

SUPPLY CHAIN MANAGEMENT FAST MOVING CONSUMER GOODS

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Supply Chain:

Supply chain is an end to end link in between producer and consumer which links both producer and consumer by a forward and backward link



As the given Supply chain is related to **Fast Moving Consumer Goods** (products that are sold quickly and at a relatively low cost) which is transporting **instant noodles** which is a **perishable commodity** so require a robust and quick transport network with proper storage facility.

The problem statement states that there is **demand and supply mismatch** in given business which is causing inventory and other losses.

Since the business is dealing with a food item for which proper forward and backward linkage are pre-requisite. But since the forward link itself is not working well so it is hampering the entire business.

In order to make this FMCG business **profitable and competitive** we first have to understand the independent features which affect the business directly or indirectly and how we can work upon to improve their efficiency. These features are:

- **Location of warehouse:** The location of warehouse may either be rural or urban.
Ways to improve efficiency -
 - In urban locations relatively demand is more than rural counterpart so company should focus on urban warehouses more,
 - Company should also focus on availability of **transportation network** before establishing a warehouse,

- The company can also look for **Weber Industrial location theory** which provides an idea of optimum distance between industry and market.
- **Capacity of warehouse:** The production and storage capacity of warehouse. Warehouse works as a link between production and final consumer. Warehouses can speed up product delivery by offering additional price tagging, product packaging, or final assembly. So their efficiency is very important.
Ways to improve efficiency –
 - Technology enabled production of commodities keeping in mind the demand & supply and available market,
 - The storage of commodities in warehouse can be improved without changing the floor space by proper positioning and alignment of racks,
 - Identifying underutilised area of warehouse and utilise that area in some constructive way,
 - Warehouse should have minimum number of breakdowns.
- **Number of refilling request:** The track on refilling is kept for a period of 3 months.
Ways to improve efficiency-
 - Special emphasis on warehouses where refilling request are maximum,
 - Reduce the inventory cost of those warehouses where refilling requests are least and focus on increase in selling in those areas by advertising and other means.
- **Transportation issues:** Transportation is the backbone of any type of FMCG businesses which ensures linkages among various entities involved in entire business.
Ways to improve efficiency:
 - The business should not only dependent on any one mode of transportation but should have alternates available.
- **Competitors in market:** Competition is necessary for a healthy business and it provides choices to consumers also which ultimately tends businesses to improve the quality of products.
 But over competition can hamper the business adversely. So to make a level playing field businesses first should analyse the available competition in market and footprints of the competitors and then should formulate an appropriate procedure to deal with challenges.
 - To increase the foothold the firm should focus on capturing local market by **penetrating the product in maximum local shops.**
 - Also there should be **minimum distributors present in between warehouse and local merchants** so that distribution of dividend can be minimise and profit can be maximise,

- **Electricity supply and local government policies:** Since noodles are perishable commodity so requires an optimum ranged temperature to maintain the shelf life and for that refrigeration is required and ultimately electricity is crucial for this, apart from this technology driven warehouse require consistent electricity supply. The local government plays very important role in ensuring this infrastructural requirements and issuance of licences so the government should have a progressive policy which will work in favour of the industry.
- **Product weight tonnes:** This variable shows the capacity and flow of product into and out of warehouse. This should be continuous and should be consistent at maximum extent possible.

Ways to improve efficiency:

- Technology driven input and output of inventory,
- Improvising latest techniques like **Just in Time** technique to enable smooth flow of products,
- Robust forward and backward linkages,
- Minimise or eliminate the demand supply mismatch by keeping an eye on market performance of the product,
- Focus on sales maximisation techniques such as advertisement, healthy competition, market research and function as per local requirement, incentivise consumers and retailers for consistent consumption and selling of product.

Benefits of analysing the data:

- Reduction in demand supply mismatch the company is facing,
- Reduction in losses which are associated either with production or supply,
- Can strategise the business more properly,
- Enhancing product quality by feedback loop from customers,
- Help in research and development in the product and distribution,

Apart from available features some extra features can be considered which can help in business:

- Improvement in forecasting efficiency by automation,
- Measure and optimise inventory level,
- Ensuring end to end visibility of supply chain,
- Review and incentivise suppliers performance,
- There should be a column for supply in the warehouses from where the refilling requests are there and the time duration in which the refilling request is fulfilled,
- There should also be a mention of column which gives us detail of precautionary emergency facilities available,

Best way to collect data for suggested features-

- Use of web aggregators, web harvesting, web scrapping, application programs to keep an eye on data collection and manipulation,
- Use of AI for maintenance and collection of data,
- Enable maximum use of technology like RFID tag on consignment to collect data at entries and exits of inventory,
- Using GPS enabled tracking of transportation to identify issues related to transport,
- Tech enabled feedback system from customers who can raise issues if there are related to product conveniently

So this was the general overview of supply chain management of FMCG and a general approach by which we can increase in efficiency of business.