

Optimizing Warehouse Management of ABC Company

Wisut Limkun¹, Winyu punto² and Tosaporn Mahamud³

¹Graduate School of Business Administration, Bangkok

²Modern Trade Management Phetchaburi Rajabhat University, Phetchaburi

³Graduate School of Business Administration, Bangkok

Tosaporn.mah@kbu.ac.th

Abstract: *The objective of this study is to increase inventory management efficiency of ABC Company. To study warehouse management of ABC Company to study efficiency ABC company warehouse management to compare performance ABC Company Warehouse Management Classified by personal data To study the relationship between warehouse management and warehouse management efficiency of ABC Company to study warehouse management Influencing the warehouse management efficiency of ABC Company The questionnaire was used for 53 sets. It is a tool for collecting data and using statistics to analyze data, namely percentage, average. hypothesis testing t-test, F-test (One-Way ANOVA) Correlation and Multiple Regression Analysis*

The study found that most of the respondents were between 20 and 30 years old with a bachelor's degree. Positions in other positions and have worked for more than 3 years. Data on ABC's inventory management priorities showed that the receiving side product storage Distribution An overview of ABC Company's warehouse management priorities is at the highest level of importance Data on ABC's inventory management efficiency found that Right Product, Right Product, Right Quantity, Right Quantity, Right Condition, Right Condition, Right Place, Right Place, Right Customer, Right Customer, Right Time Right on time. Overall, ABC's inventory management efficiency was in the highest level of agreement. Personal information, age, education and job title The effect on the efficiency of the ABC company's warehouse is not different.

Personal information about working age Different ABC company warehouse optimization effect is different. warehouse management receiving goods product storage and product distribution Overall, there is a correlation with ABC Company's warehouse optimization. same direction high correlation level warehouse management receiving goods And the product storage has an influence on increasing the efficiency of ABC's warehouse and found that warehouse management Distribution There was no influence on the efficiency of ABC Company's warehouse at statistical significance at the .05 level.

Suggestions from the study to be used as a guideline for increasing warehouse efficiency in the future. There should be more studies on how to increase the efficiency of storage space management within the warehouse due to current Increasing the flexibility of storage space to support the purchase demand of customers who are not certain It helps the organization to meet the purchasing needs of its customers. It also takes advantage of the storage space that is limited. for maximum efficiency

Keywords: *efficiency improvement, warehouse management*

1. Introduction

Nowadays, warehousing is one of the important activities of logistics. It is an important part of a supply chain management system that helps connect with other activities in the supply chain. Good warehouse management will help the organization to have an infrastructure. Good infrastructure A warehouse generally

serves to store goods between different points in the shipping process. Inventory Management Plays an important role in making customers satisfied. especially warehouse management which is a supporting activity that makes receiving goods delivery of goods and efficient delivery because of good warehouse management will save time and operating costs such as inventory control Determining the storage location each type of product so that it can be picked up accurately and quickly In order to manage the inventory system to be effective. in order to be able to respond to customer needs (Li, 2011).

From the foregoing, many activities related to the logistics system will occur in the warehouse system Because warehousing is a place where goods are stored, an essential component in modern supply chains, many activities in warehousing involve multiple steps in production. and distribution starting from Receiving raw materials, storing, unloading raw materials Work in process to inventory storage and finished storage Therefore, warehouse management is very important to every business. If business owners can reduce the cost of warehouse management, it means that Businesses will have more competitive advantages or be able to make more profits. (Jacobs, Chase, & Lummus, 2014)

Since the import and export business has many domestic competitors. And the company's main competitor has the number one market share in the country. Therefore, in order to compete effectively in business. to gain more competitive advantage Therefore, development and optimization within the company must be the first step. Therefore, (Blenkhorn, & Fleisher, 2005) the development of the company's logistics system is extremely important. According to the study of the warehouse management of ABC Company, there are problems that arise. Many things such as unable to find the item, placing the item in the wrong location, picking up or picking up the wrong item, releasing the wrong item. which is part of the activities of bringing products to customers, etc. From the above background, the study has foreseen the importance of studying the warehouse management efficiency of ABC Company in order to find ways to improve warehouse management to be more efficient in order to be ready to support business competition in the future. (Persson, 1991)

2. Objectives of The Study

To study the warehouse management of the company ABC To study the warehouse management efficiency of ABC Company to compare the warehouse management efficiency of ABC Company classified by personal data. To study the relationship between warehouse management and warehouse management efficiency of ABC Company.

3. Hypothesis

- Different personal information affects different ABC company warehouse management efficiency.
- Warehouse management is correlated with ABC company warehouse management efficiency.
- Warehouse Management Influences ABC Company Warehouse Management Optimization

4. Scope of Study

Content A study on increasing the efficiency of warehouse management of the company. based on theory Warehouse management (Warehouse Management) consists of receiving goods, storing goods. and product distribution and the concept of 7R Logistics by studying only Right Product, delivering the right goods, Right Quantity, right quantity, Right Condition, transporting in the right condition, Right Place transporting to the right place, Right Customer transporting for the right customer. Right Time

Population and sample used in the study He is an operating officer of ABC Company. Select a sample of 53 people.

The period of study between November 2021 - February 2022

5. Warehouse Management

5.1. Definition of Warehouse Management

Warehouse is a place for placing, storing, resting and distributing inventory. It may be called by other names such as distribution centers. Distribution centers, warehouses, warehouses, storage units, warehouses, liquid storage tanks or bonded treasury no matter what it's called The warehouse also performs the same

function, namely Is a place to store products or raw materials or items to support the various activities of the delivery process A warehouse is where goods are received, sorted and then distributed. (Jarke, Lenzerini, Vassiliou, & Vassiliadis, 2002)

defined the meaning of warehouse management as Warehouse management (Warehouse Management) is the management of receiving, storing, means delivering goods to recipients for sales activities. The main goal in business administration In relation to the warehouse, it is to achieve a systematic operation that is worth the investment. quality control of the collection picking, preventing, reducing losses from Operate to keep operating costs as low as possible. and taking full advantage of the area (Richards, 2017)

6. Theoretical Concepts Related To Warehouse Management.

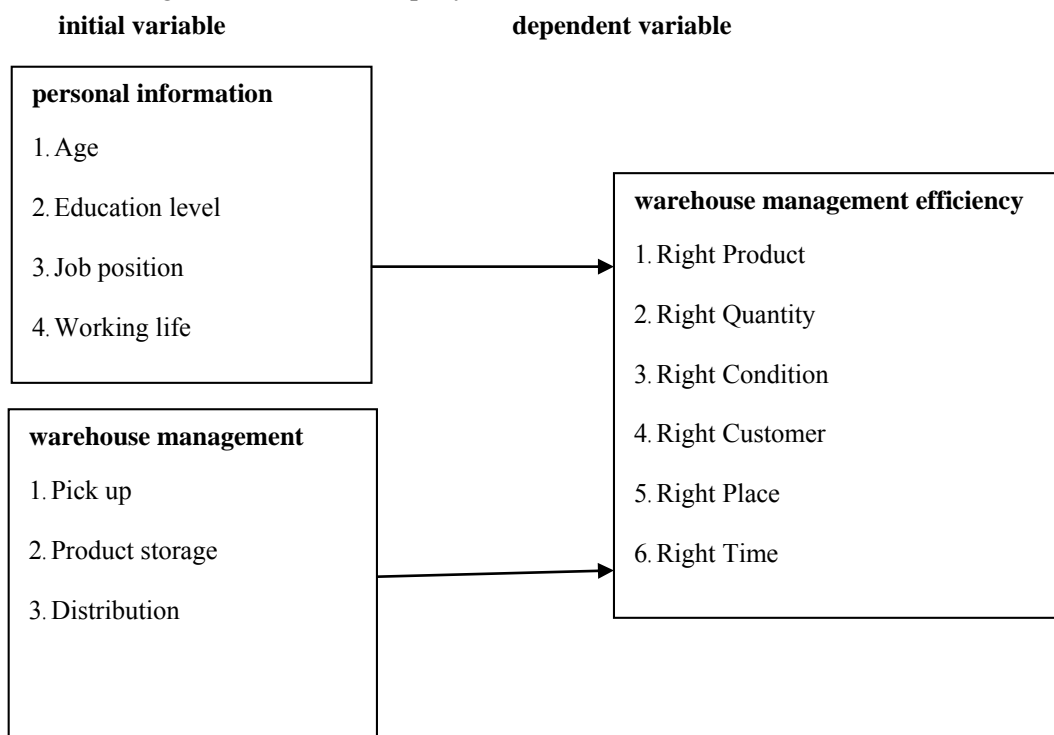
-Goods receiving includes activities such as loading and unloading goods from a vehicle that is brought into a warehouse. counting the goods to match the amount ordered Including taking back products from customers, etc. Receiving goods is therefore the basic activity of every warehouse as a place to hold products. If there is a good receiving management The organization ensures that there is sufficient supply to meet the needs of its customers, no matter where they are in the supply chain.

-Product storage Activities in storing goods such as planning for effective storage of goods The consolidation of goods received from several small shipments together. to combine into a large product Separating the products into smaller numbers (Break Bulk), etc. The management should have a good storage management. In order to reduce storage costs (Storage Cost), which will reduce the cost of the organization. In addition, storing goods creates value added in the product (Value Added) when it reaches its destination.

-Distribution It is an activity that executives must plan in order to distribute products according to the right quality, the right quantity, the right time, the right place, and the right condition. customer specified This will result in a consistently good level of service. By distributing products, there are important activities such as delivering products to sellers. Transferring goods from one warehouse to another. Within the same organization, etc. Distribution is also related to other tasks, such as transportation (Transportation), inventory (Inventory Management), etc.

7. Conceptual Framework

From the aforementioned studies, the researchers relied on the concepts of warehouse management theory and 7R Logistics theory to summarize and integrate into a conceptual framework for studying the efficiency of warehouse management of ABC Company as follows:



8. Research Methodology

The study of inventory management efficiency of ABC company aims to study ABC company's warehouse management efficiency, ABC company's warehouse management efficiency, compare ABC company's warehouse management efficiency classified by personal data. relationship between Warehouse Management and Warehouse Management Efficiency, ABC Company Warehouse management affecting warehouse management efficiency, ABC Company The data from the study can be used as a guideline to increase warehouse management efficiency so businesses can operate efficiently. has set the method of study as follows

An analysis of the relationship between warehouse management is related to increase efficiency ABC company warehouse

warehouse management	Optimization relationship ABC			
	r	Sig	relationship level	level
receiving goods	.783**	.000	same direction	1
product storage	.730**	.000	same direction	2
Distribution	.697**	.000	same direction	3
ภาพรวมเฉลี่ย	.808		same direction	

** Statistically significant at the .01 level (2-tailed)

Warehouse management is related to an optimization relationship. Company warehouse ABC overall average has a high degree of same direction correlation ($r = .736$)

Consider The Relationship from The Correlation Coefficient R in Descending Order in The Following Order:

1. Warehouse management is related to ABC company warehouse optimization relationship in receiving goods. High correlation level in the same direction ($r = .783$)
2. Warehouse management is related to ABC Company's warehouse optimization relationship in storage. High degree of homogeneous correlation ($r = .730$)
3. Warehouse management is related to distribution company ABC's warehouse optimization relationship. High degree of homogeneous correlation ($r = .697$)

Comparison of Influence Warehouse Management to ABC Company Warehouse Optimization

Warehouse Management	B	Std. Error	Beta	t	Sig.	Test
(Constant)	1.124	.384		2.928	.005	yes
receiving goods	.389	.128	.458	3.029	.004	yes
product storage	.255	.119	.283	2.138	.038	yes
Distribution	.127	.126	.139	1.010	.317	No

** Statistically significant at the .05 level (2-tailed)

Comparison of Influencing Warehouse Management Increasing warehouse efficiency, ABC found that warehouse management had a significant influence on ABC warehouse efficiency, except for the distribution aspect which had no influence on ABC warehouse efficiency at statistical significance at .05 level. It can be seen that the aforementioned warehousing management has a large influence on ABC's warehousing efficiency, but for distribution, it has no influence on ABC's warehousing efficiency.

9. Summary, Discussion, and Recommendations Conclusion

The objective of this study is to increase inventory management efficiency of ABC Company. To study the warehouse management of ABC Company To study the warehouse management efficiency of ABC Company To compare the warehouse management efficiency of ABC Company classified by personal data To study the relationship between warehouse management and inventory management efficiency of ABC company. To study the influence of warehouse management on ABC company warehouse management efficiency. A questionnaire of 53 sets was used as a tool for data collection and statistical analysis was used for percentage, mean, hypothesis test, t-test, F-test (One-Way ANOVA), Correlation and Multiple Regression Analysis from the results. Data analysis can be summarized as follows.

10. Personal Information

According to a study on the efficiency of warehouse management of ABC Company, it was found that most of the respondents were between 20 and 30 years old, with a bachelor's degree. Positions in other positions and have worked for more than 3 years.

ABC's warehouse management information

According to the study of information on the importance of warehouse management of ABC Company, it was found that the receiving of goods product storage Distribution Overall, ABC's warehousing management priorities were the highest. The details are as follows.

receiving goods The results of the study were found to be at the highest level of significance. with important details At the most important level, 5 things are recorded in the system. Receiving must be correctly classified by product type or by station. Receiving can accurately monitor the receiving status in the system. There is a barcode scanner to receive and check the condition of the product before receiving every time. and deliver the goods to the next section on time

product storage The results of the study were found to be at the highest level of significance. with important details It is at the most important level of 5 things, consisting of properly storing each type of product. Check for leftovers along the sides of the conveyor belt. Store products that are large lots or heavy items correctly according to their location. How to properly store products according to the shelf. Store small and lightweight products and high-value products correctly.

Distribution The results of the study were found to be at the highest level of significance. with important details At the 5 most important levels, consisting of knowing the product release process, scanning correctly, customers receive the product correctly, completely and quickly, delivering it to the station correctly. Preparing products to be delivered to trucks on time according to the release cycle and knowing the location of the products that will be distributed.

ABC's Inventory Management Performance Data

According to the study of data on warehouse management efficiency of ABC company, it was found that Right Product, right product, right quantity, right quantity, right condition, right condition, right place, right place, right customer, right customer, right time, right time. Overall, ABC's warehouse management efficiency was at the highest level of agreement. The details are as follows.

Right Product The results of the study were found to be in the most agreeing level. with detailed comments was at the most agreeing level in 4 aspects, consisting of delivering goods to customers that are correct according to the document page Able to verify the actual product with the program correctly Receiving the product is the correct product according to the document page. and store the product, get the correct product according to the document page

Right Quantity The results of the study were found to be in the most agreeing level. with detailed comments was in the most agreeing level in 4 aspects consisting of being able to verify the actual number of products

with the program correctly The product reaches the customer's hand 100% complete before receiving the count of the correct number of products as specified in the document and store the correct amount of goods according to the storage base

Right Condition The results of the study were found to be in the most agreeing level. with detailed comments It was at the most agreeing level in 4 aspects, consisting of being able to check the actual product condition and accurately record the defective product information. The product reaches the customer in 100% perfect condition before accepting, inspecting the product condition without dents, rotting, wet or tearing and the delivered products in perfect packaging condition without dents, rotting, wetting or tearing.

Right Place The results of the study were found to be in the most agreeing level. with detailed comments was at the most agreeing level in 4 aspects consisting of being able to verify the actual storage location with the program correctly Store the products correctly according to the shelf or each category properly. deliver the goods to the station or the truck picks up the goods correctly and pick up and place the goods on the correct pallet according to the location

Right Customer Right Customer The results of the study were found to be in the most agreeing level. The details of the opinions were in the highest agreeing level in 4 aspects, consisting of delivery of products with correct delivery documents according to customer details. Delivery of goods and customers who receive the goods correctly according to the details on the box and documents. Products are labeled or identified according to the customer list. And able to verify that the product details are true and the program is correct.

Right Time The results of the study were found to be in the most agreeing level. with detailed comments It is in the most agreeing level of 5 factors, consisting of being able to identify the location of the actual product from checking the status of the product in the program accurately and precisely. Deliver goods around the car The customer receives the product no later than the date stated. Able to check the date that the customer actually received the product with the program correctly Pick up and prepare items according to the scheduled release cycle. and can be stored at the specified time

11. Hypothesis Test Results

- **Hypothesis 1:** Different personal information affects ABC company warehouse management efficiency differently. Personal information, age, education and job title The effect on the efficiency of the ABC company's warehouse is not different. The study found that Personal information about working age Different ABC company warehouse optimization effect is different. The relationship between warehouse management is related to optimization. ABC company warehouse **hypothesis test results**
- **Hypothesis 2:** Warehouse management is related to ABC's warehouse management efficiency. warehouse management receiving goods product storage and product distribution In general, there was a relationship with ABC Company warehouse optimization at a high level of correlation in the same direction.
- **Hypothesis 3** Warehouse management has an influence on ABC Company's warehouse management efficiency. warehouse management receiving goods And the product storage has an influence on the efficiency of ABC's warehouse and found that warehouse management Distribution There was no influence on the efficiency of ABC Company's warehouse at statistical significance at the .05 level.

12. Discussion of The Recommendations Received From The Study.

The researcher has suggestions for the benefit as follows:

In this study, the warehouse management of ABC Company was realized to be used as

Guidelines for increasing the efficiency of inventory management of ABC Company are as follows:

1. Receiving goods In the process of receiving the product Before receiving the product into the system, you must check the correctness of the product (Right Product), count the number (Right Quantity), and check the

completeness (Right Condition) first every time. and then receiving the product into the warehouse by recording data by scanning a barcode in the system every time to prevent problems with incorrect products incomplete and imperfect condition Including receiving, must separate the product type or separate according to the station on the pallet correctly It will help to confirm the receiving status in the system precisely. resulting in delivery of goods to the next work segment on time and most efficient

2. Product storage In the process of storing the products before storing the products to the location, you must check the correctness of the product (Right Product), count the number (Right Quantity), check the completeness (Right Condition) first every time, and then store the product to the Location. By the method of saving data by scanning the barcode into the system every time

Each type of product should be stored properly. Check the remaining product. along the side of the belt Store products that are large lots or products that are heavy according to the correct location Store products correctly according to the shelf Store small and lightweight products and high-value products correctly

3. Distribution should learn the process of distributing products to customers to receive products accurately, completely and quickly (Right Customer), prepare products to deliver to trucks on time according to the release cycle (Right Time). Employees Have knowledge and understanding about the destination station of distribution to customers so that the product can be delivered to the customer in the right place (Right Place)

13. Recommendations For Further Studies

From the results of the study to be used as a guideline to increase warehouse efficiency in the future. There should be more studies on how to increase the efficiency of storage space management within the warehouse. due to current Increasing the flexibility of storage space to support the purchase demand of customers who are not certain It helps the organization to meet the purchasing needs of its customers. It also takes advantage of the storage space that is limited. for maximum efficiency

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