



CHAPTER I

INTRODUCTION

1.1 Back Ground and Rationale of Problem

Wholesaler is a distributor or middleman who sells mainly to retailers and institutions, rather than direct to consumers. Wholesaler is a middle man of the supply chain and its key important roles of the chain are to hold local stock, provide local credits for retailers, deliver product knowledge to retailers and to maintain customer relationships to company.

Largest asset on the balance sheet for most wholesalers is an inventory or their stock. In the wholesale business, inventory is the only asset that can be easily manipulated. The most critical success factor for marketing success of wholesalers is inventory because wholesalers would be in trouble if they have to keep telling customers, "I'm sorry we're out of that item. May we order it for you?" Even though the items are selling briskly, they will lose customers if they don't have an item in stock. When the customer spends, they have got to be ready with the goods. This is why inventory is important to the success of wholesalers.

In many wholesale operations, the single largest asset is inventory. Control of this investment is vital. It will eliminate a number of the problems associated with capital shortages and will also provide capital to permit expansion of operations for increased sales and profit. Inventory problems often require prompt corrective action. In wholesale company, the market life of inventory is short and if inventory is insufficient when market demand peaks, sales and profits are lost. If inventory is excessive when demand declines, the excess must be cleared, often at sharply reduced prices, again affecting profits.

— Although inventory is the largest asset that they invest money on, many Thai wholesale distributors do not know the inventory value of their product at their warehouse, what the optimum inventory levels should be based on weeks of supply, what the inventory minimum and maximum points are, or what the safety stock levels should be, etc. All of these inventory components, while important to most warehouse management systems, have not been readily recognized by most Thai wholesalers.

In the last 3 years, Thai retailers' total market share has been decreased by threat of many big distributors such as Lotus, Carefour, BigC. When retailers' sales

volume has decreased, Wholesalers' sales volume has been affected hugely also. Because the main customers of wholesaler are retailers then wholesalers are forced to do some actions for improving their operation to maintain their profit. As I mentioned earlier, Inventory is the largest asset in most wholesalers so if they can manage their warehouse well, it will enhance their competitive capability in the term of cost and service.

This thesis has used Rungwattana 1994Ltd.(RW) which is one of Thai wholesalers in Sampeng, as a case studied company to study on Thai wholesalers' problems and requirements to improve their warehouse management. RW is the wholesaler company that provides household products to retailers. RW have one store in Sampeng that they settle more than 30 years and another 2 buildings that are used as warehouse. There are more than 1,500 items in their warehouse. They used 2 commercial building that locate near Sampeng as a warehouse because it is comfortable for them to deliver product to customers and store.

Rungwattana 1994Ltd.(RW)'s main problems are High excessive inventory because there is no system or record to check quantity of each product in the warehouse, and Storage capacity is not enough occasionally. Due to they don't know exact amount of items in stock then they keep ordering item to keep in stock.

From the case of RW, their problems come from poor inventory and warehouse management but the root cause is untidy warehouse so inventory system could not work accurately and lack of data record system such as stock location, movement of item.

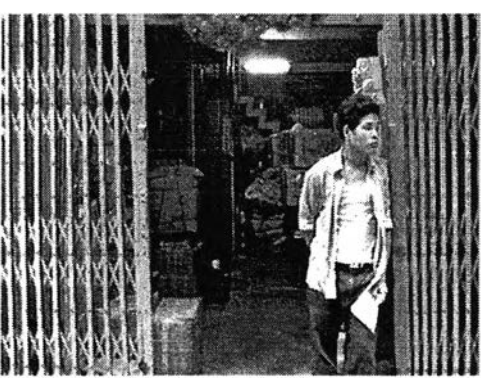


Fig.1.1-The first floor of building no.2



Fig. 1.2-Storage Method in a warehouse

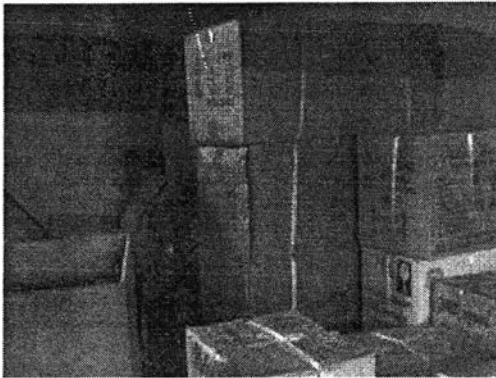


Fig1 .3- The way they keep items in warehouse.



Fig1.4- Some items are allocated on the rack.

Inspiration from these problems stimulates the idea of design the warehouse management which is suit to Thai wholesalers. Warehouse management which can improve efficiency of Thai wholesalers must consist of 3 areas: Warehouse Layout, Warehouse management system and Warehouse operation process. These 3 areas must support each other to solve the existing problem in warehouses of Thai wholesalers.

Consequently from the problems, this thesis aims to develop the warehouse management that improves on space utilization, stock locator and information system that support inventory system to function correctly.

1.2 Objective of Study

The objective is to propose the warehouse management system, which controls movement and storage of items within a warehouse with the limited area for the local wholesalers.

1.3 Scope and Assumption of Study

This study is to provide the appropriate warehouse management systems to Thai wholesaler based on a case study of Rungwattana 1994 company. The scope of study is limited to:

- Product: Focus on regular product of Rungwattna 1994 company
- Historical document: This study would base on the company data and documents from Jan. 2004 to Sep. 2004.

- This thesis does not include implementation of the designed warehouse system.
- This study does not concern on warehouse management software development but it could be mentioned just as the tool to use in the system.

1.4 Methodology and Schedule

1. Study theory and research involving thesis.
2. Study and collect the current data of warehouse and item characteristics to examine and analyze.
3. Examine and analyze the collecting data with studied theory and previous research in order to design the appropriate warehouse management.
4. Develop and design the appropriate warehouse layout and facilities.
5. Develop the warehouse systems such as the storage system, the item identifying system and the allocation system etc.
6. Develop warehouse operation process.
7. Propose the designed warehouse management to the wholesaler.
8. Evaluate and follow up the feed back to improve.
9. Conclusion and Suggestion.
10. Thesis write up and submission.

Schedule for the sequence methodology is illustrated in the following table.

Scheduling

Procedure	Year 2004										Year 2005			
	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Study theory and research involving thesis	█	█	█											
Study and Collect current data of warehouse and item characteristics to examine and analyze.			█	█	█	█								
Examine and analyze the collecting data with studied theory and previous research in order to design the appropriate warehouse management.						█	█							
Develop and design the appropriate warehouse layout and facilities.								█						
Develop Warehouse systems such as Storage system, Identifying and sorting system etc.									█	█				
Develop warehouse operation process.											█			
Propose the designed warehouse management to the wholesaler.												█		
Evaluate and follow up the feed back to improve.													█	
Conclusion and Suggestion.												█	█	
Thesis write up and submission										█	█	█	█	

Table 1.1-Scheduling and Time frame of studying

1.5 Expected Outputs

Once the study is completed and finished as the developed warehouse management system, here is expected positive consequence:

- The item tracking system of quantity and location of each item in the warehouse.
- The warehouse database system that provides quantity and storage location of each item to operators.
- Design of storages and facilities which are appropriate to physical attribute and characteristic of items in warehouse.
- The appropriate allocation system or item placement system, which help operators to allocates each items into its suitable storage in the warehouse.
- The warehouse operation process that goes well and bring the best use of new warehouse system and operation.
- The new warehouse layout that make the best use of warehouse space.

1.6 Expected Benefit

- Storage capacity is adequate with demand from forecast.
- To eliminate unnecessary costs such as sink cost and holding cost.
- Increased service level.
- Reduce lead time in warehouse operation.
- Lower inventory
- Decreased dead stock

Side Benefit

- Stimulate other wholesalers to think about their most important asset.
- Guiding case for other wholesalers who think of improving their operation processes to survive from the threat of big distributors.