

The Essence Of Supply Chain Management In Indian Modern Retail

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INTRODUCTION

Retail, one of the largest sectors in the global economy, is going through a transition phase in India. Retailing has become a green pasture bearing a vast amount of untapped market potential which is eyed by the new as well as existing entrepreneurs. This suggests that the potential for growth is immense and modern retailing is poised for a mega change. Hitherto, dominated by the traditional formats in form of 'mom and pop' stores or the 'kiranas', with the 'shoppertainment' in vogue, there is a paradigm shift from the traditional (unorganized) to modern(organized) retail.. The country's retail sector presents a unique opportunity as consumption driven economy to investors across the globe to use India as a strategic hub.

During an economic slowdown, there was an intense pressure on the retailers to cut costs so as to sustain profits. At present, when the bigwigs of the developed countries around the globe are facing economic slowdown, surprisingly, India's economy is poised for an exceptionally good growth rate of around 8%-9%. Again, the challenge in retail sector remains the same i.e. to cut costs so as to maximize profits. Hence, in order to be cost effective during recession, recovery or boom time, focus on a highly efficient supply chain is imperative to gain competitive edge. India can position itself as a lead player in Asia, if the retail sector here attains the competitive strengths by responding to the changing markets through supply chain. As the retail market matures, reverse logistics (RL) management also needs to be considered as an important supply chain strategy to cut costs and improve efficiency.

OBJECTIVES OF THE STUDY

- 1) To study of role of supply chain in retail in India.
- 2) To analyze the supply chain of food and grocery.
- 3) To identify the challenges and suggest some measures for managing supply chain effectively in food supply chain.
- 4) To analyze reverse logistics as an effective supply chain strategy.

SUPPLY CHAIN AS A VITAL COMPONENT IN RETAIL

In today's business environment where competition is burgeoning, companies are under intense pressure to reduce costs, expand into new markets and develop new products. Hitherto, most retailers in India have invested majorly into the front end, but relatively little on the back end and supply chain. Even in developed countries like the USA, Germany and England, where modern retail is highly developed; managing supply chain is a major concern. Logistics costs in India equals 13% of the GDP, which is significantly higher than those of the developed countries, where it equates to only around 8-10 percent. Even a slightest reduction would result in considerably huge savings for the country. However, one needs to know that the nature of retail sector in India is different from other countries around the world. The retail sector in India is highly fragmented and there are huge inefficiencies in the supply chain.

In modern retail, where competition is intense and stakes are high, customer satisfaction is paramount. With the end consumer demanding a variety of product mixes at affordable prices, the need for on shelf availability, and for on time delivery of products, the role of supply chain is vital. Effective and efficient supply chain can act as the greatest asset to sustain the trends in retail to manage a ready flow of goods and services. The role of supply chain in Indian modern retail is very significant as the growth of this sector depends on it.

A typical supply chain is a network of suppliers ► Factories ► Warehouse ► Distribution centers ► Retailers through which raw materials are acquired, transformed into goods and delivered to customers to satisfy their needs. To

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increase the efficiency and effectiveness of service, retailers have to collaborate with all parties concerned and coordinate all the processes in their supply chain.

A well-modern supply chain thus helps in reducing the inventory in supply chain, avoiding the bull whip effect, improving supply chain cost efficiencies and maximizing the visibility of the supply chain, resulting in substantial tangible business improvements. It also helps in averting potential stock outs, space planning, staffing needs, placing realistic orders, so that the products are available at the ***Right Time, Right Place, Right Price In A Right Quantity Of Right Quality To The Right Customer.***

SUPPLY CHAIN FOR FOOD AND GROCERY- AN ANALYSIS

BRIEF REVIEW OF THE SEGMENT

According to KPMG, the food and grocery market in India is expected to reach \$482 billion in 2020. The overall food and grocery segment contributes to about 60 per cent of the retail sales in India and comprises mostly of the traditional sector. The food and grocery retail is going to be the major driving force for the Indian retail industry. Food and grocery products include dairy products, edible oils, farm products, sugar, fruit juices, packaged food, concentrates, hot and cold beverages, breakfast foods, biscuits and confectionery etc. However, at present, it comprises of less than 10 per cent of the modern retail sector, but is expected to grow at 25-30 per cent in the coming years and reach 40% by the year 2025.

REALITY CHECK

In India, about 60 percent of food quality is lost in the supply chain from the farm to the final consumer. Consumers actually end up paying approximately about 35 percent more than what they could be paying if the supply chain was improved, because of wastage as well as multiple margins in the current supply structure with numerous intermediaries. A farmer in India gets around 30 percent of what the consumer pays at the retail store compared to USA where farmers can receive up to 70 percent of the final retail price and wastage levels are as low as 4 to 6 percent.

MODUS OPERANDI OF MAJOR CHANNEL INTERMEDIARIES

The retailers in food and grocery business work on wafer-thin margin business and competition amongst them is intense. The food supply chain is complex with perishable goods and involves numerous small stakeholders and it starts at the farm and ends with the consumer. It may start with Breeding ► Seed production ► Agricultural growing ► Packing ► Processing ► Final manufacture ► Merchants ► Wholesaler ► Retailers ► Consumers. Or in case the food products are imported, the supply chain consists of (international suppliers) Imports ► Packing ► Processing ► Final manufacturing ► Merchants ► Wholesalers ► Retailers ► Consumers. Sometimes, it is possible that the food is supplied directly to the retailers from the manufacturers, or from packing to directly the retailers depending upon the nature of the products and the bargaining power of the retailers. The perishable nature and daily use of the product requires a strong supply chain through select liaison with competent vendors' in order to sustain competition. Maintaining on-time programmed delivery of fresh produce from a large and scattered production base is complex. The agri food supply chain has slowly evolving from the earlier carpet bombing technique of supply chain comprising numerous levels of intermediaries such as the farmer ► Consolidator ► Agent ► Trader ► Wholesaler ► Retailer ► Consumer to a more precision bombing technique comprising of farmer ► Wholesaler ► Retailer ► Consumer. For packaged products, it may be Factory/ Domestic supplier / International Supplier ► Distribution Centre ► City hub ► Retailer ► Consumer.

SUCCESSFUL FOOD SUPPLY CHAIN MODELS IN INDIA

Efforts are being taken up by the big retailers in India like the Future Group with retail stores like Big Bazaar and Food Bazaar, TATA's Star Bazaar, Reliance Retail's Reliance Fresh and Wal-Mart and Bharti to improve the efficiency and effectiveness of supply chain and logistics. There are some successful supply chain models in India for food and grocery such as the :

✿ **E-choupal** which is an ITC success supply chain story of procurement of produces from small farmers where earlier, the supply chain was traditional and it constituted of farmers who sold the produce to the nearby mandis (local market) and to the middlemen who clearly exploited the farmers. Now, through e-choupal, the farmers are well

informed by sanchalak (leader) and through samyojak (ITC's agent) they supply their produce to the mandi and to Choupal Sagar (the distribution centre of ITC) thereby, creating win-win situation for both. Even Food Bazaar is expected to take advantage of the infrastructure by partnering with local dealers through ITC's Choupal Fresh for the supply of fruit & vegetables.

✿ **Amul** successfully operates a supply chain which handles a highly perishable commodity like milk in huge quantities. It acts as a cooperative using a simple hub and spoke model. Some surplus milk is also sent to a factory to be converted to other milk products (reverse logistics).

✿ **Best Price Modern Wholesale**, a joint venture between the world's largest wholesale retailer- Wal-Mart with Bharti Enterprises with its warehouse store is expected to help drive efficiencies across the supply chain and work towards the betterment of India's farmers, retailers and small manufactures.

✿ **McDonald's** is one of the few companies which epitomizes supply chain management. The back-end activity of McDonald's for Mumbai and Delhi is managed by Radhakrishna Group, which operates distribution centre (DC) that specializes in handling large volumes, providing the entire range of services including procurement, quality inspection, storage, inventory management, deliveries, data collection, recording and reporting. Ranging from liquid products coming from Punjab to lettuce from Pune, the DC receives items from different parts of the country. These items are stored in rooms with different temperature zones and are finally dispatched to the McDonald's restaurants on the basis of their requirements. The company has both cold and dry storage facilities with capability to store products up to -22° C as well as delivery trucks to transport products at temperatures ranging from room temperature to frozen state.

✿ **Adani Agri Logistics (3PL)** provides complete supply-chain from grain storage to transportation to the last mile connectivity.

✿ **GATI's** model for distribution of Alphonso mangoes throughout the country with the Information Technology support has been quite successful.

CHALLENGES IN MANAGING SUPPLY CHAIN EFFECTIVELY FOR FOOD AND GROCERY

One of the major impediments in managing supply chain effectively for food and grocery is the infrastructure connecting the stakeholders which is very weak in terms of improper road, low connectivity of rail, and air links, ineffective ports, shortage of power supply and inefficient warehousing facilities. Moreover, each stakeholder such as the farmers, wholesalers, food manufacturers, retailers all work independently rather than being interdependent. In India, very few retailers manage supply chain unlike the west as modern retail is still in the nascent stage.

Following are some major challenges and possible suggestions and recommendations to improve and create a robust efficient supply chain for food and grocery-

✿ **Challenge :** Lacuna in the terms of effective mode of transportation and warehousing, which forms the crux of supply chain.

✿ **Suggestion :** The government's pledge to build 10,000 kilometers of new roads and improve ports by 2010 should help. Building up a complex distribution center is a must for tackling complex supply chain network. A standard needs to be set up for suppliers, and compliance has to be met by the vendors. However, the bulk of the infrastructure building which includes supplying their own electricity, running water and road access should preferably come from public-private partnership. Until the infrastructure develops and retail markets mature, local outsourcing may be gainful.

✿ **Challenge :** Highly fragmented and supply chain network.

✿ **Suggestion:** The Farmer-Corporate model relationship works best and helps both the farmers and the corporate in bringing the high quality, low cost product to the retail shelf. The centre and state government can act as a catalyst by providing assistance to the farmers. With the emergence of Private Label, even the retailers need to work with the farm community in developing an efficient supply chain and to leverage on the cost advantage at both ends. By building efficient and effective supply chain techniques, it is possible to serve the population with value added food while simultaneously ensuring remunerative prices to the farmers.

✿ **Challenge:** Lack of coordination among large and scattered stakeholders (intermediaries).

✿**Suggestion:** Cooperation in cross functional support rather than competition needs to be promoted. Focus should be on creating a lean supply chain so that a coordinated effort among stakeholders eliminates waste (non value added cost) across the supply chain. Cooperation than competition among the stakeholders in the supply chain will make the chain more effective and lead to higher growth in revenues and profits. This would further help in leveraging the core competence of each player in the supply chain.

✿**Challenge :** Lack of visibility in supply chain.

✿**Suggestion :** Investment in commercial vehicles having tracking systems so as to create a better visibility in supply chain is a must as at present. Only approximately 3000 vehicles have tracking system.

✿**Challenge:** Limited use of technology in retail.

✿**Suggestion:** Modern retailing is a 'technology-intensive' industry. Information sharing is a must for managing a robust food supply chain. Sharing of POS- point of sale data, data warehousing, Efficient Consumer Response (ECR) will act not only as a differentiator for the successful retailer, but will be a classic example for minimizing the distortions due to bull-whip effect and reducing perceived variability of demand by the partners in the chain and help in being more responsive to consumer demand. Moreover, use of RFID, WI-FI, Bar Code, electronic article surveillance, smart card are some of the e-based technologies which provide retailers to process information about their operations and also prevent theft and promote store goods. For example in 2003, Wal-mart deployed the radio frequency distribution through a pilot approach and witnessed 1% improvement in inventory control.

✿**Challenge :** Lack of expertise in managing supply chain.

✿ **Suggestion:** Establishing a core and dedicated logistics team to manage the supply chain is essential. Delivery success in the short term won't be based on technology only, but would also rely on relationships and communication. Hence, training, coaching, counseling and mentoring have to be extended to all the parties in the supply chain. For example, it is important to conduct courses and training sessions to stakeholders on cold chain management.

✿**Challenge:** Role of Third Party Logistics(3PLs) is limited.

✿ **Suggestion:** As retail grows, the assistance of customized solutions in transportation by 3PLs/4PLs is required to make supply chain more effective. Moreover, outsourcing along with the consolidation of 3PLs players would result in improving efficiencies and lowering costs and better manage the supply chain rather than relying on own logistics.

✿**Challenge :** Limited use of innovative techniques of managing supply chain.

✿ **Suggestion:** As competition intensifies, innovations in distribution rather than following the traditional techniques of supply chain for distribution of products is required to build competitive advantage. For example, Wal-mart clearly ousted K-Mart by building up its competitive advantage by pioneering the concept of cross-docking in its distribution.

✿**Challenge :** Shrinking product life span and managing returns.

✿ **Suggestion:** Focus on reverse logistics. Mapping supply chain backwards is also essential for efficient supply chain network of perishables and food items with respect to time, quality and quantity. It is important to take early decisions in either disposing the products or using it before it becomes stale and outdated.

REVERSE LOGISTICS: THE NEW SUNRISE SECTOR IN SUPPLY CHAIN

Reverse logistics has assumed a new priority as an effective tool in supply chain as cost optimization. Simply said, it is a back-end route of a logistics process. With return policies becoming more lenient, managing products in a reverse chain has become a greater challenge for retailers. Normally, forward logistics deal with events that bring the product towards the customer. In the case of reverse, the resource goes at least one step back in the supply chain. For instance, goods move from the customer to the distributor or to the manufacturer due to damage, recalls, defective, seasonal inventory, excess inventory etc.

WHY REVERSE LOGISTICS?

The key to a successful supply chain is not only planning how to distribute products effectively, but how to bring it back both customer returns and obsolete products. Managing returns effectively allows to recapture value or reduce write-offs, while keeping the customers happy. Reverse logistics typically answers the following questions such as how much of goods are returned, why it is returned and where is it going? It is necessary for the retailer to manage product returns in a holistic way so as to reduce the costs and also future returns significantly. It also ensures higher

customer satisfaction and trust and higher cash flows to the company as well through better customer services. Certain drivers such as growing environmental concerns, fierce global competitiveness, higher customer expectations and stricter regulatory norms in many countries regarding tracking and recording the product recycling and disposition, reverse logistics has significantly gained importance.

REVERSE LOGISTICS FOR FOOD AND GROCERY /PERISHABLES- AN ANALYSIS

Reverse logistics for food and grocery is a daunting task as returns must be managed with great precision to meet regulatory and health standards. For example, food manufacturers must comply with the Prevention of Food Adulteration Act, Insecticide Act, Milk and Milk Product Control Order (MMPO), Meat Food Product Order 1973, Fruits & Vegetable Products (Control) Order FPO 1955 and many more. In case of food and grocery, timing of returns is important as they are perishable.

Some of the strategies for managing reverse logistics for food and grocery effectively are as follows-

✿ Use of Gatekeeping methods to check the products to be allowed into the reverse logistics system, collect, sort by deciding what to do with the products (recycle, reuse or dispose etc.) and send the products to their desired destinations.

✿ In case of unsold food and grocery products, an alternative channel can be provided for by connecting sellers and buyers for unsold products rather than dump it as a landfill fodder would work effectively.

✿ Role of technology in reverse logistics is useful for tracking and tracing the products that would be returned in the original chain.

✿ Incorporating and integrating reverse logistics with core systems database is required to speed up returns by feeding data into data warehouses, SAP systems, and so on.

✿ Feasibility of commercial reverse supply chain also needs to be considered. Very few firms have successfully invested in the systems/technology and expertise to support reverse logistics as forward logistics practice. Most of the companies do not have supply chain systems that can handle reverse logistics. With more importance given to the freshness of the product, there is a need for a more efficient reverse supply chain.

Integrating forward and reverse supply chain would result in excellencies and visibility in distribution and manufacturing process. On a more positive note, there is no better time to do formulate an indigenous retail supply chain than now. Focus should be on providing solutions rather just delivery of products to the consumers for creating customer satisfaction and enhancing the bottom-line.

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