

Chapter 6
Case on Customized Logistics Services

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1 INTRODUCTION

Layout decision and inventory management is interlinked between each other as accurate layout decision will be beneficial to a business in managing their inventories.

Layout is one of the crucial decisions that determine the long-run efficiency of operations. Layout has strategic since it starts an organization's competitive priorities in regard to processes, capacity, cost, and flexibility as well as quality of work life, contact, customer and image.

An effective layout can benefit an organization achieve a strategy that supports low cost, differentiation, or response. The objective of layout strategy is to grow a productive layout that will meet the firm's competitive supplies.

One of the settings that require the most accurate layout decision is the warehouse. The main aim of warehouse layout is to catch the optimum balance between handling costs and costs associated with warehouse space.

A warehouse also needs a very effective inventory management as there are a lot of goods being located in there. Without proper management, it will be hard to manage the inventories smoothly.

The main aim of inventory management is to strike a balance between inventory management and customer services. It is impossible for companies to achieve a low-cost-strategy without worthy inventory management. A good inventory management alongside a correct layout decision will help the company to minimize their material handling costs.

The objective of this case study is to analyse how can iHS Sdn. Bhd. improve their layout in their warehouse so that they can develop a higher performance in managing their inventories in the warehouse.

2 CASE STUDY

iHS Sdn. Bhd. is one of the multinational company that specialized in warehousing and inventory management for a lot of products. It is well-known in S. area, Selangor, Malaysia.

The company has operated for sixteen years and has provided customized warehousing services for many companies.

Despite being in the industry for a long time, iHS Sdn. Bhd. still faces problems in managing the stocks in their warehouse. This caused them to experience reduced productivity and high material handling costs as the warehouse is not in the most efficient condition.

One of the problems faced by iHS Sdn. Bhd. is that the stocks in their storage are in chaos with no classification. The stocks are mixed up causing the company to have trouble in keeping tracks of their inventories, which will lead the warehouse having excess inventory or unexpected shortages.

Excess inventory caused iHS Sdn. Bhd. to face decreasing in cash flow, increases storage spaces, which definitely will lead to deficient customer services. Despite that, inventory shortage caused greater problem to the company since it lead to unfulfilled orders and unhappy customers.

Besides that, the employees of iHS Sdn. Bhd. are having trouble in locating the stocks that are needed during order picking, which caused the employees needing a long time to pick the goods as they need to travel around the warehouse to find the right location of the goods, then leading to slow loading process and creates needless backup in labour allocation. This problem is triggered by the lack of inventory oversight causing the company experiencing accumulation of inefficiencies within the warehouse that slows operations and increases costs. In addition to that, it is found that iHS Sdn. Bhd. is also facing problem in locating the goods as the area used for storage is too large. Inefficient warehouse layout caused unnecessary labours as more workers are needed to handle certain goods in certain locations. iHS Sdn. Bhd. is not optimizing their storage system properly causing them needing more space to put their inventories.

It is also found that the company is having problem in delivering the wrong items to their customers. Naturally, the mistake is caused by the pickers; however, it is still due inefficient inventory management. The reason why the pickers delivered the wrong items to their customers is because of the mixed up products in a location within the warehouse. Since most of the boxes look very similar to each other, the employees did not bother to check, thus assuming the content of all the boxes are the same.

Another problem faced by iHS Sdn. Bhd. is damaged inventory. This is simply because the inventories are typically being handled multiple times making them vulnerable to damage. Having damaged inventory is always unfavourable to the company as it creates more problems such as trying to sell them to cover the financial losses and increased the usage of the space in the warehouse.

The inefficient inventory management then lead to high inventory carrying cost borne by the company. Since they are not having a proper layout in the facility, it caused the costs for

handling the inventories keep increasing. Whenever there are excess or shortage of inventories, it will always come along with the costs as having too much inventory will increased the storage cost, while having insufficient inventory increased the stock-out costs.

3 CONCLUSION

Having an improved layout setting gives iHS an opportunity to have a better inventory management and allow them to get higher customer satisfaction. Since inventory represents a major investment for the company, it is crucial for them to make use of their space efficiently and effectively.

Teaching Note
CASE ON CUSTOMIZED LOGISTICS SERVICES

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This case study is suitable for Operations Management subject for (Management) diploma students. This case study is designed for level 2 and/or level 3 (Comprehension and/or Application) of Bloom's Taxonomy.

Lecturers may ask students to be in small groups, then read and discuss the case for about 30 minutes. After that, lecturers may ask the groups to share their findings with the class. At the end, lecturers may use a few minutes to conclude the answers and mention below solutions.

PROBLEM SOLUTION

Layout decision and inventory management are much more complicated to be applied in real situation than it appears theoretically. Therefore, it is important that companies fully understand their goals and objectives, so that they can make the best decision that will satisfy their needs.

– **Detailed Classification**

In order to avoid excess or shortage of inventories, the company can do a detailed classification of their products by the product codes and description of the products along with the Bill of Material of the products. This will prevent mixed up of the products and will help the pickers to identify the products quickly, thus avoiding delivering the wrong items to the customers. It is also advisable that the company use barcodes so that the inventory records can be easily recorded, hence, allows iHS Sdn. Bhd. to keep track of the items in their warehouse.

– **Storage Strategies**

Rearranging the storage may sound difficult in a large space; however, having a logical warehouse layout will bring immediate success to the company. Therefore, instead of having products scattered throughout the warehouse floor area, it is better that the company establish a naming convention for bins and racks so that the employees can find the things quickly and easily, as they know where to go to find them. Besides that, the company need to utilize all of

the space available in the warehouse horizontally and vertically. Therefore, using forklifts will help to place the products in higher place according to their sections.

– **Items Location Control**

Another method that iHS Sdn. Bhd. can use to manage its inventory is by maintaining an accurate items location control. The company can do this by using the Warehouse Management-System, a software application which backs the day-to-day actions in a warehouse. Using the software allows the company to keep track of the movement of the inventories in the warehouse. This software also helps the company to ease the employees' day-to-day job of handling the inventories.

– **Order Picking Strategies**

Besides that, the company can implement an order picking strategy so that they can improve their efficiency in operation, thus increase the customers' satisfaction. The ability to order pick efficiently and accurately process customer orders will be very beneficial for the company as it will increase the productivity of iHS Sdn. Bhd. in handling their inventories. The key objectives in designing an order picking operation also include reduction in cycle time and increase in stock accuracy.

– **Accurate Records Maintenance**

Since the company is having trouble of delivering wrong items to their customers, it is important that the company maintain an accurate record of the inventories. This can be done by upholding a more regular, smaller cycle counting and reconciling routine, instead of yearly physical inventories counting. A business usually shuts down for a day up to a week every year to do the physical counting of the inventories to make sure that the data are matched. However, this practice used a lot of time and cost. Therefore, it is advisable that the company changed its way of counting the inventories by doing the checking regularly and one section at a time as it is more convenient.

– **Training**

Continuous training programme is very important to maintain an efficient inventory management. This is because most of the inventory issues such as inventory accuracy, product identification and damage can be traced back to the human mistake. Inadequately trained warehouse staffs produce inventory problems that better-trained personnel regularly can escape. For instance, an under-qualified forklift driver is more likely to damage products during inventory put away and retrieval than an experienced forklift driver. Suitable training grows a warehouse's productivity and cuts inventory management problems.

CASE PRACTICE

In a real practice, the operation manager of iHS Sdn. Bhd. practiced the above solutions to improve the layout in their warehouse and inventory management. The above solution of maintain a storage strategy helped the company in reducing the storage area as the spaces in the warehouse are being fully utilized. Besides that, he also found that since the items are being classified with details, it reduced the amount of inventories as they are able to be managed efficiently. Practicing the accurate records maintenance allows the company to have stock accuracy, picking accuracy and increase their fulfilment rate. From the above solutions provided, it is definite this case study can help improve the company's layout, thus increase their inventory management.

This case study was a practice of Operations Management, Layout Strategy and Inventory Management.