Inventory Management in Distribution Channels

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Abstract

The purpose of this paper is to determine the actual strategies used in Inventory Management in the field of Distribution phenomenon. In the first part of the research, theoretical backgrounds will be reviewed in order to provide better understanding the importance of Inventory Management in Distribution Management. The qualitative data were gathered by face to face interviews and a phone interview from four selected intermediaries. The study finds intermediaries practicing JIT in the sales and distribution and maximizing the sales activities and minimizing the inventory cost by giving up on an opportunity cost.

Keywords : Materials management, inventory management, distribution, distribution channels

1. Introduction

The objective of this research is to investigate the actual strategies used in inventory management in the field of distribution channels. To stay closer to the data and any observations to be made for such an area in the context, the qualitative approach is used. A chosen sector, distribution channels, is large phenomenon where there are many kinds come in different sizes and shapes and it is ambiguous enough to conduct the qualitative research. The constructions of reality formed by the data will be the starting point of the research to investigate the reality and gather the information. In order to increase the validity of research, the researcher has chosen the qualitative approaches to take the advantages of extended and intensive contacts with the interviewees.

2. Literature Review

2.1 Inventory Management

Materials Management is the concept of having one department responsible for the flow of materials, from supplier through production to consume according to Amord, Chapman, and Clive [1]. For companies to
minimize total costs and provide a better level of customer service, many companies have adopted this type of organization. There is another term used widely is inventory. Inventory is defined as “the stock of any item or resource used in an organization” by Chase and Aquilano [2]. It is a concept indicating a temporary condition where the flow of objects, main elements of the system, connecting both functions of production and sales of company is tied up at a certain point in the system as Jeong stated [3].

In Korean, “제고(Inventory)란 기업의 생산과 판매라는 두 기능을 연결하는 시스템의 주요소인 물체의 호흡이 이 시스템 내의 어느 지점에 정체되어 있는 상태를 가리키는 것으로서 일시적 관점에서 발생하는 개념이다 [3].”

It refers to materials and finished products companies have and hold for the purpose of production or meeting the demands of customers according to Jibok Jeong [4].

The definition in Korean, "제고(Inventory)는 기업이 제품의 생산이나 고객의 수요에 대비하여 보유하고 있는 자재 또는 완제품을 의미한다 [4]."

The overseeing and controlling of the ordering, storage and use of components that a company will use in the production of the items it will sell as well as the overseeing and controlling of quantities of finished products for sale [5]. Therefore, inventory management is the process of efficiently overseeing the constant flow of units into and out of an existing inventory. Inventory for a business can be major assets which represents an investment tied up until the item is sold or used in the production of an item that is sold. However, it costs money to store, track and insure inventory. When inventories are mismanaged, it can cause significant financial problems for a business, whether the mismanagement results in an inventory glut or an inventory shortage. In this research, a term inventory management is used since the study focuses on the distribution channels and intermediaries who handle complete products or finished goods.

1.2 Distribution Management

Distribution is an activity transferring tangible product and intangible service from the producer to customer according to Shin Mo Lee [6].

In Korean “유통*물류는 유통의 상품과 무형의 서비스를 생산자로부터 소비자에게 이전시키는 활동으로 정의할 수 있다 [6].”

Product distribution (or place) is one of the four elements of the marketing mix stated by McClean [7]. Distribution is the process of making a product or service available for use or consumption by a consumer or business user, using direct means, or using indirect means with intermediaries according to Kotler, Keller, and Burton [8]. In this process, there are many parties involved. Distribution channels are the company and every
individual participated in transferring the goods and services from the producers to customers [6].

In Korean, “유통경로(distribution channel)는 상품 및 서비스를 생산자로부터 소비자에게 이전시키는 과정에 참여하는 모든 개인 및 회사의 결합 [6].”

A distribution channel can include distributors, agencies, wholesalers, retailers, and even the Internet. The study focuses on the intermediaries between the main companies and customers.

3. Methodology

3.1 Qualitative Research

The objective of this research is to investigate the actual strategies used in inventory management in the field of distribution channels. In order to stay closer to the data and any observations to be made for such an area in the context, the qualitative approach is used. In the following, the explanation why the qualitative method is chosen, how the data collected, and what kind of analyzing procedure is used.

A chosen sector, distribution channels, is large phenomenon where there are many kinds come in different sizes and shapes and it is ambiguous enough to conduct the qualitative research. According to Van Maanen, [9] the definition of qualitative techniques is as follows:

‘An array of interpretative techniques which seeks to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world’ [9].

Therefore, the qualitative research method is chosen in order to stay close to the real experiences based on the data collected from the intermediaries in distribution channels. The constructions of reality formed by the data will be the starting point of the research to investigate the reality and gather the information. In order to increase the validity of research, the researcher has chosen the qualitative approaches to take the advantages of extended and intensive contacts with the interviewees.

3.2 Data Collection

In order to create qualitative data, the important natural language data are collected through the guided open interviews in semi structured methods according to Easterby-Smith, Thorpe, and Lowe [10]. As a qualitative data analysis for the obtained data, the grounded analysis is used which provides a more open approach to data analysis and is closely linked to the idea of grounded theory [11]. Qualitative research methods have been
increasingly used in a wide range of academic and professional areas, especially in fields that deal with people and their behavior or experience, as an object of study. Interviewees were informed that the interview would respectfully be used for the study of inventory management. Informal field work was done thru informal interviews using the method of memos during their time off.

In collecting or interviewing, the participants all wanted their identities to be confidential and agreed that the authorized information can be used for my research study. The privacy of participants will be protected and collected information will be kept and used only for the purpose of author’s research. A timing of the study was a main limitation since it required intensive interviews simultaneously in many different circumstances and hours of working in translations, transcribing, and analyzing in three days. Three trips which required not only the time and distance, but the expense were a quite challenge. Most of all, the interviewing was always challenged to both researcher and participant in establishing the mutual base in order to communicate well. All conducted interviews are definitely precious and important although the most of them are done between the strangers.

4. Data Analysis

4.1 Data 1: Sempio Seongnam (Private Agency) – Sempio Foods Company [12]

Sempio Foods Company is about 70 years old company established in Korea. The company started as a soy sauce manufacture in 1946, began sales of “Sempio” brand soy sauce in 1954, and established Korea’s first research laboratory for soy sauce, bean paste, red pepper paste, etc. The business has expanded into other food product areas to noodles, vinegar, oil and other seasonings, canned fish and teas.

Sempio Seongnam is a privately owned agency which has a right to sell and distribute Sempio products only in Seongnam, Kwangju, and Yongin area based on the contract. There is about nine staff involved in sales and delivery activities, two for Seongnam, three for Kwangju, two for Yongin, and two for the office. Total of four one ton trucks are used for the deliveries and each truck cost about average of six (when two people are on board) to eight (when three people are on board) million Korean won to operate and maintain each month. The cost per truck includes labor, insurance, fuel, etc. In addition, one million and five hundred thousand won for the storage use is another monthly expense. Unexpected expenses can be also occurred from time to time.

The agency raises approximately an average of two hundred million Korean won each month. There are
differences in seasons since Jangs have seasonality, less demand in winter time. The top three profitable products are soy sauce, salt, and jerky [13] according to the agency personnel. Sempio Foods Company has established a brand value [14] which is a favor to the agency competing in the market. However, it is still a challenge for the agency to handle all the product lines of Sempio Foods Company as it is agreed in the contract. In order to keep the right to sell and distribute in the designated areas, the agency had to purchase all the product lines of the company in the first place at two hundred million wons to start. The inventory of all items has to be also restocked in order to keep up with and maintain the required list. Everyday inventory is handled by each agent during her or his sales and delivery activities and reported to the owner to be logged into the centralized program of Sempio Foods Company called, “Bokdongyi.”

Unfortunately, the agency has about four hundred million Korean wons worth inventory in stock. How has it accumulated that much? Sempio Foods Company gives incentives to the agency, 2% on sales and 2% upon full payment, for the purchase of two hundred million Korean wons each month. The agency has limitation to sell only within the designated areas and no dumping is allowed. There are returned items they have to take like rejects, products with date expired, and products from their customers who are closed down. Since Sempio Foods Company only takes 0.2% of sales as rejects, the rest becomes a burden to the agency. Making profit working under the obligations and limitations has been a big challenge for the agency. The agency has worked with Sempio for about twenty years. They have figured that there is about from 0.5% to 0.8% loss a month. The interviewee said that he chooses to give up on incentives one time or twice a year by not making a purchase in order to keep the inventory low. It can be considered as a part of asset in case selling the agency he added positively.

4.2 Data 2: Dan Mi Beauty Distribution (Private Agency) – Cume [15], NewGenCorea [16]

Dan Mi Beauty Distribution is a privately owned agency which is contracted to multiple companies and has rights to sell in Incheon area. The owner is in charge of all the orders of freelancers who handle both sales and distribution. While the representative of the agency is responsible for the storage inventory and collects incentives from the companies making orders and purchases, the freelancers enjoy no burden of a storage expense and an inventory cost other than the rejects or returned items they receive directly from their own clients.

The interviewee has worked in the field for about eight years and raises approximately an average of thirteen million Korean wons each month. The most profitable products are color (hairdyes) and perm products, but besides there are required items he must sell such as styling and clinic products. He works with total of
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six different companies, but mainly handles products from two major companies, Cume and New Gen Corea. A biggest challenge is working with too many product lines from the multiple companies. Like Sempio Seongnam, the inventory of all items has to be also restocked in order to keep up with and maintain the required list. Everyday inventory is handled by during his sales and delivery activities and reported to the agency head through KakaoTalk.

Fortunately, the freelancer has no obligation for a storage expense and inventory cost, but the stock. He works on average of 35% margin and responsible for his expenses in sales and distribution activities. Choosing to be a freelancer leaves him no inventory cost, but the cost for promotion activities which takes a part of his expense supplying rubber gloves, rubber bands, and other supplies. He said it is a quite challenge to be a freelancer, but he prefers to stay this way rather than running the agency.

4.3 Data 3: Do Young Agricultural Food (Private Agency) – Do Young Aloe & J Food [17]

Do Young Aloe & J Food is a company producing environment-friendly agricultural products, Aloe Saponaria, Aloe Red Ginseng, Aloe Collagen, etc. Do Young Agricultural Food is a privately owned agency which is contracted to only Do Young Aloe & J Food and has exclusive distribution rights to sell and distribute Aloe Red Ginseng anywhere in Korea. Mr. Ahn is an owner who is in charge of all the orders, purchases, and handles sales activities. While the other two owners of the agencies are responsible for the storage expenses and inventory cost above, Mr. Ahn enjoys no burden other than making arrangement for the inquiries of the rejects or returned items he receives directly from his clients. What is the case? He has a very special contract with the company for having his purchases in a made to order basis. Witnessing the practice of the concepts of Just-In-Time, which stresses the need to supply customers with what they want, when they want it, and to keep inventories at a minimum [1].

Mr. Ahn has worked in the field for twenty years and raises approximately an average of eighteen million Korean won each month. The average sales marked about forty million won until 2011, but it is declining due to the appearance of other health food products in the market. A challenge for him is working with the sole product line covering every corner in Korea. Everyday there is no cost for inventory, his orders and purchases are done through KakaoTalk, the manufacture handles shipments of the orders directly to his customers, and he only needs to be on the road for his sales activities.

4.4 Data 4: Armour-Eckrich Meats, South Region based in Mesquite, Texas (Company Agency) – John Morrell Food Group from Smithfield Foods (US) [18]
Mr. Jonny Bae is a regional marketing and sales manager of John Morrell Food Group who belongs to the corporate office in Cincinnati, Ohio and based in Mesquite, Texas overseeing the South region of the states, Oklahoma, Lousiana, Texas, etc. Within John Morrell Food Group, there are many companies like Armour-Eckrich, Carando, Curly's, Mohawk, Patrick Cudahy, Saratoga and etc. John Morrell Food Group belongs to Smithfield Foods which is the biggest pork company in United States which was just sold to Shuanghui International Holdings Ltd., which is the largest shareholder of China's biggest meat processor.

John Morrell Food Group works with its own branches to take care of stores like Dollar General, Big Lots, many other local grocery stores, donut shops, and etc. while the corporate directly handles places like Wal-Mart, Albertsons, and many other major chains by using third vendors to deliver. The corporate sell direct from the retail team called "Retail Division" to the individual "Wal-Mart" warehouses and they distribute to stores and that goes same for the other major chain grocery stores like Albertsons, Krogers and etc.

For the branches in Texas receive all stuff from Americold [19] in Fort Worth, Texas which are from own factory in Junction City, Kansas. Americold is the global leader in temperature-controlled warehousing and logistics with the largest network in the United States. It manages over 90,000 truckloads of freight annually and it is a vital part of supply chain, connecting food producers to end customers. There are 17 plants including the one in Kansas in Junction City. Plants do manufacture some different things but most plants are focused on one product category. Therefore, they do not have many plants making the same products. The manufacture in Junction City makes all the smoked products like smoked sausages for the whole company. The plan in Springdale, Ohio produces 80% of the hot dogs and so on. Currently, there are 17 plants producing all Armour Eckrich and John Morrell products.

The branch in Mesquite, Texas receives its shipments three times a week. The top three profitable products are sausage, bacon, and ham products. The branch has separate teams for sales and distributions, however, distribution team members are empowered to sales activities. Everyday inventory is handled by each team member during her or his sales and delivery activities and logged the information to their carrying device called, handheld. Handheld is a device which the route salesmen (the delivery men) carry along with them to input all items sold and returned. Also they are able to print out receipts for the customer right there on the spot with these handhelds. All out dated products or damaged products are to be returned to their own branches to be disposed.

5. Findings and Conclusion
The actual inventory management in the field of distribution is considered as an unwanted accumulated asset, a challenge, a burden, and an unavoidable loss in the perspectives of the intermediaries. The obligation and limitation Sempio Seongnam has in their sales activity; no dumping and limited to three designated areas, leaves us a question. For the Sempio Seongnam and a branch of John Morrell Food Group in Mesquite, Texas, the inventory cost was determined as an expected loss, however, they both tried to separate the products which can be sold from the ones have to be discarded. Strategies used in the inventory management from the data are trying the best not to have inventory by practicing JIT in the sales and distribution and maximizing the sales activities and minimizing the inventory cost by giving up on an opportunity cost.

References


