Analysis of the Effect of Inventory, Operational Audit and Internal Control on Warehousing Management at PT Internasional Asia Prima Sukses

Lydia Putri Puspitasari[1], Fandy Bestario Harlan, S.T., M.M.T[2]

{lydiaputri1010@gmail.com[1], fandybestarioh@gmail.com[2]}

Business Administration, Politeknik Negeri Batam, Jl. Ahmad Yani Batam Centre 29461, Indonesia[1]

Business Administration, Politeknik Negeri Batam, Jl. Ahmad Yani Batam Centre 29461 , Indonesia[2]

Abstract. In distributor companies, the problem that often occurs at PT Internasional Asia Prima Sukses (IAPS) is the discrepancy in the stock of goods. This is due to a lack of accuracy in calculating goods entering the warehousing, a lack of re-checking when the goods will be distributed, and lack of supervision of employee performance.This study aims to identify the influence of inventory, operational audits, and internal control on warehousing management at IAPS. The study sample consisted of 50 employees involved in warehouse management. This study uses descriptive analysis methods and multiple linear regression. The results showed that simultaneously inventory, operational audits, and internal control in warehousing management had a positive and significant effect on warehousing management with a determination efficiency of 0.770. Partially, inventory and operational audits have a positive impact and internal control has a negative influence on warehousing management.

Keywords: Inventory, Operational Audit, Internal control and Warehousing Management.

1 Introduction

Warehouses are something that is inseparable in the business world of trading goods, especially industrial goods. Warehousing activities are one of the important activities in logistics. Warehousing activities must have a good sprinkling system in order to support the production process. Warehousing management is important for business continuity, because warehouses are directly related to sales [4].

As one of the trading companies in the distributor sector in Batam, PT Internasional Asia Prima Sukses has a problem with the number of different stocks between the SAP system and the physical warehouse, causing a discrepancy in the stock of goods. This is due to lack of accuracy in the calculation of goods entering the warehousing, lack of re-checking when the goods will be distributed, and staff who carry out quality control participate in the collection

of goods in the warehouse until the goods are packed. This shows that there has been low quality control in the form of an error in the type of goods or the wrong size of goods that are not in accordance with the delivery order.

From the problems faced by the company related to stock discrepancies in the warehousing, an evaluation is needed in the form of an operational audit that will provide recommendations for improvements that must be made to be more efficient and find out the risks and challenges faced, being able to maintain the stability of the number of stock of inventory in the SAP system and physical goods. Thus, it can assess the effectiveness of warehousing management in order to achieve its goals.

In addition, there are several problems faced by PT Internasional Asia Prima Sukses such as the absence of continuous monitoring of the implementation of warehousing management resulting in employees often violating company regulations and policies. Lack of supervision of employee performance results in not being able to assess the risks faced, and not conveying information properly in warehousing activities. Based on this description, the researcher decided to take research related to inventory, operational audits and internal control with the aim of determining the partial and simultaneous influence on the warehousing management of PT Internasional Asia Prima Sukses.

2 Theoretical Studies, Literature Review and Hypothesis

2.1 Management

Management is a distinctive stage and is composed of the steps of design, organizing, activating and supervising that are carried out in order to determine and also achieve the goals that have been determined through the use of human resources and other sources [6]. Thus from this theory that management is the stage of designing, organizing, directing and supervising the steps of organizational members and the use of human resources and other sources in order to achieve organizational goals.

2.2 Warehouse

Business activity, especially in the field of production, is widely encountered the term "warehouse". Warehousing activities are not only about inputting goods in warehouses, in warehousing activities are important to design, organize and control logistics both technically and administratively, these activities can guarantee and maintain the sustainability and sustainability of each activity in each work unit in an organization [3].

Warehouses are an important element of the modern supply chain, which includes the stages of: sourcing, producing, and distributing goods, from handling raw materials and goods in the process to finished products. Warehouses can be described as part of the logistics system of the enterprise. Its function is to store products and provide information about the status and condition of materials/stocks stored in warehouses, so that the information is kept up-to-date and easily accessible to anyone interested.

2.3 Inventory

Inventory is a term that refers to assets to be sold in ordinary business activities or assets that are directly or indirectly included in goods produced and sold [7].

Inventory is a number of finished goods, raw materials, materials in the process at a trading company whose purpose is to be sold or processed next. In conclusion, inventory is a term that shows all things from existing resources in the process whose purpose is to anticipate all possibilities experienced can be from demand or there are other problems [5]. From that definition, the conclusion is that inventory is goods that are owned to be sold or used in the production process or non-production needs in the normal activity cycle.

2.4 Operational Audit

Audit is a systematic stage for obtaining and evaluating evidence objectively using statements about economic activities and events whose purpose is to determine the level of conformity between statements and predetermined criteria and the submission of audit report results to interested users [7].

Operational audit aims to evaluate the efficiency and effectiveness of each organization [2]. The operational audit includes an evaluation of the organizational structure, computer operations, production methods, marketing, as well as all other areas in which the auditor mastered it. This operational audit is more like management consulting.

2.5 Internal Control

Internal control system includes organizational structures, methods and measures that are coordinated to maintain organizational wealth, check the accuracy and reliability of accounting data, encourage efficiency and encourage compliance with management policies [5].

The conclusion is, "the internal control system is a stage implemented in order to achieve organizational goals composed of various policies, procedures, techniques, physical equipment, documentation, and people". As well as covering policies and procedures that protect the company's assets from misuse, ensuring that the management information presented is accurate and convincing that laws and regulations have been followed.

2.6 Literature Review

The following is some information about the results of the previous research that became the basis or basis for the current research. The title Operanisonal Audit, Internal Control and Warehousing Management; Studies on the Yogya Department Store using descriptive analysis techniques and multiple linear regression, the results of a well-conducted audit reached a score of 80.06%, showing that the audit pays attention to the efficiency and effectiveness of warehouse management and making improvements. Internal control is well implemented, reaching a score of 82.01% this shows that the controlled environment is effective in implementing other components to achieve the implementation of effective and efficient warehouse management. On the other hand, Yogya Mitrabatik Tasikmalaya department store performed well in warehouse management, with a score of 83.16% [1].

Second the title Warehousing Management System Analysis on CV. Sulawesi Pratama Manado uses a quantitative descriptive method with the results of a warehouse management system that uses the Duta system, one of PT. Pratama Manado's products. Ambassador of Media Cipta in Jakarta. Judging from the location strategy, warehouses have great potential business opportunities because of the strategic location of the warehouse. In terms of layout, it is necessary to improve the layout for tidiness, the addition of equipment such as shelves and layout changes to make it easier and more efficient for the process of moving luggage [3].

2.7 Hypothesis

A hypothesis is a temporary answer to a problem faced and must be tested for validity with more complete and supportive data. This study was carried out to find out the influence of warehousing management on inventory, operational audits and internal control, in this case increasing the effectiveness of warehousing at PT Internasional Asia Prima Sukses. Here is the formulation of the hypothesis of this research:

H1 = There is an influence of inventory on warehousing management at PT Internasional Asia Prima Sukses

H2 = There is an influence of operational audit on warehousing management at PT Internasional Asia Prima Sukses

H3 = There is an influence of internal control on warehousing management at PT Internasional Asia Prima Sukses

H4 = There is an influence of inventory, operational audit and internal control together on warehousing management.

3 Research Method

This study uses descriptive analysis techniques as well as research instrument tests, classical assumption tests, multiple linear regression tests, coefficients of determination and hypothesis tests. The population in this study is the party who participated in managing the warehouse with the number of samples using the slovin formula, which was 50 people composed of warehouse heads, receive administrators, warehouse keepers, checkers, and service crews, as well as internal auditors.

The data used are primary and secondary data obtained directly through respondent responses and literature studies. Data collection or retrieval techniques used in quantitative research include questionnaire or questionnaire methods. In this study, the author used google form as a medium for distributing questionnaires to find out directly the views of respondents.

The stages of data management can be seen in figure 1 below:
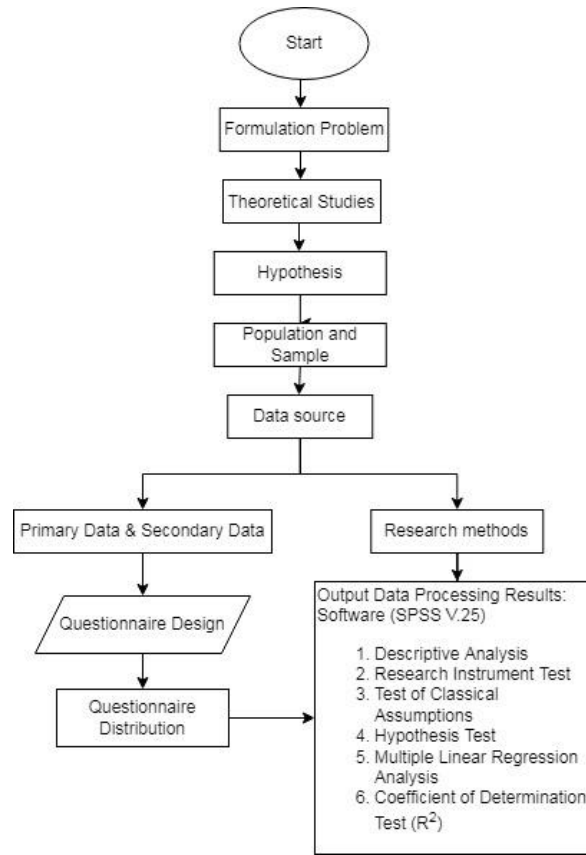
Fig. 1. Stages of Data Management

4 Research Result

4.1 Validity Test

Table 1. Validity Test Results

Group Statement	Statement	Invalid Statement	Valid Statement
Inventory	26	0	26
Operational Audit	36	0	36
Internal Control	21	0	21
Warehousing Management	12	0	12

Source: Primary Data, Processed (2022)

Based on Table 1 above, validity tests on the variable indicators of inventory statements (X1), Operational Audit (X2), Internal Control (X3) and Warehousing Management (Y) tested with SPSS version 25, it can be seen that all statements are valid and eligible for use as measuring instruments.

4.2 Reliability Test

Reliability Test results can be seen in Table 2.

Table 2. Reliability Test Results

Variabel	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Item	N Off Item
Inventory	0,937	0,60	50
Operational Audit	0,947	0,60	50
Internal Control	0,946	0,60	50
Warehousing Management	0,836	0,60	50

Source: SPSS Output Data Processing Results 25, 2022

According to the results of the reliability test, it can be seen that all items / indicators of statements on the variables of Inventory (X1), Operational Audit (X2), Internal Control (X3) and Warehousing Management (Y) with an Alpha Cronbach value greater than 0.60, then all items / indicator statements are reliable.

4.3 Descriptive Analysis

Table 3. Data Test Results per Variable

Variable	Statement	Mean	Category
Inventory	Any expenditure of goods shall be on the basis of a letter of passage, or the like authorized officer of the company (X1.12)	3,74	Very High
	Only warehouse attendants enter the warehouse (X1.11)	2,36	Low
Operational Audit	Operational audit review of the means used to maintain asset (X2.3)	3,74	Very High

	The auditor conducted a separate audit inspection activity with my various other work activities (X2.10)	3,26	Very High
Internal Control	Printed sequence numbered document (X3.13)	3,8	Very High
	There is a re-inspection of goods coming in and out at the security guard post (X3.15)	3,22	High
Warehousing Management	The goods receipt department always matches the goods received in accordance with the purchase order to convince whether the goods received are actually ordered goods (Y.5)	3,86	Very High
	There are consignments or entrusted goods in the company's warehouse (Y.9)	2,36	High

(Source: Excel Microfoft Data Results, 2022)

Based on the results of the questionnaire, the inventory of goods at PT Internasional Asia Prima Sukses is very well managed with a mean value of 3.74. This shows that the inventory of goods has been well monitored, each expenditure of goods is appropriate based on the road letter.

The implementation of the operational audit has been very good with a mean value of 3.74. This shows that the operational audit has reviewed the facilities used to maintain assets through paying attention to efficiency and effectiveness in order to achieve goals. Then, the operational audit has provided recommendations for improvement.

The implementation of internal control has been good at 3.22. This shows that internal control has been effective and is a good basis for the implementation of other components, employees can be responsible for every task assigned by the company. Control activities are adequate, communication can convey information smoothly, and monitoring carried out by leaders can respond to problems quickly. However, there are still shortcomings, such as assessing the risk of excess or lack of stock which is not as good as assessing the risk of damage and registration errors, so it is often experienced warehouse overload. Access to the warehouse is also not well controlled because there are no access restrictions. In this case, the information system used in the warehouse has not yet been fully integrated with the information system as a whole.

The implementation of warehousing management has been very good, worth 3.86. This shows that the goods receipt department always matches the goods received based on the purchase order to convince whether the goods received are the goods that were actually ordered. On the receipt of goods, the procedure has been well understood, then the quality and quantity of goods received are based on what has been determined. There is a clear separation of duties as well as good communication between the purchasing department as well as the warehousing section.

4.4 Test of Classical Assumptions

The results of the Normality Test can be seen in Table 4.

Table 4. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		50
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	2,18685479
Most Extreme Differences	Absolute	0,095
	Positive	0,084
	Negative	-0,095
Test Statistic		0,095
Asymp. Sig. (2-tailed)		**,200[c,d]**

(Source: SPSS Output Data Processing Results 25, 2022)

As per Table 3, it can be seen that the Asympototic Significance (2-tailed) value obtained, which is 0.200, shows that the value is > of the alpha value of 0.05. So it was determined that the variable data of this study was normally distributed. Visualizationally,it is considered normally distributed when the data in the Normal P-Plot of Regression image follows a diagonal line and does not spread.

The results of the Multicholinearity Test can be seen in Table 5.

Table 5. Multicholinearity Test Results

Variable	Tolerance	VIF
Inventory (X1)	0,221	4,518
Operational Audit (X2)	0,186	5,379
Internal Control (X3)	0,229	4,369

(Source: SPSS Output Data Processing Results 25, 2022)

As in Table 5, it proves that all variables received a tolerance value of > 0.1 and a VIF of < 10. Thus, it can be considered that there is no correlation or symptom of multicollinearity in this study.

4.5 The results of the Heteroskdasticity

This means that there are no visible symptoms of heteroskedasticity (natural homokedasticity) in the regression model, so this model is suitable for use.

Hypothesis Test

4.6 T Test Results (Parsial)

The T test is necessary to test the significance of the impact of the independent variable (X) on the dependent variable (Y) partially (respectively). According to Table 6, it appears that the ttable value can be searched using the df (degree of freedom) value formula, with the formula:

$$df = (n - k)$$

(1)

Information:
df   = Degree of Freedom
k   = number of variables (free + bound)
n   = number of observations/samples

Table 6. T Test Results

	Coefficients[a]				
Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,824	3,189		0,886	0,380
Inventory	0,228	0,068	0,506	3,369	**0,002**
Operational Audit	0,172	0,057	0,492	3,004	**0,004**
Internal Control	-0,048	0,070	-0,100	-0,679	**0,500**

a. Dependent Variable: (Y) Warehousing Management

(Source: SPSS Output Data Processing Results 25, 2022)

Then the partial influence in this study can be seen, namely:

a. Inventory (X1)

From the results of the T Test (Partial) obtained, the calculated value of inventory (X1) was 3.369 > ttabel 2.012 and the sig value was 0.002 < 0.05. Then it can be stated that the variable inventory of goods (X1) partially affects the warehousing management of PT. International Asia Prima Success. Therefore, it can be determined that H1 which says that "inventory of goods partially affects the warehousing management of PT. International Asia Prima Success".

b. Operational Audit (X2)

From the results of the T Test (Partial) obtained the calculation value of the operational audit (X2) was 3.004 > ttabel 2.012 and the sig value was 0.004 < 0.05. Then it can be stated that the operational audit variable (X2) partially has a significant impact on the warehousing management of PT. International Asia Prima Success. Therefore, it can be determined that H2

which says that "operational audits partially have a positive effect on the warehousing management of PT. International Asia Prima Success".

c. Internal Control (X3)

From the results of the T Test (Partial) obtained the calculation value of internal control is -0.679 < ttabel 2.012 and the sig value is 0.500 > 0.05. So it can be stated that the internal control variable (X3) partially does not have a significant impact on the warehousing management of PT. International Asia Prima Success. Therefore, it can be determined that H3 which says "partial internal control has a negative impact on the warehousing management of PT. International Asia Prima Success".

4.7 F Test Results (Simultaneous)

Table 7. F Test Results

ANOVAª					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	785,986	3	261,995	**51,430**	**,000ᵇ**
Residual	234,334	46	5,094		
Total	1020,320	49			

(Source: SPSS Output Data Processing Results 25, 2022)

As per table 7, a Ftable value of 2.81 was obtained. From the calculation results obtained the calculated value of 51,430 > Ftable 2.81 and a sig value of 0.000 < 0.05 shows that the model of regression of inventory, operational audits and internal control simultaneously has a positive and significant impact on the performance of field employees at PT. International Asia Prima Success.

4.8 Multiple Linear Regression Analysis

Multiple linear regression analysis is used to predict what the conditions (ups and downs) of dependent variables will look like.

Table 8. Multiple Linear Regression Test

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	**2,824**	3,189		0,886	0,380
X1	**0,228**	0,068	0,506	3,369	0,002
X2	**0,172**	0,057	0,492	3,004	0,004
X3	**- 0,048**	0,070	-0,100	- 0,679	0,500

a. Dependent Variable: Y

Results

(Source: SPSS Output Data Processing Results 25, 2022)

According to Table 8, a regression model or equation is obtained, namely:

$$Y = 2.824 + 0.228X1 + 0.172X2 - 0.048X3 \qquad (2)$$

4.9 Coefficient of Determination Test (R2)

The coefficient of determination (R2) is used to measure the model's ability to reduce the variation of dependent variables.

Table3. Coefficient of Determination Test Result (R2)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,878[a]	**0,770**	0,755	2,257

a. Predictors: (Constant), X3, X1, X2

(Source: SPSS Output Data Processing Results 25, 2022)

As per table 8 above, the results of the Model Summary show that the variables of inventory, operational audit and internal control contributed 77.0% to the dependent variables of warehousing management. The rest are spelled out other variables that were not present in this study.

5 Disscusion

All research variables have been carried out well, namely the inventory of goods with a mean value of 3.74 (very high). This response shows that field employees have maintained supplies by preparing and issuing goods according to the signed road letter. Operational Audit with a

mean value of 3.46 (very high). Internal control with a mean value of 3.22 (high). Simultaneously, inventory, operational audits and internal control have a significant impact on warehousing management with a coefficient of determination of 77% and 23% affected by other variables.

6 Conclusion

This study aims to determine the influence of inventory, operational audits, internal control on warehousing management. The results of this study show that the variable inventory of goods partially has a positive and significant impact on warehousing management. Researchers hope that the warehousing management will continue to manage supplies in an orderly manner and prevented from: Theft, Damage, Fire and other risks. Operational audit variables partially have a positive and significant impact on warehousing management because the recommendations given to management can be implemented and implemented in warehousing activities, able to manage warehousing management properly.

References

[1] Anugrah, E. C., Tugiman, H., & Triyanto, D. N. 2017. The Effect of Operational udit and Internal Control on Warehousing Management (Case Study at Yogya Mitrabatik Tasikmalaya Department Store). EProceedings of Management, 4(2), 1595–1602

[2] Arens, Alvin A., Elder, Randal J., Mark, S. B. 2015. Auditing and Assurance Services. Volume I. E1st disi5. Jakarta: Erlangga

[3] Kusuma, Y., Sumarauw, J., & Wangke, S. 2017. Warehousing Management System Analysis on Cv. Sulawesi Pratama Manado. Journal of Economic Research, Management, Business and Accountantsi, 5(2), 602–611

[4] Makatengkeng, C., Jan, A. H., Sumarauw, J. S. B. 2019. Warehousing Management System Analysis at Pt. Timur Laut Jaya Manado. EMBA Journal: Journal of Economic Research, Management, Business And Accounting.

[5] Rudianto. 2008. Introduction to Accounting. Jakarta: Erlangga.

[6] Ruslan, Rosady. 2014. Public Relations and Media Communication Management. Revised Edition printed 12. Jakarta. PT RajaGrafindo Persada. Pg 1.

[7] Stice, Skousen. 2009. Intermediate Accounting. Jakarta; Sixteenth Edition, Book1, Salemba Four.