

## A STUDY ON THE STORE AND INVENTORY MANAGEMENT PRACTICES AT ENTOPEST ENVIRONMENTAL SERVICES SDN BHD IN PETALING JAYA

M.H. Abdul Rahman<sup>1</sup>, N. A. Bakari<sup>1</sup>, R.T Wing Shin<sup>1</sup>

<sup>1</sup>*Industrial Logistics Section, Universiti Kuala Lumpur, Malaysian Institute of Industrial Technology, Masai, Johor, Malaysia*

*Corresponding Author: mhilmiar@unikl.edu.my*

### ABSTRACT

Inventory management is essential for a company that conducts service operations, in order to ensure the availability of materials. Typically, service operations such as disinfection services require more effective inventory management because the amount of inventory stored is more in line with the increasingly complex work process. This study was conducted to identify the store and inventory management practices, as well as to discover the challenges faced by companies when managing inventory. This study was conducted at Entopest Environmental Service Sdn Bhd in Petaling Jaya. This study uses qualitative research methods that need to interview employees from the company. To obtain relevant data, primary and secondary data were collected. Two respondents working in Entopest Environmental Service Sdn Bhd in Petaling Jaya were selected to participate in the interview session for this study to obtain the primary data. Throughout the process of analyzing this study uses conceptual framework theory as a guideline. The results show that several practices have been carried out by Entopest in the store and inventory management. In addition, there are also some challenges in current inventory management faced by the company. In conclusion, several recommendations have been made for improving the quality of work especially in store and inventory management and recommendations for future studies are also included in the last part of the report.

**Keywords:** Store, Inventory Management, Practices, Challenges

### 1. INTRODUCTION

Entopest Environmental Services Sdn Bhd is a company that provides the most effective services and solutions for their customer which is pest control service, washroom and hygiene services, and fumigation. Proper store and inventory management practices are essential for success for a company. The practice of store and inventory management is very important for an organization. Good and effective maintenance of stores and inventory will reduce the cost of expenses.

With the practice of store and inventory management in an organization it can help optimize working hours for updating the record as receiving, storage and production of goods [1]. Each company has its own approach to inventory management in terms of store and inventory management practices. Inventory is a valuable commodity for every business, and inventory management must be done efficiently and effectively. [2] Proper store management practices are keys. This is because having a neat and tidy shelf label in store can help organizations to control and manage inventory properly.

There are several challenges in managing stores and inventory, among them is that companies need to ensure that inventory supply is balanced with customer demand. Basically, the business should have enough inventory to satisfy consumer expectations and demands without losing

customers due to a lack of inventory. But for a company they do not want to hold too much of this inventory because it costs a lot to keep stock in store. For store management and inventory the company has a high risk in making decisions and it also affects the management of the organization's supply chain[3].

Effective store and inventory management practices are essential to ensure that the whole process runs smoothly, but the company is unable to practice proper store and inventory management practices. This can cause the organization itself to suffer losses. There are also problems involving the stock cards record which there are incorrect data entry during the movement in and out of the particular items of stock in the store.

## 2. CONCEPTUAL FRAMEWORK

Figure 1 below shows the independent and dependent variable that researcher points out from this research.

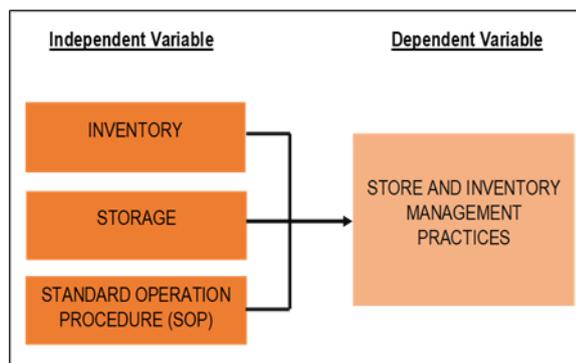


Figure 1: Conceptual Framework

### *Independent and Dependent Variable*

This research will help identify the contributing factors to the store and inventory management practices based on the data collected through the interviews that will be conducted on the respondents [4]. Based on Figure 1, the dependent variable refers to the main variable that interests the researchers to predict its variability. This variable is often known as the outcome variable. In other words, a dependent variable is something that depends on other factors. The dependent variable in this study is the store and inventory management practices that can be influenced by many factors. These factors will affect the dependent variables.

To identify store and inventory management practices, the factors influencing those practices must first be identified. Thus, the next set of variables are independent variables. An independent variable is a cause or reason for an outcome that is derived from a dependent variable in a positive or negative way. In other words, an independent variable is also a variable that can stand alone and it is not changed by other variables. The change of the independent variable will directly cause the change of the dependent variable in the study. The independent variables in this study were inventory, store, and standard operation procedure (SOP). Therefore, the following methodological framework above will be used to construct the question for this qualitative method used for the study.

### 3. DATA ANALYSIS

All the data for obtained a result was collected by using interview session and was been recorded that will be analyze one by one in order to get the results as to meet the objectives of the research. The respondents can be defined as the people who involved in responding to the research activities. The respondent has been selected from the staff of the Entopest Environmental Services Sdn Bhd who is responsible in managing the store and inventory of the company. They will be chosen as the representative to give and share their opinion regarding the question that will be given.

#### *Inventory*

In Entopest they are using the manual system to manage the inventory. Inventories are the most important things in every company. Without a proper management of the inventory company cannot be run their operation. Each of the company need at least one system in managing their inventory in order to ensure the inventory can be controlled always. As for the Entopest they still using the manual system which is stock card because both respondents are agreed that this system can reduce cost.

Other than that, researcher finds that Entopest inventories need to be classify according to their types and according to the standards set by the company and the Ministry of Agriculture in order to prevent any unwanted accidents. For example, chemicals need to be stored in special places such as below room temperature. Next, for the gases Entopest always keep their inventories in controlled by stored them in the room where only the authorities can enter and handle the gases.

In Entopest they record the inventory by using the stock card and ledger as for their future reference. Recording the inventory help company to know the actual amount of stock available at a given period of time. It also helps the company in planning the repurchase of stock based on the remaining stock available [5].

#### *Storage*

As for the storage researcher found that the using of the stock card as a system in recording the inventory is effective. Both respondents state that using the stock card for recording inventory is effective due to Entopest does not keep too much stock. Although it looks quite common system used by this company, but it can help the company plan their cash flow for payments to suppliers. It also can help company prevent losses in the event of stock irregularities. It crucial for organization to have the procedure in order to stored and moving inventory. If company have the right procedure to handle the inventory indirectly it helps company achieve efficient and fast operations, also at an affordable cost.

With the right processes and procedures inventory management can be transformed from an activity that creates fear into an activity that helps business thrive. Placing security cameras in storage area is the best method to prevent theft. With night vision security cameras, inventory will always be monitored, even in the dark. If criminal activity is detected, the authorities will be notified, and they will be able to take action. Internal theft is another major problem that can have a huge impact on the success of company. The presence of video surveillance cameras helps prevent internal theft, prevent employees from committing misconduct such as stealing stock.

#### *Standard Operation Procedure (SOP)*

Researcher found that there is Standard Operation Procedure (SOP) need to be followed by staff

in Entopest in order to handle the dangerous goods such as chemicals and gases. Staff need to wear the Personal Protective Equipment (PPE) in order to enter the store. Other than that, they need to undergo training before handle and operate the goods. Providing inventory management training to employees is essential for every company.

Since it teaches workers how to improve the inventory handling process as well as react proactively, effective training will speed up the dissemination of knowledge. In the same way, adequate preparation ensures that employees are adequately instructed and understand the company's management policies and procedures. It would be easier to follow company procedures, perform reviews, and take decisive action if enforcement is not met as a result of this. For the stock counting of inventory in Entopest can indirectly develop company's understanding of best-selling products. The business will fulfil orders on time and build a loyal customer base by having the right goods in stock. Maintaining an inventory pattern of best-selling items allows the company to hold stock and continue fulfilling orders.

### *Challenges*

During the interview session researcher found Entopest also facing a challenge in inventory management practices. There are several challenges including problems with the current inventory system, stock shortages as well as challenges when the COVID-19 pandemic hit. Challenges in current inventory system is due to the negligence of the staff who did not record in the stock card and ledger when they removed or returned the goods in the store. To avoid this situation, occur company can take a precaution measure by make sure if of the staff that need to removed and returned the goods, they must have the signature of the person in charge of the store.

As for the shortages of the stock, company can use the existing technologies as bar coding system to track the inventory. Other than that, staff that need to enter the store can register their self by using the fingerprint to avoid loss of goods in the store. During COVID-19 company facing shortages stock due to the highest demand in sanitizing products. This problem can be solved if company can identify and managing their critical stock. When stocks are limited or lead times are unpredictable, it's critical to identify critical stock products and develop an inventory plan to mitigate risk. By recognizing the most desirable item, the company may place a higher priority on it than other products, such as monitoring demand, stock levels, and time reliability more often to ensure availability at all times.

The summary of findings can be referred in Table 1.

Table 1: Summary Findings

Themes	Details
Inventory	<p>Using the manual system stock card.</p> <p>Classifies inventory according to the type of material such as chemicals and gases.</p> <p>To control the use of stocks such as quantity, price and size and is used for stock closing at the end of the month.</p> <p>Proof of updating data, avoiding waste, loss or malpractice by employees.</p>
Storage	<p>Items received must be recorded immediately.</p> <p>Form will be signed by the Recipient of the goods.</p> <p>Voucher issued must be recorded in the ledger.</p> <p>Chemical stored in or below room temperature.</p> <p>The storekeeper responsible for maintaining the safety of store.</p>
Standard Operation Procedure (SOP)	<p>Employees must wear PPE (Personal Protective Equipment) (PPE).</p> <p>Only trained workers are allowed to handle chemicals.</p> <p>Chemicals stored in a place that has air circulation, cool and dry.</p> <p>Staff that enters the store need to record their name on the form.</p>
Challenges	<p>Person handling the materials is usually not suitable for the clerical work involved in writing stock cards.</p> <p>Restricted measures and export of sanitation products.</p> <p>The company's stock is insufficient to meet customer demand.</p> <p>Using existing applications and technologies such as bar-coding systems</p>



#### 4. CONCLUSION

This study is investigated the store and inventory management practices at Entopest Environmental Services Sdn Bhd in Petaling Jaya. Primary data were collected by interview session with the responsible person in charge which is Ms. Ruziana Hamzah as Fumigation Admin and Mr.Zaiful Azuhar as the Supervisor. Other than that, observation also was carried out for researcher to analyse the situation at the company. The theme that been selected are inventory, storage, standard operation procedure (SOP), and challenges,

The practices of the inventory management system have been carried out in the Entopest. The implementation of this practice will make it possible to lower costs, minimize losses, maximize productivity with accurate data and be able to access inventory information at any time. The inventory system that have been used by Entopest is manual which is the stock card. Therefore, the user can only access the material inventory information through a limited place such as in the storage area [6]. Companies which does not have an inventory management system will face problems when checking the stock balance whether it is sufficient or not.

This study has met its objective respectively which is to observe the store and inventory management practices and to analyse the challenges in the current inventory management at Entopest Environmental Services Sdn Bhd in Petaling Jaya. The suggestion and recommendation given based on the findings and results discussed in the previous chapter. The purpose of making the recommendations was to help in improvement and have a better operations quality standard and inventory management practices run more smoothly. Last but not least, researcher hope that this study can be a reference for the next future study or industry that desire to do some of the improvement regarding to the topic of this research.

#### References

- [1] Z. Michael, "VET 4093- Pengurusan Stor, Harta Modal dan Inventori", Slideshare.net, 2012. [Online]. Available: <https://www.slideshare.net/ZUZANMICHAEL/vet-4093-pengurusan-stor-harta-modal-dan-inventori>.
- [2] A. Walts, "Taking a Physical Count of Your Inventory - What You Need to Know", SkuVault, 2020. [Online].
- [3] D.Deepak, & Kumar, M. (2016). INVENTORY MANAGEMENT AND COST ANALYSIS. International Journal of Scientific & Engineering Research, Volume 7, Issue 4, April-2016, 177-182.
- [4] A. Julianto, "Conceptual Vs Theoretical Frameworks.," 2013. [Online]. Available: <http://skripsi-fkip-inggris.blogspot.com/2013/04/conceptual-vs-theoretical-frameworks.html>.
- [5] Sahari, S., Tinggi, M., & Kadri, N. (2012). Inventory Management in Malaysian. SIU Journal of Management, Vol.2, No.1 (June, 2012). ISSN: 2229-0044
- [6] Sarkar, A., Das, D., Chakraborty, S., & Biswas, N. (2013). A Simple Case Study of Material Requirement Planning. IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), 58-64.