

# THE INCREASING OF PERFORMANCE EFFICIENCY WAREHOUSE, A CASE STUDY KERRY EXPRESS SALAYA COMPANY

**Sasiwimon Wongwilai\*, Aekachai Khuptawatin\*\* & Kitichai Wongcharoensin\*\*\***

\* *College of Logistics and Supply Chain, Suan Sunandha Rajabhat University, Thailand,  
E-Mail: sasiwimom.wo@ssru.ac.th*

\*\* *Faculty of Business Administration and Information Technology, Rajamangala  
University of Technology Isan, Thailand,  
E-Mail: akekachai.co@rmuti.ac.th*

\*\*\* *CPL Group Public Company Limited, Thailand, E-Mail: kitichaiw@outlook.com*

## ABSTRACT

Abstract— The objectives of this research were 1) to study the working procedures in the warehouse 2) to analyze the guidelines for improving the efficiency of warehouse operations. The population consisted of managers and 5 employees of the establishment. Data from interviewees were analyzed by content analysis. This paper presents the results of a qualitative research. Results of this research were the following.

1. Approaches to increase the efficiency of the company's warehouse operations. Kerry Express Salaya can be applied in warehouse operations. Analysis of the root causes of problems arising in the organization's operating processes and to optimize the efficiency of work in the warehouse.

2. Planning before executing daily operations is important to increase efficiency in warehouse operations and can greatly increase customer satisfaction.

Keywords— Optimization, Warehousing, Workflow.

## INTRODUCTION

Thailand has been a production base for variety of world class industries, which indicates the potential of competitiveness for the country. (Chansate, V., 2018) The advancement of technology in digital form has led to the movement of goods and services are the economic system of the region and the world that is connected without borders. Local and international entrepreneurs are accelerating the production of manpower to have important specialized skills. These include information technology skills, English language skills to be able to adapt to society. The environment and the situation are changing rapidly. In particular, the adaptation of logistics carriers to move goods and services to where they are in demand is streamlined and fast. Low cost, accuracy, reduce losses and activities that do not cause value. (Aussawakornnirangkool, P.,2019) In addition, consumer behavior due to Covid-19 has also affected the parcel delivery business in Thailand. E-commerce, Due to consumer behavior in the digital age, the popularity of shopping through online platforms is becoming increasingly popular. Both major e-commerce websites such as: Lazada, Shopee, JD, Central Priceza and Social media, such as: Facebook, Line, Instagram. In addition, the COVID-19 pandemic has resulted in the overall shipment of more than 4 million packages per day. Thailand's parcel delivery business is expected to continue to grow by 35% in 2020, valued at 66 billion baht. (Petcharat, S., et al. 2022). The main needs of consumers of online products are: Speed, Accuracy, Trackability Fast parcel delivery is therefore a key success factor that has contributed to the success of the freight forwarding business, resulting in the rapid growth of the parcel delivery market.

Warehouse management is one of the activities that form the basis of logistics, the management must plan each stage of the process in warehouse management, Warehouse management consists of receiving goods, storing goods, and distributing goods, which are the core functions of warehouse management. Managing a warehouse to be as liquid as possible depends on 3 main factors: Right Time, Right Place and Right Cost. Therefore, good logistics is the main aid in creating these 3 factors. Since logistics is the transport of goods from our inventory to the consumer, through the distribution system, the cost of transportation to storage becomes a cost that our organization has to bear. Therefore, an organization or company must manage the warehouse well. There is a system in place to ensure that transport activities or logistics systems work at full capacity. This reduces costs and

enables our inventory to store and distribute products at any time without interruption. (Pro Ind Solutions (2022). For that reason. Therefore, we are interested in studying the process of working in a warehouse. To find ways to increase productivity in the warehouses of Kerry Express Salaya Company. The objectives of this research

1. Study the working procedures in the warehouse
2. Analyze the guidelines for improving the efficiency of warehouse operations

## LITERATURE REVIEWS

### 1. Warehouse Management

Warehouse management is an activity that plays an important role in logistics management through smaller activities related to warehouse management. Such as choosing a type, choosing a size, choosing a location, and planning a warehouse. Planning the movement of goods within the warehouse. In addition, the use of information technology in warehouse management, etc., which effective warehouse management system will bring benefits to the organization (Asamongtham, J., n.p.) as follows:

1. This allows raw materials to be stored in warehouses and has sufficient amounts to produce and does not cause intermittent production interruptions.
2. This enables the distribution of products to the market from manufacturer to consumer. The manufacturer stores the finished product in its warehouse for further distribution.
3. It is the storage and storage of parcels for service businesses that do not need to store raw materials for the production of goods, however, service businesses also need warehouses to store parcels and equipment necessary to conduct business.
4. It is credited to the business, i.e., the depositor of goods located in a public warehouse. The product can be used as collateral for borrowing from financial institutions such as banks, for example.
5. It is a place for government agencies to collect or store goods that the government wants to intervene in the market price of certain products such as rice, cassava, rubber, etc. in order to maintain the price level for farmers.
6. Make it economical, shipping costs. In the case of finished goods waiting to be resold, the goods will be included at the warehouse first, which will result in greater shipping cost savings than those sent directly by the manufacturer to the store.

It's all Storage of goods in warehouses is divided into 2 types as follows: (Phoomdee, P., Hotrawaisaya, C. and Moryadee, C.,2020)

1. Random storage This is the closest storage of goods in the place. Be that as it may Shelf Pallet for example, based primarily On first. Early exit This type of storage has the greatest use of space Nowadays, computer programs and automated technologies are used to help store This is called automatic storage and removal of goods, which reduces labor costs in this area.
2. Storage at a defined location This classification indicates a fixed storage location. For each type of goods within the warehouse, this type of storage is divided into 3 types. Storage in order of numbering of parts Storage by consumption rate and Activity level storage

### 2. Key processes in warehouse management

Usually, warehouses have important goals: accommodation facilities for the movement of goods through the supply chain to the end customer. There are three basic processes in warehouse management: Picking up, storing, and distribution. The details are as follows:

1. Picking up goods - Consists of activities such as loading and unloading goods from vehicles imported into warehouses. Counting products to match the ordered quantity Including receiving returns from customers, etc. Picking up goods is therefore the basic activity of every warehouse for a place to stay. If there is good product collection management, the organization will ensure that there are enough products to meet the needs of customers. No matter what part of the supply chain the customer is in.
2. Storage of goods - It is an activities for storing goods such as Efficient storage planning, Collecting goods obtained from several small shipments together to combine them into large quantities, Splitting products into smaller quantities (break bulk), etcThe management should have good storage management to reduce (storage costs.) In addition, the storage and maintenance of goods creates value added when it reaches the destination.

3. Distribution - It is an activity that management must plan in order to ensure that the distribution of products meets customer-defined the right quality, right quantity, right time, right place and right condition, this will result in a consistently good level of service. The distribution of goods has important activities such as: Sending goods to the seller Transfer of goods from one warehouse to another within the same organization, etc. Distribution is also associated with other areas of work, such as: transportation and inventory management , etc.

## **METHODS**

1. Key contributors to this research are Managers and employees in each relevant department of Kerry Express Salaya, Phutthamonthon 4th Road, Phutthamonthon District, Nakhon Pathom Province, the researchers determined the number of people who provided important information. 5 persons.

2. The tools used in qualitative research are interviews with questions about performance in warehouses. 19 items to achieve efficiency in the development of enterprises. Questions are asked by the informant to express their opinions freely, and the information is written down and summarized in order to analyze the content of the interview in depth.

3. Data analysis We collected the data by interviewing and using the obtained data to analyze the content. Group content and summarize research findings according to research objectives. The data presented in response to the research questions are as follows: 1) The results of the study of the system used in inventory management. 2) The results of the study from interviews with key contributors, and 3) Problems and solutions to problems with the system.

## **RESULTS**

This research presents an increase in warehouse productivity. Kerry Company Express Salaya Which has a qualitative form of research. The datators used in the research are employees who perform real duties at Kerry. Express Salaya includes 5 managers and employees. The tools used are interviews. 19 items have shown that: The system is used to manage warehouses, Kerry company. Express Salaya uses a system called Warehouse Management System (WMS). WMS is a system used to manage warehouses, with the process of managing from the goods entering the warehouse to leaving the warehouse. Picking up, storing, and picking” The benefits of the WMS program are: Historical data can be viewed, convenient management and management of employees, reduce workflows and simplify operations. This should encourage operators to use information systems that are suitable for their work and maintain the equipment in the system to ensure regular availability. There should also be a manual that determines how the system is used when personnel changes. This will give the workers who come to work instead. Such manuals can be used to convey the operation of the system to newly arrived workers, enter the system and continuously result in warehouse operations.

## **CONCLUSION AND FUTURE WORK**

The research was carried out sequentially based on findings that were based on research objectives, which were the results of qualitative analysis of the data obtained from the research. Objectives can be analyzed to analyze ways to increase productivity in warehouses. In this finding, WMS warehouse management is important, For the planning side, warehouse management greatly reduces the error of working in a warehouse and WMS can increase warehouse efficiency even more in line with Phomphai, P., Limoubpratum, C. & Ounok, N. (2020). Conduct a study on the subject “Warehouse Management Factors Affecting Attitude Towards Warehouse Operation Efficiency” The objective of this research was to study warehouse management and attitude towards warehouse operation efficiency; examine warehouse management factors affecting attitude towards warehouse operation efficiency. The research sample includes 225 samples, consisting of operational level and middle management. The questionnaire is used as a data collection instrument with a reliability test of 0.96. Frequency, percentage, mean, and standard deviation are employed for data analysis. Structural equation modelling (SEM) is used to test the research hypothesis, with a .001 level of significance. The study found that: 1) The respondent concerns warehouse management factors at the highest level. When considering each aspect, the electronics system (WMS system) was at the highest level, followed by electronic information exchange (EDI), space

management, visual control system, inbound and outbound system, space layout management, respectively, and 2) The respondent concerns warehouse efficiency is at the highest level. When considering each aspect, the velocity of operation was at the highest level, followed by problem and error reduction, and when considered factors affecting warehouse efficiency, it found that electronic information exchange (EDI), space management, visual control system, inbound and outbound system, space layout management positively affecting the velocity of operation and problem and error reduction with .01 level of significance.

#### **Suggestions for implementing research findings**

In terms of warehouse space management, products should be laid out in a separate category and there are clear storage points for each type of product. For convenience and speed in the operation of disbursement and transport of goods.

In the field of electronic systems (WMS), there should be training on the use of electronic systems (WMS) for staff and employees to increase the efficiency of warehouse operations.

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