INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X
Impact factor: 4.295
(Volume 5, Issue 5)
Available online at: www.ijariit.com

Vendor base management of FMCG companies: A comparative study

Pranay Siroya
pranay.siroya@bba.christuniversity.in
Christ (Deemed to be University), Bangalore, Karnataka

Chinmey Akotkar
chinmey.akotkar@bba.christuniversity.in
Christ (Deemed to be University), Bangalore, Karnataka

Shivam Sharma
shivam.sharma@bba.christuniversity.in
Christ (Deemed to be University), Bangalore, Karnataka

ABSTRACT

It is historically known that the cost-cutting corner of any organization is its supply-chain and logistics department. Whereas the marketing department brings in the revenue, it is the supply-chain operations that directly impact the bottom line of firms. A crucial part of every supply chain is the vendors and the relationships firms have with them, especially in the era of Vendor Managed Inventory. In this paper, we have analyzed the supply-chains of three companies in the FMCG industry in India from the vendor management perspective and have also talked about the impact of GST on various components of supply-chain like warehousing, logistics, and distribution.

Keywords— *Vendor-management, Supply chain, Inventory, FMCG, GST, Sourcing, India*

1. INTRODUCTION AND METHODOLOGY

A supply chain is a today one of the most integral functions in the trade cycle. With modern innovations coming up, the traditional supply chain has now taken a back seat, and most of the companies today are now dependent on Enterprise Resource Planning and its integration with supply chain management.

In order to get the insights of Supply Chain, it is highly important to understand what supply chain is. Margaret Rose defines Supply Chain as "the network of all the individuals, organizations, resources, activities and technology involved in the creation and sale of a product, from the delivery of source materials from the supplier to the manufacturer, through to its eventual delivery to the end-user." (Rose, 2013) Will Kenton defines supply chain as "a network between a company and its suppliers to produce and distribute a specific product to the final buyer. This network includes different activities, people, entities, information, and resources. The supply chain also represents the steps it takes to get the product or service from its original state to the customer." (Kenton, 2019)

Thus, based on these two definitions from two industry experts, we can define Supply Chain as "A Network that links a company to its suppliers and customers that enables the company to procure raw materials and resources required to produce a product and make it available in time to its customers. This network also enables the flow of information and resources up and down the chain."

Now, the first link in the supply chain is that of a vendor or supplier. A vendor in simple terms is someone who vends or supplies a product. Michael Grant and Julia Kagan describe a Vendor as an "entity that is paid for goods that are provided, rather than the manufacturer of the goods itself. It is possible for a vendor, however, to sometimes operate as both a supplier (and seller) of goods and a manufacturer." (Grant and Kagan, 2019) Margaret Rouse describes a Vendor as "also known as a supplier, is an individual or company that sells goods or services to someone else in the economic production chain." (Rouse, 2015)

Thus, based on these definitions, we can define a Vendor as "An entity which makes available to a manufacturer of a product, the raw materials required for the production of the said product on time in lieu of payment."

As we get to the root of the subject matter of this article, which revolves largely around vendor management, Julia Fournier defines vendor management as "the activities included in researching and sourcing vendors, obtaining quotes with pricing, capabilities, turnaround times, and quality of work, negotiating contracts, managing relationships, assigning jobs, evaluating performance, and ensuring payments are made." (Fournier, What is vendor management: HCM Works, 2015)

One of the most modern advancements or better said, initiatives taken in case of Vendor management, is Vendor Managed Inventory. Martin Murray defines Vendor Managed Inventory (VMI) as "a business model where the buyer of a product provides information to a vendor of that product and the vendor takes full responsibility for maintaining an agreed inventory of the material, usually at the buyer's consumption location." (Murray, 2018)

Thus, in simple terms, VMI involves a close link of vendor and buyer in terms of inventory management. It is a model where the vendor assumes full responsibility for inventory management. Consequently, the vendor maintains a catalogue and record of the inventory of the buyer and keeps refilling it based on the agreement between the buyer and the vendor. This model has picked pace, as it has been adopted by many companies lately.

The objective of this article is to compare the supply-chain operations of three FMCG companies which have a Vendor Managed Inventory type of supply chain. The methodology followed was: firstly, a questionnaire was prepared (which included objective and subjective type questions), then we sought responses from three companies (ITC, PnGz, and HUL) after which we did the analysis. Finally, we incorporated the literature reviews of 5 articles in our conclusion presented at the end of this article.

2. VENDOR MANAGED INVENTORY AND THE FMCG INDUSTRY

Overall there are several types of supply-chains however broadly they can be categorized into two types: Vendor-Managed Inventory and Traditional Supply-Chain. In the FMCG sector, supply chain costs are more than 50% of the total cost of production hence this a vital function of all FMCG companies.

Vendors are individuals or businesses who provide an organization with products and services. (Fournier, What is Vendor Management 2015) An organization can have any number of vendors, providing the same or different products at one or many locations. This comprises one of the major reasons for a company to effectively manage its vendor base. A vendor base is the portion of a company's supply network which is actively managed by the company itself. (KB Manage, n.d.)

Vendor management is more than just finding suppliers, offering the lowest price. It is an internal structure of a company put together to deal with and maintain relationships with the vendors. (Hao, n.d.) It includes all the activities from researching and sourcing of vendors to maintaining long-term relationships with them; you need to obtain quotes, look into the capabilities of the vendor considering the turnaround time and quality requirements, negotiate the contracts, ensuring payments and delivery, and evaluate the performance. (Fournier, What is Vendor Management? 2015)

Vendor management of a business has a direct impact on its revenues as vendor management is nothing different than risk management. Vendor management is focused towards adopting the best practices to heighten the efficiency and productivity of the production units and with effective vendor base management in place, the company benefits regarding cost, quality and supplier relationship.

Vendor base management is a multi-stage process, it comprises the following for establishing and maintaining a healthy and mutually beneficial relationship: a) vendor selection, b) risk assessment, c) contract negotiation, d) onboarding, and e) Managing performance and monitoring/mitigating risk. (SAP Ariba, n.d.)

Fast Moving Consumer Goods (FMCG) industry is a very vital industry of the Indian economy. It is the 4th largest sector and contributed about US$ 52.75 billion (FY2018) to the economy. FMCG is broadly categorized into three: a) food and beverages, b) healthcare, and c) personal care and household. Personal care and household constitutes 50% of the sector, whereas food and beverages and healthcare constitutes 19% and 31% respectively. (India Brand Equity Foundation, n.d.)

The FMCG sector has experienced a growth of 8% (on an average) in the past financial year. It has a projected CAGR (Compound Annual Growth Rate) of 27.86% for the upcoming financial year making it a US$ 103.7 billion industry. The FMCG sector has seen major growth in the rural markets of 15-16% when compared to 12-13% in the urban markets. The rural markets have accounted for 45% of the total revenue of the FMCG sector in India in the previous year. The rural markets today, demand for quality and variety leading to the scope for the growth of the FMCG sector, these companies have been able to capture the market with the help of enhanced distribution channels and improved supply chain management. Apart from this GST (Goods and Service Tax) has also played an important role in it. (India Brand Equity Foundation, 2019)

GST has impacted the retail value of various products, the tax on some have reduced while on some it has increased. But more importantly, we would like to discuss the impact of GST on the manufacturing companies with regards to its logistics network as the distribution cost accounts to about 2-7% of the total cost. The companies have managed to reduce the total logistics cost by 1.5% with the implementation of GST. (Expert, 2017) (Adeel Hussain Alie, 2019)

FMCG companies benefit from the IGST (Integrated Goods and Service Tax) which is imposed on inter-state suppliers. This comprises of both central and state GST. (Adeel Hussain Alie, 2019) IGST has changed the optics of supply chain management and has reduced the overall logistics constraints which were faced by the companies for the supplies. The IGST helps in quick and free movement of goods within the country among different states. (Cleartax, 2017) There is a massive reduction in the time taken at inter-state check posts, this has paved way for enhanced vendor managed inventory (VMI) and a huge reduction in the amount of buffer stock to be maintained by the companies as the transportation time has reduced.

Table 1: GST impact on FMCG products

Product	Previously taxed at	Currently taxed at	Companies impacted
Detergents	23%	28%	HUL, P&G, Jyothy Laboratories
Shampoo	24-25%	28%	HUL, P&G, Dabur, Himalaya, Patanjali
Sanitary napkins	10-11%	18%	P&G Hygiene and Health Care
Skincare	24-25%	28%	HUL, Dabur, Himalaya, Patanjali
Hair dyes	23-28%	28%	Godrej Consumer Products
Ayurvedic medicine	7-10%	12%	Dabur, Emami
Toothpastes, soaps, hair oil	22-24%	18%	Colgate-Palmolive, HUL, P&G
Paints	25-26%	28%	Asian Paints, Berger Paints, Nerolac
Branded paneer	3-4%	5%	Nestle, Mother Dairy
Butter, ghee, cheese	4-5%	12%	Amul, Nestle, Mother Dairy

Another logistics factor impacted greatly by the implementation of GST is warehousing. The companies have managed to cut costs by 25-50% concerning warehousing. GST has enabled them to store goods at the proximity of their production units or according to their supply needs, while before they had to focus on exploiting tax benefits, irrespective of the distance. (Adeel Hussain Alie, 2019) Hence, the companies presently are focusing on cutting costs of warehousing with locations which are in the primitive of their production facilities and locations which hold strategic importance in distribution. This paves way for improved inventory control and enhanced demand forecasting as before the implementation of GST due to the complex tax structure of sales tax and VAT across different states led to the multipart warehousing decisions. These led in stocking up high volumes of inventory and at times also facing stock runouts. This led to inefficient inventory management resulting in high costs. (Holisol, 2017)

GST has also surfaced enhanced opportunities for 4PL (Fourth-Party Logistics) companies in India. The FMCG companies have one of the most complicated logistics requirements this is where we can see the role of 4PL companies which specialize in providing innovative solutions to companies for the complete supply chain management, also it can be outsourced to them.

Today, the retail sector is the most benefitted out of the integration of 4PL companies. The FMCG sector constituting a major part of the retail sector has incorporated 3PL or 4PL for its supply chain management which enables them to focus on their core competencies. 3PL companies provide outsourced logistics services to companies whereas 4PL takes it a step further and provide integrated supply chain solutions to the companies, concerning managing resources, technology, infrastructure, and even other 3PL companies. (tradegecko, n.d.)

With the integration of 3PL or 4 PL, we see the popularity of vendor managed inventory (VMI). VMI is an outcome of the extended services provided by the vendors to enhance relations with their clients, especially the companies which bring in huge business. In a VMI setup, the distributor or the 3PL provider takes up the responsibility of monitoring the inventory and replenishing the stock, time-to-time. Re-ordering and delivering it on time are also taken care of by them. (Luthman, 2014)

VMI concept is beneficial to reduce inventory in the pipeline. It helps companies incorporate JIT (Just-in-Time) inventory management. The JIT method is very efficient in bringing down the operational cost as when this method is incorporated with VMI, the inventory is only charged for when it is used, until them it is owned by the supplier itself. (Juneja, n.d.) This is also highly effective in managing the working capital and cash flows of the company in the short-run. The success of VMI depends on the capacity and efficiency of the supplier/ 3PL companies.

3. COMPARATIVE STUDY

A questionnaire was created based on questions pertaining to the subject matter of the article. This questionnaire was sent to Supply Chain Managers at India offices of ITC, Hindustan Unilever Limited (HUL) and Procter and Gamble (P and G) *(Telephonic interview)*. These questions helped us in obtaining the information about vendor management of these companies and the current condition of VMI in these companies. It enabled the formulation of a scorecard, which helps us analyze the performance and vendor management of each company.

ITC, Hindustan Unilever Limited (HUL) and Procter and Gamble (P and G) are the three of biggest companies in the FMCG sector in India, and it has been widely noticed that any of the innovations in Supply Chain Management is bought in by one of these three companies.

3.1 Vendor Management at P and G

Procter and Gamble Hygiene and Health Care Limited is a consumer goods company that is present pan-India and serves two key segments of the FMCG industry, namely Personal Care and Home Care. (Watch, n.d.) It is majority-owned by a holding company (Procter and Gamble Overseas India BV, the Netherlands) that has a 68.73% interest in the company. It has five plants and over nine contract manufacturing sites in India. It is the owner of the Oral-B brand which is the number two brands of toothpaste sold in the country.

Procter and Gamble have adopted an electronically integrated platform for Vendor Management. They use SAP Enterprise Resource Planning for Vendor Management. Procter and Gamble do not follow the Vendor Managed Inventory model for their finished goods, in case of contract manufacturing, but in the case of raw material procurement, they have successfully adopted VMI. From what was understood, Procter and Gamble have been open to innovations in Supply chain. They have adopted an End-to-End synchronization model, where the supply chain right from procurement to logistics of finished goods is centralized.

Procter and Gamble also believe in staying closer to the customer base i.e. market place, which cuts down lead time. Though, largely Procter and Gamble place their factory locations based on three parameters that are:

- Cost: Logistics Cost, Tax Liabilities, Other Costs
- Lead Time
- Procurement Time

Moving on to the warehousing at P and G, they follow an in-house warehousing model. During seasonal fluctuations, P and G maintains inventory based on capacity, product sales, trends, and signals, thus indicating, that they do not ramp up production based on prediction, but has integrated the Just-in-Time model. P and G also maintains a policy that ensures exclusivity to a said vendor, when it comes to critical ingredients, for example, sodium lauryl sulfate in case of shampoo.

When it comes to the maintenance of inventory and its parameters, in case of raw materials, P and G depends on the Vendors records, since for raw materials, it follows Vendor Managed Inventory, in case of in house-manufacturing. But for the products that are produced, based on the Contract Manufacturing model, P and G maintains lump-sum inventory and then based on demand places new orders.

3.2 Vendor Management at ITC

ITC Limited, formerly Imperial Tobacco Company of India Limited and then India Tobacco Company Limited is an Indian multinational holding company which has transitioned from its tobacco business into a diversified group with interests in four sectors, namely: FMCG, hotels, paper and packaging and agriculture. It markets products varying from branded packaged foods to stationery to agriculture commodities such as soya, coffee, and spices. This March, ITC reclaimed its top spot as India's most valuable FMCG Company (in terms of market capitalization).

ITC's supply chain's integration with Management Information System is deeply-centred. ITC too like Procter and Gamble has integrated SAP as the Enterprise Resource Planning platform for Vendor Relationship Management.

On average, a new product development cycle for an ITC product takes approximately 18 months. ITC has not integrated Vendor Managed Inventory model, in its supply chain yet, and they have absolute control of the inventory. Now, coming onto the factory locations, ITC believes in setting up their production units near the source of raw materials. The reasons justifying this are:

- Low procurement time
- Cheaper procurement logistics
- Feasible for perishable raw materials

Now, coming to the warehousing; ITC has outsourced its warehousing to a third party, in order to include specialization and lower employment costs.

Our source at ITC also shared information about the Maharashtra Floods of 2019, when the logistics were stalled completely, it was due to the piled-up inventory that the markets in Maharashtra did not face a shortage. It was also conveyed that for products like Soap, Shampoo, and other Bathing products, the production is ramped up based on the season (summer) and for cosmetics, production is ramped in wedding season and festivals (Jan-Feb, April-May, Nov-Dec).

The demand and trends are already known to the production department; hence they automatically increase production during the season.

In the case of vendor exclusivity, ITC follows a combination strategy. For critical ingredients, ITC has maintained exclusive vendors, while also, maintaining a back-up supplier. This helps them in maintaining the quality of the product while also ensuring that there are no slip-ups.

3.3 Vendor Management at HUL

Hindustan Unilever Limited is India's largest FMCG Company and it is estimated that every nine of ten Indian households use an HUL product every day. It serves all segments of the FMCG industry with 35+ brands spanning 20 distinct categories. In the Oral Care segment, it owns Closeup and Pepsodent, which have a combined market share of 16.8%. The Company has about 18,000 employees and is a subsidiary of Unilever which has a majority interest of 67.19% shareholding in HUL.

Hindustan Unilever Limited, like its competitors – Procter and Gamble and ITC, to uses SAP as its Enterprise Resource Planning platform. It is SAP, which helps Hindustan Unilever Limited in optimum Vendor Management.

Hindustan Unilever Limited controls its inventory wholly and solely and hasn't integrated Vendor Managed Inventory model in its system yet.

Traditionally, a new product development cycle at HUL lasts for about 18 to 24 months, which is similar to industry standards. When it comes to factory locations, HUL believes in placing their factories closer to the source of raw materials. The reason for placing factories closer to the source of raw materials is:

- Cheaper procurement logistics
- Lesser procurement time
- Better connectivity with vendors
- Tax Liabilities

With respect to warehousing, HUL hasn't outsourced its warehousing and maintains complete control of end-to-end warehousing, which justifies its control over inventory management. When it comes to seasonal fluctuations, HUL prefers seasonal production cycle. In simpler terms, it ramps up production, when it forecasts increase in demand, and partially shuts down production lines during lean periods.

Like its competitors, HUL too follows the policy of maintaining exclusive vendors, while maintaining back-ups, in case of emergencies.

HUL's policy on inventory maintenance is fixed. The procurement of raw materials is pre-decided based on the quantity required, which is fixed based on the production plan.

Table 2: Score Card Comparison

Criteria	Scoring of Companies (out of 5)		
	Procter and Gamble	**ITC**	**Hindustan Unilever Limited**
Integration with Management Information System	4	4	4
Vendor Management System	4	3	3
Vendor Managed Inventory	3	2	2
Innovations in Supply Chain	3	2	2
Responsiveness to Seasonal Fluctuations	3	2	4
Warehousing-in terms of convenience	3	4	3
Warehousing in terms of costs	4	3	4
Proximity to Marketplace	5	3	3
Proximity to the source of raw materials	3	5	5
Exclusivity to Vendors	5	4	4
Total	37	32	34

**Source: Based on the telephonic interview undertaken*

From the table, it can be observed that the most-efficient supply chain in terms of Vendor Management is that of Procter and Gamble. But, it should be noticed that because Procter and Gamble's supply chain is the most efficient, it is not necessary that it would be the most cost-effective. It can be observed that the three companies are on level-game when it comes to integration of Vendor Management with Information Technology, and the three FMCG giants do have their Vendor Management Systems in place.

Of the three companies, Procter and Gamble, has a higher degree of Vendor Managed Inventory, while the other two do not. From the responses, the innovations in Supply Chain of Procter and Gamble were clearer. Hindustan Unilever Limited has higher responsiveness to seasonal fluctuations. ITC has outsourced its warehousing, thus making it more convenient, although a bit towards the costlier side. On the other hand, the warehousing for Procter and Gamble and Hindustan Unilever Limited are in-house, thus more cost-effective.

Procter and Gamble have placed its factories closer to the market place, thus helping it cut down on the lead time, FG logistics and other preliminary costs. On the other hand, ITC and Hindustan Unilever Limited have their factory locations set near the source of raw materials, hence making procurement cheaper. When it comes to exclusivity to vendors, Procter and Gamble, again leads the way, as it exercises absolute exclusivity towards its vendors.

Thus, it can be observed that based on the scorecard, Procter and Gamble have the most efficient Supply Chain operations in terms of Vendor Management, followed by Hindustan Unilever Limited and lastly, ITC.

4. CONCLUSION

From the observations and the scorecard, it was certain that Procter and Gamble have the most efficient supply chain in terms of Vendor Base Management. The three companies are today, the leading players in the FMCG sector. Understanding an important aspect of supply chain management, pertaining to these three companies, does give us an insight into the supply chain operations in the FMCG sector, on generic terms as well.

5. REFERENCES

[1] KB Manage. (n.d.). Supply Base Management. Retrieved August 2019, from KB Manage: https://www.kbmanage.com/concept/supply-base-management-sbm

[2] India Brand Equity Foundation. (n.d.). FMCG Industry in India. Retrieved August 2019, from India Brand Equity Foundation: https://www.ibef.org/industry/fmcg.aspx

[3] Fournier, J. (2015, September 23). What is Vendor Management? Retrieved August 2019, from HCM Works: https://www.hcmworks.com/blog/what-is-vendor-management

[4] Hao, D. (n.d.). How to Create an Effective Vendor Management Process. Retrieved 2019 August, from Procurify: https://blog.procurify.com/2018/02/13/create-vendor-management-process-brings-value-company/

[5] SAP Ariba. (n.d.). Solutions: Vendor Relationship Management. Retrieved 2019 August, from SAP Ariba: https://www.ariba.com/solutions/business-needs/vendor-relationship-management-software

[6] India Brand Equity Foundation. (2019). FMCG Industry in India, Industry Report (July 2019). Delhi: India Brand Equity Foundation.

[7] Expert, I. (2017, September 21). Post-GST impact on FMCG sector. Retrieved August 2019, from Avalara India: https://www.avalara.com/in/en/blog/2017/09/post-gst-impact-fmcg-sector.html

[8] Adeel Hussain Alie, D. J. (2019). Impact of GST on FMCG Sector in India. Research Journal of Humanities and Social Sciences, 10(1), 2321-5828.

[9] Cleartax. (2017, June 20). Impact of GST on FMCG Sector. Retrieved August 2019, from Cleartax: https://cleartax.in/s/gst-consumer-fmcg

[10] Holisol. (2017, February 17). Impact of GST on Warehousing In India. Retrieved August 2019, from Holisol Supply Chain Management: https://holisollogistics.com/impact-of-gst-on-warehousing-in-india/

[11] Rose, M. (2013, October). Supply Chain: Whatis.Com. Retrieved August 20, 2019, from Whatis.com: https://whatis.techtarget.com/definition/supply-chain

[12] Kenton, W. (2019, May 20). Supply Chain: Investopedia. Retrieved August 21, 2019, from Investopedia: https://www.investopedia.com/terms/s/supplychain.asp

[13] Grant, M., and Kagan, J. (2019, June 9). Vendor: Investopedia. Retrieved August 20, 2019, from Investopedia.com: https://www.investopedia.com/terms/v/vendor.asp

[14] Rouse, M. (2015, March). Vendor: Whatis.com. Retrieved August 20, 2019, from Whatis.com: https://whatis.techtarget.com/definition/vendor

[15] Fournier, J. (2015, September 23). What is vendor management: HCM Works? Retrieved August 20, 2019, from HCM Works.com: https://www.hcmworks.com/blog/what-is-vendor-management

[16] Murray, M. (2018, December 5). VMI: the balance of small business. Retrieved August 21, 2019, from thebalancesmallbusiness.com: https://www.thebalancesmb.com/vendor-managed-inventory-vmi-2221270

[17] Watch, M. (n.d.). Stock: Market Watch. Retrieved from Marketwatch.com: https://www.marketwatch.com/investing/Stock/500459?countryCode=IN

[18] tradegecko. (n.d.). What is the difference between 3PL and 4PL and other logistics providers? Retrieved August 2019, from tradegecko: https://www.tradegecko.com/inventory-management/what-is-4pl

[19] Luthman, J. (2014, August 25). White Paper: Vendor-Managed Inventory Solutions Provided By 3PLs in the Life Sciences and Pharmaceuticals Industry. Retrieved August 2019, from MD Logistics: https://www.mdlogistics.com/2014/08/barriers-benefits-vendor-managed-inventory-solutions-carried-out-by-3pls-life-sciences-pharmaceuticals-industry/

[20] Juneja, P. (n.d.). Vendor Managed Inventory - A collaborative Supply Chain Concept. Retrieved August 2019, from Management Study Guide: https://www.managementstudyguide.com/vendor-managed-inventory.htm

