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A Study on Supply Chain Challenges for the Indian FMCG Sector

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ABSTRACT

The term "supply chain management" emerged in the 1980s, initially introduced by consultants and later explored by the business community. In simple terms, it establishes an integrated two-way communication system among organizations involved in the supply chain to efficiently manage high-quality inventory. Supply chain management encompasses a network of facilities and distribution options, managing the procurement, transformation, and distribution of materials in both the service and manufacturing sectors. The complexity of supply chains varies across industries and firms, involving multiple end products, shared components, and various transportation modes. SCM facilitates successful supply chain management execution through technology exchange and strategic alliances, collaborating with professional consulting firms and core technology vendors.

Keywords— Supply Chain Management, FMCG, Stock Control

I. INTRODUCTION

A supply chain comprises a network of facilities and distribution channels that carry out the processes of acquiring materials, transforming them into intermediate and finished products, and distributing these final products to consumers. This idea is relevant to both service and manufacturing entities, displaying differences in complexity among various industries and companies. As per Christopher, Supply Chain Management (SCM) entails the effective management of relationships with suppliers and customers to provide superior customer value while minimizing costs for the entire supply chain. Professor Douglas M. Lambert defines SCM as the seamless integration of business processes from end users to original suppliers, involving products, services, and information that collectively contribute value to the customer

The expansion of global markets transcends traditional borders, reshaping the dynamics of supply and demand management. International corporations are propelled by markets spanning continents, compelling them to continually seek cost-effective production centers where raw materials and labor are affordable. This necessity drives the adoption of a dynamic procurement strategy that spans multiple countries, involving the sourcing of raw materials and the identification of vendors capable of supplying the required quality and quantity at competitive prices. In this context, companies often engage in global procurement, obtaining materials from diverse vendors to support their manufacturing facilities dispersed across different continents. The end products from these varied factory locations then traverse through intricate distribution networks, covering warehouses, exporting to diverse nations or local markets, involving distributors, retailers, and ultimately reaching the consumer, the supply chain is a comprehensive system that oversees various stages from production to consumer delivery.

In practical supply chains, there are often multiple final products that share components, facilities, and capacities. The material flow may not follow a linear network, and diverse transportation modes could be utilized. The list of components for final products can be comprehensive and complex.

Conventionally, different functions within the supply chain, such as marketing, distribution, planning, manufacturing, and purchasing, operated autonomously, each pursuing its own conflicting objectives. Manufacturing operations typically prioritized maximizing throughput and reducing costs without adequately considering the effect on stock levels and distribution capabilities was significant. Procurement agreements were often subject to frequent negotiations. the impact on based on historical buying patterns, lacking comprehensive information.

The consequence of these factors is the absence of a unified, combined plan for the corporation, leading to as several plans as there are corporations. There is a transparent need for a process that can facilitate the integration of these disparate functions. Supply chain management serves as a strategic approach to achieving such integration. It occupies a middle ground between fully vertically integrated companies, where a single entity controls the entire material flow, and situations where each channel member operates independently. Therefore, effective management relies on coordination among the various players in the supply chain.

The Significance of a Supply Chain Management

SCM strategy for an organization cannot be overstated. In today's business landscape, SCM strategies serve as the essential foundation for the operations of business entities. The successful coverage of markets and the availability of products at strategically chosen locations, which are crucial for revenue recognition, hinge on the efficiency of the SCM strategy implemented.

To simplify, when a new product is introduced and promoted in the market, it is imperative that the entire market within the country, along with all sales outlets, has the product readily available for customers to purchase and receive. Any disruptions in ensuring timely product availability can lead to a decline in customer interest and demand, potentially resulting in severe consequences. The design and management of the transportation network play a pivotal role in supporting sales and marketing strategies.

On a global scale, finished goods inventory is dispersed across various locations and distribution centers, often managed by third parties. Additionally, a significant portion of inventory is in transit through the transportation network, and distributors and retail points also hold inventory. Given that any loss of inventory at any point in the supply chain translates to a loss of value, the effective control and visibility of inventory become paramount within the realm of Supply Chain Management.

The management of logistics in the Fast-Moving Consumer Goods (FMCG) sector entails the strategic planning, coordination, and control of the entire product flow, spanning from the origin point to the ultimate destination. This comprehensive approach includes logistics management in the FMCG sector involves coordinating various key actions, including transportation, inventory management, order processing, and warehousing. The primary goal is to ensure the timely and cost-efficient delivery of products while optimizing the overall efficiency of the supply chain

Profitability of Fast-Moving Consumer Goods (FMCG) products is influenced by multiple factors, including brand positioning, market demand, pricing strategies, and production costs. Identifying a single most profitable FMCG product is challenging, as it is subject to fluctuations over time. However, certain categories of FMCG products have historically demonstrated strong profitability.These product types often benefit from a combination of brand recognition, consumer preferences, and effective marketing strategies, contributing to their sustained profitability in the FMCG sector.

Indian FMCG Sector

The Indian Fast Moving Consumer Goods (FMCG) sector holds the position of the 4th-largest segment in the economy, with a market volume exceeding Rs 500 billion. This sector encompasses a diverse range of consumer products that are frequently purchased, including soaps, tooth paste dairy products , confectionery etc. FMCG products are typically characterized by high in volume and low in term of unit costs. The leading Fast-Moving Consumer Goods (FMCG) companies in India comprise a mix of international behemoths like HUL, Nestle, Cadbury, P&G, along with indigenous entities such as Amul, Asian Paints, and Dabur.

Within the Fast-Moving Consumer Goods (FMCG) sector, the effectiveness of the supply chain holds significant importance. This industry is characterized by an intricate distribution network and intense competition, necessitating companies to consistently explore innovative approaches in their supply chain management..The effectiveness of the supply chain system becomes a distinguishing factor for success. Companies with well-managed supply chains are poised for superior performance, while those with inadequately handled supply chains may struggle to survive in the highly competitive market.Half of the industry's sales come from household and personal care products, with healthcare contributing 31-32%, and the remaining 18-19% attributed to food and beverage items. This distribution underscores the significant impact these sectors have on shaping the economic landscape of the nation. Its role is crucial in ensuring the smooth operations of e-commerce processes. Therefore, it's essential to explore the genuine importance of warehouse management in driving the success of the FMCG sector!

II. REVIEW OF LITERATURE

Khanzode, Vivek, and Shah, Bhavin (2017) extensively explore the current state-of-the-art literature on warehousing. They emphasize pertinent research issues based on the proposed taxonomy. The study introduces a decision framework aimed at determining the optimal quantity of depots and their necessary size within a supply chain system. While the research investigates certain performing procedures analyzing their impact on the complete logistics system, it does not center on warehouse design and operational concerns. This oversight excludes a consideration of performance measures that influence each aspect of warehousing functions and overall productivity.

Shilpa et al.'s research in 2014, the optimization of the entire distribution network can be achieved through the optimization of load planning and network structures. Their study concentrates on optimizing costs of logistics within the secondary delivery network of the retail supply chain. The research provides a thorough examination of the significance of transportation and various costs linked to retail logistics. However, it is important to note that the study has a limitation as it solely focuses on the retail distribution network of a business. Additionally, the research finds existing research gaps within this specific area.

III. PRIMARY OBSTACLES IN THE INDIAN FMCG SECTOR

Effectively Handling Product Accessibility within a Complicated Distribution Structure

The FMCG sector in India grapples with a complex distribution system involving numerous small retailers between companies and end customers. Ensuring product accessibility at the end stage of supply poses the significant challenge due to the increasing number of Stock Keeping Units (SKUs). Standard solutions from developed countries may not be directly applicable, necessitating innovative approaches.

Operating with Smaller Sizes: Contrasting in developed nations where larger pack sizes are common for cost efficiency, the Indian trend leans toward smaller pack sizes to reach the economically lower segments. This strategy, while enhancing market penetration, increases packaging and transportation costs. Balancing market outreach and logistics efficiency becomes crucial.

The introduction of domestic participants into the traditional fresh products industry:

National companies entering traditionally localized markets, especially in fresh products, face the challenge of maintaining product freshness. Decentralized manufacturing plants are essential for meeting consumer expectations, requiring a delicate balance between quality, freshness, and cost.

Dealing with Complex Taxation Structures: India's complex taxation structure impedes treating the country as a unified arcade. Changing local tax structures promote smuggling, leading to creation of grey markets. Harmonizing taxes across states, especially with the introduction of VAT, is expected to bring changes in how FMCG companies manage their supply chains.

Dealing with Counterfeit Goods: Counterfeit products cause significant revenue losses, emphasizing the need for FMCG companies should enhance their oversight of distribution channels in order to effectively address the challenge of counterfeiting.

Opportunistic Games Played by the Distribution Channel: Unscrupulous practices by distributors, such as diverting goods during promotions and illegal coupon printing, pose challenges for FMCG companies, diverting resources without adding worth to clients.

Infrastructure Challenges: Poor roads, unpredictable transportation systems, and inadequate infrastructure, especially in cold chains, impact costs and product quality. Power problems during the distribution of perishable goods, like ice cream, present additional hurdles.

Emergence of Third-Party Logistics Providers: While third-party logistics providers (3PL) are emerging, their effectiveness is still evolving. Established FMCG companies may find it more cost-effective to manage logistics in-house, particularly given the unique demands of the Indian market.

Emergence of Modern Retails: The rise of modern retail chains in India brings challenges related to bargaining power, demand for higher margins, potential channel conflicts, and the introduction of private label brands that compete with existing manufacturers.

IV. ADAPTING METHODOLOGIES AS A RESOLUTION TO OBSTACLES IN THE (FMCG) FAST-MOVING CONSUMER GOODS SECTOR

Efficient warehouse management is of utmost importance in the fast-moving consumer goods (FMCG) sector . Let's explore the vital aspects and importance of warehouse management in this sector:

Optimized Stock Control and Streamlining

Precise inventory management holds significant value for FMCG companies. A robust warehouse management system (WMS) utilizes advanced technologies, such as barcode scanning at batch, SKU (Stock Keeping Unit), and item levels, to meticulously track inventory levels.

These technologies offer real-time visibility into stock levels, allowing companies to promptly identify and address any discrepancies or shortages. Maintaining accurate inventory records is crucial in preventing stockouts, minimizing excess inventory, and mitigating the risk of product expiration.

Effective warehouse management is paramount in the fast-moving consumer goods (FMCG) industry. Let's delve into the crucial aspects and significance of warehouse management in these sectors:

Optimizing Space Utilization and Design Planning

Effectively utilizing warehouse space is crucial for FMCG brands, given the high volume of products they handle. Warehouse management systems play a pivotal role in enhancing space allocation through features like shelf management, allowing strategic organization of products and implementation of efficient storage techniques. This optimization enables e-businessess to boost storage area , reduce waste away, and simplify the selecting and sorting processes.

Ensuring Quality Excellence

Customer satisfaction is closely linked to product quality, and a robust Warehouse Management System (WMS) integrates several quality control measures, including cycle counting, expiry management, and batch management. Cycle counting entails regular inventory checks to detect discrepancies, and expiry management prevents the sale of expired goods by monitoring dates and adhering to FIFO or FEFO approaches. Batch management in WMS allows brands to identify the suitability of goods for different channels, optimizing the distribution process.

Precision and Speed in Order Fulfillment

Timely and accurate order fulfillment is crucial for FMCG products that cater to daily consumer needs. Efficient picking strategies and strategic product bundling reduce the time and effort needed to locate and retrieve products. Integrating warehouse management systems with logistics providers ensures smooth order processing and accurate picking, enhancing precise and rapid order fulfillment. The achievement of a remarkable 99.99% order fulfillment rate by The Man Company, facilitated by Unicommerce's bundling feature, serves as a noteworthy example of

Demand Driven by Data Estimating for Success

Success in the fast-paced realm of FMCG businesses hinges on accurate demand forecasting. Warehouse Management Systems equipped with robust reporting capabilities enable businesses to create comprehensive reports on key performance indicators (KPIs) and trends. This capability assists in making well-informed decisions regarding inventory replenishment and production planning.Marico Limited's partnership with Unicommerce, leveraging accurate reporting and analysis, resulted in a remarkable 100X growth in sales.

Streamlining Returns and Refunds

Effectively managing returns and refunds is a crucial element for e-commerce businesses, especially within the FMCG sector. Emphasizing product quality and safety, a well-structured warehouse management system streamlines the return process. This facilitates efficient tracking of returned products, accurate inventory management, and timely inspection of items for quality control.

V. THE DABBAWALAS OF MUMBAI CASE

The Dabbawalas are a renowned group of lunchbox deliverymen celebrated for their efficient and accurate delivery service in the city. The term "Dabbawala" translates to "lunchbox transporter" in English, and their distinctive and highly effective lunchbox delivery system has gained global recognition and study.

Service Overview:

- The Dabbawalas offer a lunchbox delivery service, primarily catering to office workers and students.
- The service involves collecting freshly prepared meals from customers' homes in the morning.
- Lunchboxes are then transported to workplaces or schools using a combination of bikes, wheelbarrows, and the local train system.
- After lunch, empty lunchboxes are collected and returned to customers' homes in the afternoon.

Key Elements of the Dabbawala System:

1. Efficient Coding System: The Dabbawalas utilize a unique and highly effective coding system to accurately sort and deliver lunchboxes. This simple yet effective coding system ensures that each lunchbox reaches the correct recipient.
2. Dependency on Public Infrastructure: The Dabbawalas rely on Mumbai's local train system for transporting lunchboxes across the city. Utilizing existing public infrastructure helps keep operational costs low.
3. Accuracy and Precision: Known for their precision and accuracy, the Dabbawalas maintain an exceptionally low error rate despite the high volume of transactions each day.
4. Teamwork: Operating in cooperative teams, the Dabbawalas ensure the smooth functioning of the entire delivery system. Each team has a designated operational area.

Business Model:

- The Dabbawalas operate on a day-to-day fee-based model, where customers pay a fee for the daily delivery of lunchboxes.
- The cooperative structure ensures that profits are distributed among the Dabbawalas, fostering a sense of pride and responsibility.

Global Recognition:

- The Dabbawalas have gained international acclaim for their efficiency and accuracy. They have become the subject of various management case studies and have been invited to speak at business schools and conferences worldwide.

Management Lessons:

- The Dabbawala system is frequently studied for its effective supply chain and integrated operations management. It provides valuable insights into teamwork, transparency in operations, and leveraging existing infrastructure.

In summary, the Dabbawalas of Mumbai exemplify a remarkable instance of a grassroots-level, highly efficient, and precise delivery system that symbolizes Mumbai's unique and effective approach to daily life.

VI. HUL'S CASE

HUL's Country Entrance Drive, encapsulated in Project SHAKTI, reflects the company's strategic initiatives to extend its market reach and distribution network in rural areas of India. Here's an overview of the key elements and components of HUL's Country Infiltration Drive:

Project SHAKTI Outline:

1. Objective: The primary goal of Project SHAKTI is to enhance the penetration of HUL's products in rural markets, particularly in areas where traditional distribution networks may be limited or non-existent.
2. Collaboration with Self-help Groups (SHGs): HUL collaborates through self-help groups (SHGs) for broaden its extent to rural part of the country. SHGs, typically composed of women, are community-based groups. HUL partners with these groups to establish a direct-to-consumer distribution model.
3. Role of SHAKTI Sellers: As part of the initiative, members from SHGs become SHAKTI sellers. These vendors act as direct-to-consumer HUL wholesalers, selling products primarily in villages within their respective regions.
4. Overcoming Accessibility Challenges: A significant challenge in rural penetration is the lack of established distribution networks due to poor accessibility. Project SHAKTI addresses this challenge by utilizing existing community structures and networks provided by SHGs.
5. Increasing Accessibility: By partnering with SHGs, HUL aims to make its products more accessible to consumers in rural areas, particularly in regions where traditional distribution channels may not efficiently reach.
6. Sustainable Business Opportunities: In addition to expanding market reach, Project SHAKTI contributes to providing sustainable job opportunities for marginalized rural women who become SHAKTI vendors.
7. Product Reach: The initiative covers a range of HUL's fast-moving consumer goods (FMCG) products, including soaps, detergents, personal care items, and other household products.
8. Community Engagement: Project SHAKTI underscores community engagement and empowerment, aligning with HUL's commitment to contribute to the economic development of the communities it serves.

Significance:

- The initiative is significant as it aligns with HUL's broader business strategy to tap into untapped markets and gain market share.
- It addresses the challenges of reaching consumers in rural areas, where purchasing power and accessibility can differ from urban markets.
- By involving local communities and SHGs, HUL builds a more sustainable and inclusive distribution network.

Impact:

- Project SHAKTI has been recognized as a successful model for rural market penetration and community engagement.
- It has contributed to HUL's growth in rural markets and has been acknowledged as a socially responsible business initiative.

In summary, HUL's Country Entrance Drive, through Project SHAKTI, represents a comprehensive and community-driven approach to expanding its market presence in rural India while simultaneously creating economic opportunities for local women.

VII. CONCLUSION

In conclusion, the supply chain management challenges faced by FMCG (Fast-Moving Consumer Goods) in the retail sector in India are multifaceted and require strategic solutions for sustained success. The unique characteristics of the Indian market, coupled with the diverse consumer base and complex regulatory landscape, contribute to these challenges. In essence, addressing supply chain management challenges in the Indian FMCG retail sector requires a holistic and adaptive approach. Companies need to embrace innovation, technology, and collaborative strategies to overcome these challenges and thrive in a dynamic and diverse market environment. The ability to integrate sustainability, community engagement, and flexibility into supply chain practices will be crucial for long-term success in the evolving landscape of the Indian retail sector.

Improving supply chain performance is crucial for Indian firms, both nationally and globally, to remain competitive. Learning from progressive firms in developed economies and emphasizing efficient supply chain management are vital for sustained victory in the dynamic FMCG sector. Efficient warehousing performs a pivotal role in the (FMCG) fast-moving consumer goods trade, ensuring smooth supply chain management and meeting consumer demands seamlessly.

To navigate challenges effectively and promote growth and profitability in your FMCG business, adopting strategic measures and utilizing a comprehensive warehouse management system is crucial. This all-encompassing approach allows for the optimization of e-commerce operations, ultimately propelling your business towards success.

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