

Inventory Management Navigating Inventory Efficiency: An Analytical the Impact of Employee Behavior

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ABSTRACT

The purpose-of this study was to determine the contribution of various aspects of employee behavior, among others. Ability to assess social interaction, motivation, self-control, and inventory control activities. This research method uses a quantitative approach to collect data by distributing questionnaires to employees of capsule sales companies.

The methodology- shows that elements of employee behavior partially and simultaneously affect the company's inventory management activities. This includes continuous monitoring of inventory continuity, optimizing inventory management, and reducing storage costs.

The results- test showed that the variables of social interaction, motivation, self-control, and ability each have an influence partially and jointly on the inventory management activities of a company. In addition, every aspect of employee behavior as a whole affects inventory management activities by 49.8.

Orientation/value - significance this study highlights the importance of understanding the role of employee behavior in the context of inventory management while highlighting the need for further research to understand other elements of Masu's work behavior. These findings provide valuable insights to businesses in their efforts to improve inventory management efficiency.

Keyword : Work Behavior, Inventory Management, Social Relations, Motivation, Self-Control, Multiple Linear Regression Test

I. INTRODUCTION

Inventory management, also known as inventory management, is a process that involves planning, controlling, and monitoring inventory in a business. The main objective of this activity is to ensure timely supplies at an efficient cost to meet customer demand. Work behavior is defined as the actions and thoughts of employees when performing tasks and interacting with the organization to achieve organizational goals (Rambe et al. According to Irawan & Si (2020), inventory management includes various tasks related to storage, handling, and turnover of inventory in order to increase company profits and provide optimal customer service. Its mission is to achieve the company's operational goals, reduce storage costs both in terms of type and quantity, and optimize the use of available resources.

Therefore, inventory management involves implementing and managing the selection of merchandise and material needs to achieve operational objectives with maximum efficiency (Triatmojo, 2020). The main tasks of inventory management include ensuring sufficient inventory at all times, efficient management and cost reduction.

Inventory management plays an important role in supporting business operations. (2020), inventories are part of current assets that include raw materials, semi-finished products or finished products that an enterprise offers for sale for a certain period of time. Therefore, to support the sustainability of the company, inventory must be

managed properly both qualitatively and quantitatively.

According to (Irawan & Si, 2020), inventory management is the ability to coordinate storage, handling, and inventory turnover in order to increase company profits and provide better service to customers. In addition, the skills and abilities of employees also play an important role in supporting the company's operational efficiency.

The main purpose of inventory management is to facilitate and improve the smooth running of a company both in terms of production and distribution. This study proposed several hypotheses based on the problems identified, established relationships between variables, and conducted a truth test (Yam & Taufik, 2021).

The first hypothesis (H1) states that aspects of social relations affect inventory management activities. The second hypothesis (H2) states that motivational aspects affect inventory management activities. The fourth hypothesis (H4) states that capabilities affect inventory management activities.

II. LITERATURE REVIEW

According to experts such as Martin and Enough (1996) (Merini & Pratiwi 2022), inventory management can be defined as the management of assets used or produced in the production process that become inventory in the normal operations of a company. In short, inventory management is the organization and monitoring of assets involved in production or assets in production to efficiently meet the operational needs of a company.

T. Johns and H.A. Harding (2001) (Lityorini, 2022) states that inventory management aims to achieve consistent delivery of required service levels while minimizing investment in inventory. This approach emphasizes the importance of achieving alignment between meeting customer needs and managing the necessary inventory investments.

Lukas Setia Atmaja (2003) (Arujisa & Rosdiana, 2022) adds an objective dimension to inventory management, explaining that the goal is to provide the necessary inventory for ongoing operations at a minimum cost. This shows that inventory management is focused on cost efficiency, and the business seeks to minimize investment without compromising the level of service to customers.

Harsanto (2020) states that inventory management is an effort to ensure that a company can provide supplies of a certain quality, quantity, and time. In this context, these factors must be taken into account in inventory management

decisions and policies to ensure that the company's operations run smoothly.

Inventory, namely the supply of physical goods at a certain place and time, is important because of the discrepancy between supply and demand caused by various physical and economic factors (Narasimhan & Billington, 1995) (Prasetya, Rosyida & Efendi, 2020). The demand for a product can be affected by economic conditions such as inflation or deflation, seasonal factors, and manufacturer marketing strategies such as deep discounts. When managing inventory, it is important to understand these factors to plan effectively and minimize the risk of supply and demand mismatches.

RESEARCH METHODS

According to Ndrifah & Qurochman (2020), the quantitative method refers to a type of research that is carried out systematically using data in the form of numbers. This study uses quantitative methods to examine various variables and determine the relationship between independent and dependent variables. Multiple linear regression was chosen as a method of analysis to explain the relationship (Qurochman & Wijiningrum, 2023). The data obtained focused on the independent variables of employee work behavior and consists of four indicators, namely social relationships (X1), motivation (X2), self-control (X3), and competence (X4).

In addition, there are inventory management activities as a dependent variable as measured by three indicators of inventory adequacy monitoring for the current period (Y1). Variable measurement operations involve testing several classical assumptions such as normality, heteroscedasticity, multicollinearity, and autocorrelation (Qurochman, 2022b). Normality test using normal P plot and Kolmogorov-Smirnov test one sample, and multicollinearity test considering tolerance value and VIF. The use of questionnaires as the main method of data collection involves a survey approach to obtain the opinion of respondents (Pijihastuti, 2020). Smatter plot and Glacier test are used to detect heteroscedasticity.

According to Yuliara (2020), multiple linear regression is used to evaluate the relationship of the independent variable and the dependent variable by using the regression equation $Y = \textcircled{3}$ $1x1$ $2x2$ $3x3$ $4x4$. T test is used to partially test the effect of each independent variable if the significance (Sig). The F test is used to determine the overall effect of the independent variable on the dependent variable with significance (Sig). The

coefficient of determination (R²) is used to measure how much influence an independent variable has on the dependent variable, with values close to 1 indicating good representativeness.

This study also describes variable manipulation procedures, tests some classical assumptions, and uses some linear regression methods as the main approach in data analysis. Therefore, this study includes a robust methodological framework to investigate the relationship between employee work behavior and

inventory management activities in CV distribution companies.

III. RESULTS AND DISCUSSION

Then performed several tests of classical assumptions, including normality test, multicollinearity, heteroscedasticity, and autocorrelation, based on data from the questionnaire:

Tabel 1 Rangkuman Uji Asumsi Klasik

Normality Test		Multicollinearity Test			Heteroscedasticity Test	Autocorrelation Test
One-Sample Kolmogorov-Smirnov Test		Coefficients ^a			Glejser Test	
	Unstandardized Residual	Collinearity Statistics		Coefficients ^a		
N	55	Model	Tolerance	VIF	Sig.	Durbin-Watson
Asymp. Sig. (2-sided)	.083	1 (Constant)			.018	2.154
		Motivasi (X2)	.904	1.106	.986	
		Self-Control (X3)	.962	1.039	.054	
		Kompetensi (X4)	.898	1.113	.085	
		a. Dependent Variable: Manajemen Persediaan barang		Aktivitas	a. Dependent Variable: Abs_Res	

Sumber: Dirangkum dari SPSS

Classical hypothesis test results

- Normality test (Kolmogorov - Smirnov)
 - Value. Sig.(two sides) = 0.083, greater than 0.05.
 - Conclusion of normally distributed Data.
- Multicollinearity test (Glacier test)
 - No multicollinearity, tolerance value > 0.1 and VIF < 10.00 for all independent variables.
 - Conclusion there is no multicollinearity in any of the independent variables.
- Heteroscedasticity test (Glacier test)
 - There is no heteroscedasticity in the data. Signature value. All independent variables are greater than 0.05.

- Conclusion there is no heteroscedasticity in the data distribution.
- Uji autokorelasi (Durbin-Watson)
 - Durbin-Watson value of 2.154. Table du = 1.7240, the Durbin - Watson value is between du and 4 du.
 - Conclusion no autocorrelation occurs. Therefore, the results of the classical assumption test showed that the data used in this study meet the requirements of the use of multiple linear regression methods.

This conclusion provides a solid basis for continuing multiple linear regression analysis to evaluate the relationship between the independent

variable(employee work behavior) and the dependent variable(inventory management

activities) on the company's capsule sales.

However, the following table 2 shows the multiple linear regression equation and t test (partial):

Tabel 2 Persamaan Regresi Linear Berganda dan Uji t

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.011	2.042		.005	.996
Hubungan Sosial (X1)	.156	.050	.313	3.114	.003
Motivasi (X2)	.280	.088	.336	3.188	.002
Self-Control (X3)	.195	.061	.330	3.227	.002
Kompetensi (X4)	.239	.084	.301	2.845	.006

a. Dependent Variable: Aktivitas Manajemen Persediaan Barang

Sumber: Dirangkum dari SPSS

Persamaan regresi linear berganda dibuat berdasarkan tabel 2 sebagai berikut: $Y = 0,011 + 0,156 X_1 + 0,280 X_2 + 0,195 X_3 + 0,239 X_4$. This shows that for $\textcircled{3} = 0.011$, if X_1, X_2, X_3 , and X_4 are worth 0, then Y increases by 0.011. For $\textcircled{3} = 0.156$, if the values of X_2, X_3 , and X_4 are constant, then any increase in X_1 by 1 unit will increase Y by 0.156. The value $4 = 0.239$ indicates that if the values of X_1, X_2 , and X_3 are fixed, each increase in X_4 by 1 unit will increase the value of Y by 0.239.

However, the t-test (partial) shows that the value of GIS. $X_1 = 0.003 < 0.05$ indicates that there is a role for X_1 in Y ; Sig value. $X_2 = 0.002 < 0.05$ indicates that there is a role for X_2 in Y ; and the value of Sig. $X_3 = 0.002 < 0.05$ indicates that there is a role for X_3 in Y . The T table can also be used to support the t test. With table t values(0,025; 55 – 4 – 1) = (0,025; 50), T table = 2,009. In addition, t

count X_1 is greater than T table, or 3.114 is greater than T table, which shows that there is an influence of X_1 on Y ; t calculate X_2 is greater than T table, or 3.188 is greater than t table, which indicates that there is an effect of X_2 on Y ; and t calculate X_4 is greater than t. Social relations, motivation, self-control, and competence are all independent variables that have a partial effect on inventory management activities, based on the role of each element of the independent variable (employee work behavior) on the dependent variable. This is in accordance with the findings of previous studies(Karomatul Jannah, 2022), (Akay et al., 2020), and (Sari et al., 2021). The results of this study explain that hypotheses H1, H2, H3, and H4 are accepted. The results of the study contradict these findings (Tumiwa et al., 2022).

Table 3 shows the following F test (simultaneous) and the amount of influence of all variables X to Y .

Tabel 3 Uji F dan Koefisien Determinasi

Model	ANOVA ^a		Model Summary ^a		
	F	Sig.	R	R Square	
1	Regression	12.416	.000 ^b	.706 ^b	.498

a. Dependent Variable: Aktivitas Manajemen Persediaan Barang

b. Predictors: (Constant), Kompetensi, Hubungan Sosial, Self-Control, Motivasi

Sumber: Hasil Olah SPSS

Table F values= (4; 55-4) = (4; 51) = 2,553, and F count = 12.416, which shows that f count is greater than F table. Sig Value. = 0.000 <

0.05, and the coefficient of determination = 0.498 or 49.8%. With Sig value. < 0.05 and F count is greater than F table, each element of the

independent variable overall impact on the dependent variable, stock management activities. This is in accordance with research findings from (Karomatul Jannah, 2022), (Akay et al., 2020), and (Sari et al., 2021). However, research findings from (Tumiwa et al., 2022) is inconsistent.

IV. CONCLUSION

Based on the results of the study, it can be concluded that the work behavior of employees covering aspects such as social relations, motivation, self - control, and ability to partially and simultaneously affect the company's inventory management activities. In addition, the study provides a foundation for companies to better understand the components of employee work behavior and how they can be optimized to improve inventory management efficiency.

However, the study also suggests that more research is needed to understand other elements of work behavior that might also affect inventory management. Overall, the results of this study make a positive contribution by providing useful insights for companies in their efforts to manage inventory more efficiently.

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