instrument item on the Likert scale is as follows ^[13].

Table no 3 : Research Instrument Scale

Weight	Information	Symbol
1	Strongly disagree	STS
2	Disagree	TS
3	Doubt	KS
4	Agree	S
5	Strongly agree	SS

Efektivitas Sistem
Informasi Akuntansi
(X1)

The frequency and percentage of each alternative answer given by each respondent in the research questionnaire can be calculated using the following formula ^[14] :

$$P = \frac{f}{n} \times 100\%$$

Information :

P = Percentage of respondents' answers for each answer to the question

F = Frequency of the respondent's answer for each question item

n = Number of respondents

The percentage of respondents' answers to each question item in the research questionnaire can be categorized using the assessment score criteria as follows [14]:

Table no 4 : Assessment Score Criteria of the Percentage of Respondents' Answers for Each Question Item in the Research Questionnaire

Research Score	Category
80 – 100	Very good
70 – 79	Good
60 – 69	Quite good
50 – 59	Not good
< 50	Bad

Statistical analysis

In this study, data analysis used the Partial Least Square (PLS) approach. PLS is a component or variant based Structural Equation Modeling (SEM) equation model. PLS is a powerful analytical method and is often referred to as soft modeling because it eliminates OLS (ordinary least squares) regression assumptions, such as data must be normally distributed in a multivariate manner and there is no multicollinearity problem between exogenous variables^[15]. The test will be carried out in 2 stages, namely

1. Measurement model or outer model.

Outer model is done by testing the validity and reliability. The validity test is carried out using the construct validity that measures the extent to which the measuring instrument is used, in this case the questionnaire must be able to measure the meaning of the concept being measured. In the validity test, it involves the content validity and the criterion validity. The content validity test is used to see the extent to which the questionnaire can measure the content of a variable to be measured. The validity test was measured by convergent validity and discriminant validity and average variance extracted (AVE). The reliability test is measured by the Composite Reliability and Cronbachs Alpha tests.

2. Inner model analysis or structural model

The structural model was evaluated using the coefficient of determination / R-square (R²) for the endogenous construct. Changes in the R-square value can be used to assess the effect of certain independent (exogenous) latent variables on the dependent (endogenous) latent variables whether they have a substantive effect. The second is to test the hypothesis. The t test serves to test the research hypothesis, where the t test can be seen from the results of the path coefficients test that will provide an estimate of the effect between variables and provide significant information that is very useful about the relationship between the research variables.

III. Result

Table no 5 : Table of Respondents

Information	Total Respondents
All questionnaires distributed to respondents	55
Criteria:	
1. Number of non-returned questionnaires	(0)
2. Questions that were not answered by the respondent	(0)
The total number of respondents who became the research sample	55

Characteristics of respondents based on gender, age, education level, and length of work. Based on gender, there are 29 men and 26 women. Based on age, for the age range of 20-30 years there are 36 people, aged 31-40 years there are 12 people, aged 41-50 years there are 5 people and ages 51-56 there are 2 people. Based on the level of education, there are 34 high school graduates, 9 D3 students, 12 S1 graduates and none of them have S2 education. Based on the length of work, there are 12 people who work under 1 year, for 1 to 5 years there are 32 people, for 6 to 10 years there are 9 people and over 10 years there are 2 people.

Table no 6 : Descriptive Statistics

	N	Mean	Median	Min	Max	Std Dev
Y (Employee Performance)	55	48,655	53	32	60	8,861
X1(The Effectiveness of Accounting Information System)	55	40,127	41	27	50	6,182
X2 (Leadership)	55	36,945	38	24	50	6,546
Z (Work Motivation)	55	40,055	41	24	50	7,359

Outer Model (Measurement Model)

Validity Test – Convergent Validity

Convergent validity test for reflexive indicators can be seen from the loading factor for each construct indicator. The rule of thumb that is usually used to assess convergent validity is that the loading factor value must be more than 0.7 for confirmatory research, and the loading factor value is between 0.6 - 0.7 for exploratory research^[16].

Table no 7 : Result Outer Loading Before Reduction

	Outer Loading	Ket		Outer Loading	Ket
KK1 <- KK	0.763	Valid	P1 <- P	0.726	Valid
KK2 <- KK	0.787	Valid	P2 <- P	0.805	Valid
KK3 <- KK	0.757	Valid	P3 <- P	0.786	Valid

KK4 <- KK	0.836	Valid	P4 <- P	0.747	Valid
KK5 <- KK	0.753	Valid	P5 <- P	0.730	Valid
KK6 <- KK	0.846	Valid	P6 <- P	0.737	Valid
KK7 <- KK	0.842	Valid	P7 <- P	0.826	Valid
KK8 <- KK	0.847	Valid	P8 <- P	0.759	Valid
KK9 <- KK	0.822	Valid	P9 <- P	0.840	Valid
KK10 <- KK	0.798	Valid	P10 <- P	0.779	Valid
KK11 <- KK	0.825	Valid	MK1 <- MK	0.698	Not valid
KK12 <- KK	0.844	Valid	MK2 <- MK	0.845	Valid
SIA1 <- SIA	0.735	Valid	MK3 <- MK	0.791	Valid
SIA2 <- SIA	0.837	Valid	MK4 <- MK	0.814	Valid
SIA3 <- SIA	0.785	Valid	MK5 <- MK	0.852	Valid
SIA4 <- SIA	0.787	Valid	MK6 <- MK	0.765	Valid
SIA5 <- SIA	0.806	Valid	MK7 <- MK	0.828	Valid
SIA6 <- SIA	0.727	Valid	MK8 <- MK	0.867	Valid
SIA7 <- SIA	0.833	Valid	MK9 <- MK	0.696	Not valid
SIA8 <- SIA	0.836	Valid	MK10 <- MK	0.828	Valid
SIA9 <- SIA	0.808	Valid	SIA * MK <- MOD SIA - > Y	1.275	Valid
SIA10 <- SIA	0.760	Valid	P * MK <- MOD P -> Y	1.123	Valid

From table no 7 it can be seen that there are still 2 outer loadings / loading factors for work motivation variable questions that are not yet valid. For this reason, questions for work motivation variables nos. 1 and 9 must be reduced. After eliminating the factor loading which is less than 0.7, from the 42 question items, it is reduced to 40 question items. The following is the loading factor value of the indicators for each variable.

Table no 8 : Result Outer Loading After Reduction

	Outer Loading			Outer Loading	
KK1 <- KK	0.763	Valid	SIA10 <- SIA	0.760	Valid
KK2 <- KK	0.787	Valid	P1 <- P	0.726	Valid
KK3 <- KK	0.757	Valid	P2 <- P	0.805	Valid
KK4 <- KK	0.836	Valid	P3 <- P	0.786	Valid
KK5 <- KK	0.753	Valid	P4 <- P	0.747	Valid
KK6 <- KK	0.846	Valid	P5 <- P	0.730	Valid
KK7 <- KK	0.842	Valid	P6 <- P	0.737	Valid
KK8 <- KK	0.847	Valid	P7 <- P	0.826	Valid
KK9 <- KK	0.822	Valid	P8 <- P	0.759	Valid
KK10 <- KK	0.798	Valid	P9 <- P	0.840	Valid
KK11 <- KK	0.825	Valid	P10 <- P	0.779	Valid
KK12 <- KK	0.844	Valid	MK2 <- MK	0.845	Valid
SIA1 <- SIA	0.735	Valid	MK3 <- MK	0.791	Valid
SIA2 <- SIA	0.837	Valid	MK4 <- MK	0.814	Valid
SIA3 <- SIA	0.785	Valid	MK5 <- MK	0.852	Valid
SIA4 <- SIA	0.787	Valid	MK6 <- MK	0.765	Valid
SIA5 <- SIA	0.806	Valid	MK7 <- MK	0.828	Valid
SIA6 <- SIA	0.727	Valid	MK8 <- MK	0.867	Valid
SIA7 <- SIA	0.833	Valid	MK10 <- MK	0.828	Valid
SIA8 <- SIA	0.836	Valid	SIA * MK <- MOD SIA -> Y	1.275	Valid
SIA9 <- SIA	0.808	Valid	P * MK <- MOD P -> Y	1.123	Valid

Based on table above, all loading factors in first-order are > 0.7. The conclusion is that the measurement has met the requirements of convergent validity.

Validity Test – Discriminant Validity

1. Fornell Larcker Criterion

Fornell Larcker Criterion is used to calculate the correlation value between variables with the variable itself and variables with other variables. The requirement of the Fornell Larcker criterion is that the correlation value between the variable and the variable itself cannot be less than the correlation of the variable with other variables [16].The following are the results of the Fornell Larcker criterion test:

Table no 9 : Fornell Larcker Criterion

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
The Effectiveness of AIS	0,792					
Leadership	0,602	0,774				
Employees Performance	0,786	0,745	0,811			
Mod X1 -> Y	-0,493	-0,391	-0,506	1,000		

Mod X2 -> Y	-0,045	-0,256	-0,430	0,823	1,000	
Work Motivation	0,645	0,659	0,741	-0,488	-0,514	0,829

Based on table above, all correlation value between the variable and the variable itself is bigger than the correlation of the variable with other variables so the measurement has met the requirements of fornell larcker criterion.

2. Cross Loading

Cross Loading is used to calculate the correlation value between the indicator and the variable itself and the indicator with other variables. The requirement for cross loading is that the correlation value between the indicator and the variable itself cannot be less than the correlation between the indicator and other variables [16].The following is a cross loading table for each variable:

Table no 10 : Employee Performance Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
KK1	0,617	0,576	0,763	-0,378	-0,241	0,563
KK2	0,594	0,505	0,787	-0,474	-0,484	0,579
KK3	0,571	0,558	0,757	-0,383	-0,343	0,445
KK4	0,721	0,654	0,836	-0,449	-0,430	0,611
KK5	0,516	0,580	0,753	-0,357	-0,280	0,541
KK6	0,668	0,608	0,846	-0,299	-0,242	0,619
KK7	0,715	0,598	0,842	-0,461	-0,425	0,745
KK8	0,639	0,703	0,847	-0,391	-0,350	0,764
KK9	0,589	0,662	0,821	-0,215	-0,215	0,535
KK10	0,584	0,640	0,798	-0,262	-0,178	0,509
KK11	0,742	0,582	0,825	-0,655	-0,534	0,672
KK12	0,642	0,562	0,844	-0,463	-0,433	0,554

Table no 11 : The Effectiveness of AIS Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
SIA1	0,735	0,376	0,540	-0,417	-0,333	0,401
SIA2	0,837	0,551	0,665	-0,479	-0,419	0,522
SIA3	0,785	0,487	0,596	-0,422	-0,331	0,516
SIA4	0,787	0,498	0,630	-0,376	-0,338	0,586
SIA5	0,806	0,478	0,594	-0,330	-0,273	0,469
SIA6	0,727	0,466	0,543	-0,278	-0,342	0,498
SIA7	0,833	0,448	0,617	-0,309	-0,346	0,491
SIA8	0,836	0,463	0,667	-0,357	-0,286	0,538
SIA9	0,808	0,478	0,699	-0,513	-0,423	0,518
SIA10	0,760	0,512	0,644	-0,395	-0,423	0,559

Table no 12 : Leadership Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
P1	0,341	0,726	0,502	-0,218	-0,106	0,374
P2	0,640	0,805	0,695	-0,428	-0,319	0,629
P3	0,360	0,786	0,585	-0,167	-0,087	0,510
P4	0,522	0,747	0,551	-0,237	-0,047	0,325
P5	0,356	0,730	0,509	-0,351	-0,279	0,562
P6	0,591	0,737	0,612	-0,404	-0,382	0,660
P7	0,423	0,826	0,509	-0,216	-0,115	0,470
P8	0,440	0,759	0,569	-0,373	-0,205	0,495
P9	0,461	0,840	0,601	-0,230	-0,157	0,539
P10	0,456	0,779	0,582	-0,357	-0,233	0,485

Table no 13 : Work Motivation Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
MK2	0,523	0,452	0,592	-0,393	-0,341	0,845
MK3	0,600	0,572	0,652	-0,528	-0,557	0,809
MK4	0,410	0,456	0,513	-0,218	-0,248	0,789
MK5	0,636	0,587	0,684	-0,467	-0,509	0,869

MK6	0,563	0,607	0,587	-0,436	-0,417	0,770
MK7	0,445	0,556	0,561	-0,340	-0,390	0,838
MK8	0,580	0,566	0,684	-0,380	-0,472	0,878
MK10	0,479	0,558	0,607	-0,433	-0,416	0,827

Table no 14 : Mod X1 -> Y Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
SIA * MK <- MOD SIA -> Y	-0,493	-0,391	-0,506	1,000	0,823	-0,488

Table no 15 : Mod X2 -> Y Cross Loading Table

	The Effectiveness of AIS	Leadership	Employee Performance	Mod X1 -> Y	Mod X2 -> Y	Work Motivation
P * MK <- MOD P -> Y	-0,445	-0,256	-0,430	0,823	1,000	-0,514

Based on all the table above, all latent contacts predict indicators on their block better than indicators on other blocks. The conclusion is that the measurement has met the requirements of discriminant validity.

3. Average Variance Extracted (AVE)

Average Variance Extracted (AVE) is used to find out the value of a variable. Average Variance Extracted (AVE) will be said to have passed the test if the value of Average Variance Extracted (AVE) is greater than 0.5 [16]. The SmartPLS output results show the Average variance extracted (AVE) value as follows:

Table no 16 : Average Variance Extracted (AVE) Table

	Average variance extracted (AVE)
The Effectiveness of AIS	0.628
Leadership	0.600
Employee Performance	0.657
Work Motivation moderate X1 ->Y	1.000
Work Motivation moderate X2 -> Y	1.000
Work Motivation	0.687

Based on table above, all AVE are > 0.5 so the measurement has met the requirements of discriminant validity.

Reliability Test – Composite Reliability & Cronbachs Alpha

The outer model is not only measured by assessing the convergent validity and discriminant validity, it can also be done by looking at the reliability of the latent variable or variable which is measured by looking at the composite reliability value of the indicator block measuring the variable. The requirement to pass the composite reliability and Cronbachs alpha test is to see the test results with a minimum value of 0.7 or above 0.7 [16].

Table no 17 : Composite Reliability & Cronbachs Alpha

	Composite Reliability	Cronbachs Alpha
The Effectiveness of AIS	0.944	0.934
Leadership	0.937	0.926
Employee Performance	0.958	0.952
Work Motivation moderate X1 ->Y	1.000	1.000
Work Motivation moderate X2 -> Y	1.000	1.000
Work Motivation	0.946	0.935

Table 17 above shows that the value of composite reliability and cronbachs alpha has values of > 0.70. The conclusion is satisfied the reliability requirements.

Inner Model Evaluation (Structural Model)

We can first start by looking at the R-Squares for each exogenous latent variable (X) as the predictive strength of the structural model. Changes in the value of R-Squares can be used to explain the effect of certain exogenous latent variables (X) on whether the latent (dependent) variable has a substantive effect. The R-Squares values of 0.75, 0.50, and 0.25 can be concluded that the model is strong, moderate, and weak.

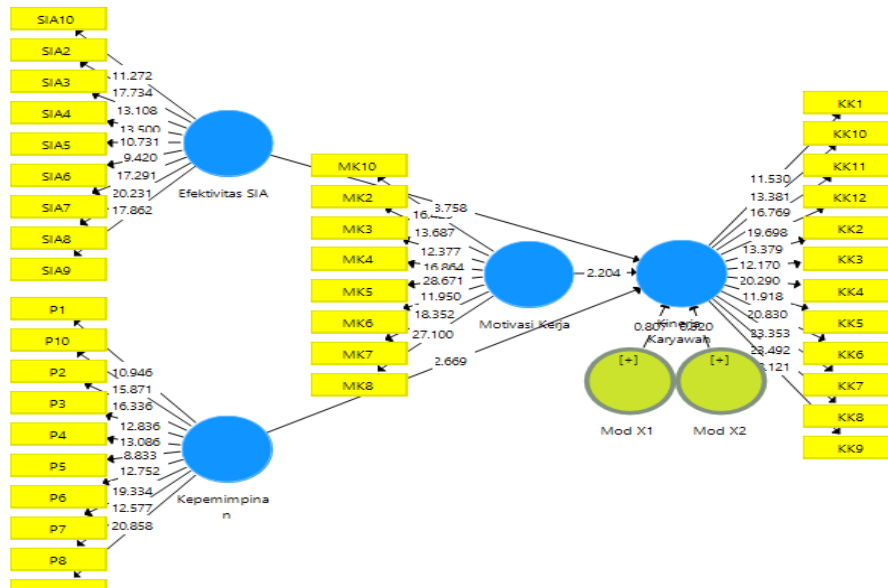
Table no 18 : R square

	R Square	R Square Adjusted
Employee Performance	0,766	0,742

The R-square value of the Employee Performance variable obtained is 0.742 or 74.2%, this shows that the Employee Performance variable can be explained by the Effectiveness of Accounting Information System

(X1) and 0.742 or 74.2% Leadership (X2) variables, while the remaining 0.258 or 25.8% is explained by other variables not examined in this study.

Figure no 1 : Research Results Framework



The next stage of evaluating the inner model is to see the significance value to determine the effect between variables through the resampling bootstrapping method. The significant values used were the t-value 1.65 (significance level 10%), 1.96 (significance level = 5%), and 2.58 (significance level = 1%) [16]. In this research we are using significance level =5% so the t-value is 1,96.

Table no 19 : Hypothesis Test Results

	Original Sample	Sample Mean	Standard Deviation	T-statistics	P Values
The Effectiveness of AIS	0,414	0,422	0,110	3,758	0,000
Leadership	0,306	0,300	0,114	2,669	0,008
Mod X1 -> Y	-0,076	-0,068	0,094	0,807	0,420
Mod X2 -> Y	0,031	0,020	0,098	0,320	0,749

It can be seen that the results of the path coefficient test between the Effectiveness of Accounting Information Systems and Employee Performance have a parameter coefficient of 0.414 with a significant value of T-statistics 3.758 > 1.96 and a P-value of 0.000 < 0.05 so that the first hypothesis is accepted. This shows that the effectiveness of the accounting information system has an effect on employee performance.

The path coefficient test between Leadership and Employee Performance has a parameter coefficient of 0.306 with a significant T-statistics value of 2.669 > 1.96 and a P-value of 0.008 < 0.05 so that the second hypothesis is accepted. This shows that leadership has an effect on employee performance.

The path coefficient test for Work Motivation in moderating the relationship between the Effectiveness of Accounting Information Systems and Employee Performance has a parameter coefficient of -0.076 with a significant T-statistics value of 0.807 < 1.96 and a P-value of 0.807 > 0.05 so that the third hypothesis is rejected. This shows that work motivation is not able to moderate the relationship between the effectiveness of the accounting information system and employee performance.

The path coefficient test for Work Motivation in moderating the relationship between leadership and employee performance has a parameter coefficient of 0.031 with a significant value of T-statistics 0.807 < 1.96 and a P-value of 0.749 > 0.05, so the fourth hypothesis is rejected. This shows that work motivation is not able to moderate the relationship between leadership and employee performance.

IV. Discussion

The effectiveness of the accounting information system has an effect on employee performance. An effective accounting information system can facilitate and accelerate the completion of tasks performed by each employee. The use of the accounting information system properly will provide benefits for employees in improving their performance. This is also supported by the overall answers of respondents to statements from the variable of the effectiveness of the accounting information system which states that there are 82.18% of respondents who choose answers that strongly agree and agree where the percentage of these answers is

between the assessment scores between 80-100 with the very good category. This shows that the effectiveness of the accounting information system at PT. Tiger Duaribu is categorized as very good. This is in line with research which state that the effectiveness of accounting information systems affects employee performance^[17]^[18]^[19]^[20]. However, it is different from research which states that the effectiveness of accounting information systems has no effect on Employee Performance^[6].

Leadership has an effect on employee performance. Leadership is a very important factor in determining the future steps of an organization including providing instructions, advice and encouragement effectively in helping employees improve their performance. Leaders invite employees to make changes where these changes affect the performance of the employees themselves. This is supported by the overall answers of the respondents for the statement from the leadership variable which states that there are 63.45% of respondents who choose the answer strongly agree and the answer agrees where the percentage is between the assessment score between 63 to 69 with the category quite good. This shows that the leadership at PT. This Duaribu Tiger is quite good. This is in line with research which state that leadership affects employee performance^[21]^[22]^[23]^[24]^[25]. However, it is different from research which states that leadership has no effect on Employee Performance^[26].

Work motivation is not able to moderate the relationship between the effectiveness of the accounting information system and employee performance. The effectiveness of the accounting information system at PT. Tiger Duaribu is not in line with work motivation in terms of employee performance. Work motivation which consists of feeling safe and comfortable at work, office tool completeness, initiative and creativity, reward and work spirit in the company does not at all affect the effectiveness of the accounting information system which can make employee performance improvements at PT. Tiger Duaribu. With an illustration, the existing office facilities in the company, work spirit, initiative and creativity that are implemented in the company are also unable to support the effectiveness of the accounting information system in supporting employee performance. Thus, work motivation is not able to moderate the relationship between the Effectiveness of the Accounting Information System and Employee Performance. This is supported by the standard deviation value of the Work Motivation variable obtained in the descriptive statistical table of the SmartPLS test tool of 7,359, but if the ideal standard deviation of the work motivation variable is calculated: $50-24 = 1/6 * 26 = 4,333$. So it can be seen that the standard deviation value of the work motivation variable is far above the ideal standard deviation, which means that the deviation for the work motivation variable is not good so that the work motivation variable is unable to moderate the relationship between the effectiveness of the accounting information system and employee performance. This is in line with research which states that work motivation is not able to moderate the relationship between the effectiveness of accounting information systems and employee performance^[27]. However, it is different from research which states that work motivation strengthens the relationship between the effectiveness of accounting information systems and employee performance^[7].

Work motivation is not able to moderate the relationship between leadership and employee performance. Work motivation cannot support leadership in PT. Tiger Duaribu in improving employee performance. Feeling safe and comfortable at work, office tool completeness, initiative and creativity, reward and work spirit in the company cannot at all determine how leadership affects employee performance. When there is no work motivation in the company, leadership will still affect the performance of employees at PT.Tiger Duaribu. With an illustration, the existing leadership is not supported by work motivation which includes feeling safe and comfortable at work, office tool completeness, initiative and creativity, reward and work spirit, for example the salary given or office facilities. Existing salaries and office facilities cannot support company leaders in improving employee performance. Thus, work motivation is not able to moderate the relationship between leadership and employee performance. This is supported by the standard deviation of the Work Motivation variable obtained from the standard deviation value in the descriptive statistical table of the SmartPLS test tool of 7.359, but if the ideal standard deviation is calculated the work motivation variable is with the following calculation: $1/6 * (\max-\min) = 1/6 * 6 * (50-24) = 1/6 * 26 = 4.333$. So it can be seen that the standard deviation value of the work motivation variable is far above the ideal standard deviation, which means that the deviation for the work motivation variable is not good so that the work motivation variable is unable to moderate the relationship between leadership and employee performance. This is in line with research which states that work motivation is not able to moderate the relationship between leadership and employee performance^[21]^[10]. However, it is different from research which states that work motivation strengthens the relationship between the leadership and employee performance^[28]^[29].

V. Conclusion

The management company of PT. Tiger Duaribu should maintain the use of an effective accounting information system because if the accounting information system in the company has been used effectively, it can facilitate and accelerate the work of employees so that employee performance can increase. In addition, the leader of the company PT. Tiger Duaribu should maintain leadership characteristics in the company because

with a leader in a company, he is able to direct, influence, organize and supervise his employees properly so that employee performance increases. The effectiveness of accounting information system and leadership have a positive effect on employee performance.

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