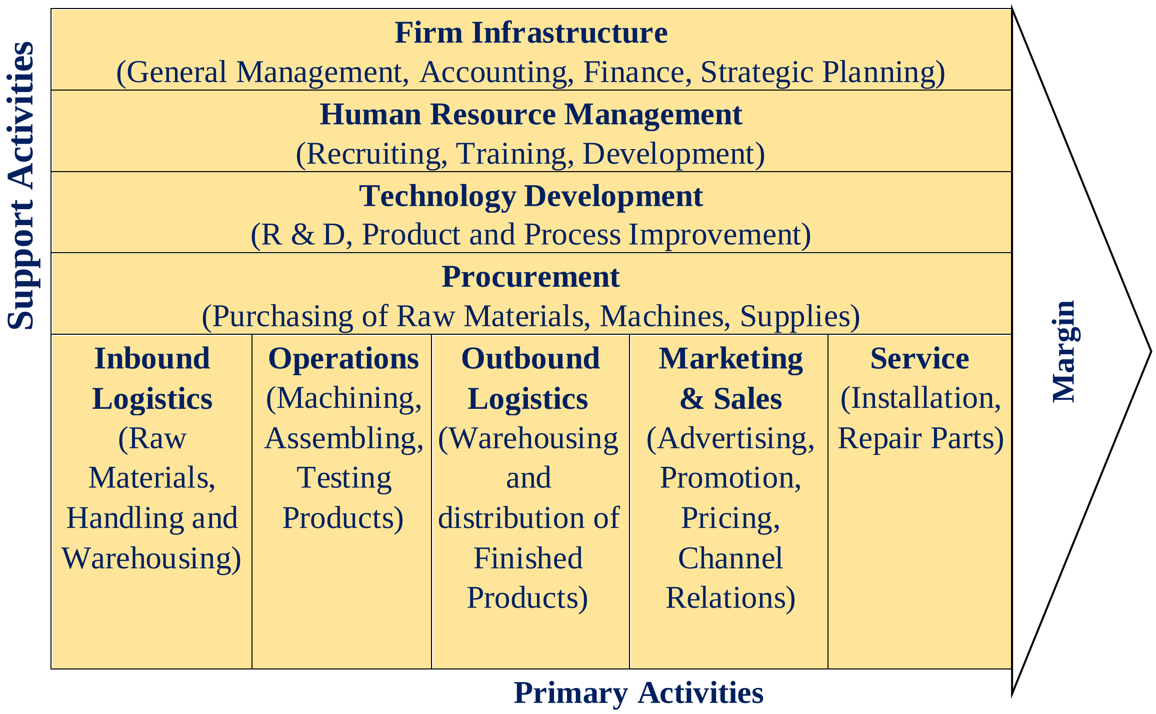
Revision Class no-1

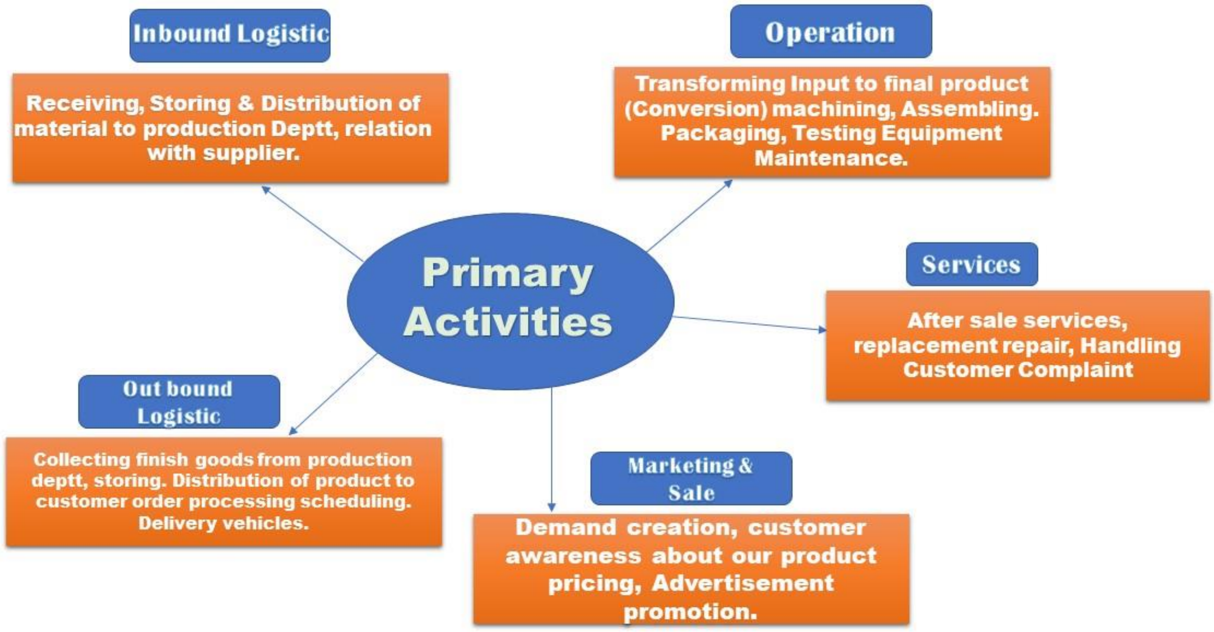
(Ch-1 Introduction to Strategic Cost Management)

Value Chain Analysis

Value-chain analysis is a process by which a firm identifies & analyses various activities that add value to the final product. The idea is to identify those activities which do not add value to the final product/service and eliminate such non-value adding activities. The analysis of value chain helps a firm obtain cost leadership or improve product differentiation. Resources must be deployed in those activities that are capable of producing products valued by customers.

The idea of a value chain was first suggested by Michael Porter (1985) to depict how customer value accumulates along a chain of activities that lead to an end product or service.





Primary activities are those which are directly involved in transforming of inputs (Raw material) into output (Finished product) or in provision of service. Secondary activities (also known as support activities) Support the primary activities.

Strategic Framework For Value Chain Analysis

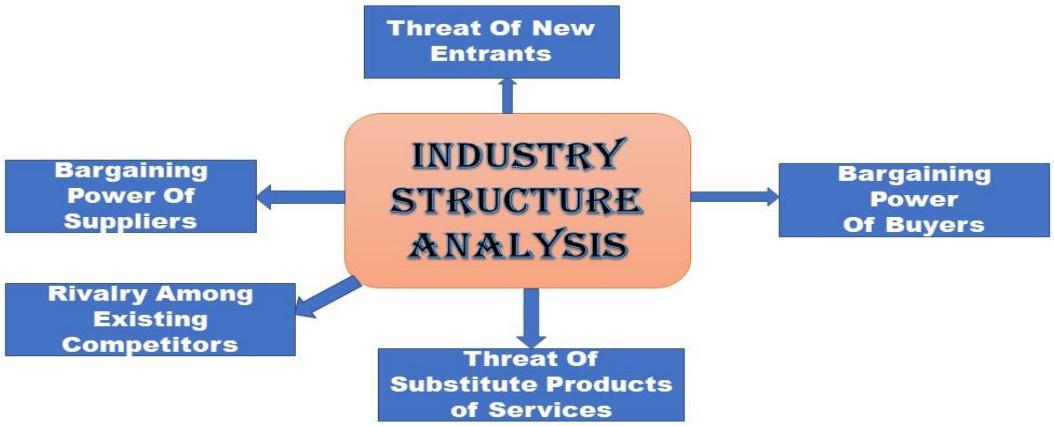
The Value Chain Analysis requires strategic framework for arranging varies information. The following three are generally accepted strategic framework for value Chain analysis.

Industry Structure Analysis

An industry might not yield high profits just because the industry is large or growing. The five forces suggested by Porter's play an important role in determining profit potential of the firms in an industry.

Michael Porter developed a five factors model as a way to organise information about an industry structure to

evaluate its potential attractiveness.
Factors which influence profitability are:



The Five forces analysis helps a firm to better understand the industry value chain and its competitive environment.

- **Bargaining power of buyers:** The bargaining power of buyers generally determines the ability of buyer to push the price down. This happens when the buyers are concentrated or when the volume purchased by buyers is very high. In other words, when the bargaining power of buyers is high, they would be in a position to dictate terms to the firm. A buyer also has higher bargaining power if the cost of switching suppliers is very low. A higher bargaining power results in lower profitability. Large companies have a high bargaining
- power when they buy from small suppliers.
- **Bargaining power of suppliers:**The bargaining power of supplier is relatively higher when the input is important to the buying firm or when there are very few suppliers of the input. The suppliers could also dictate terms if the input supplied is not replaceable or when an alternate input is not available. Microsoft dominates the operating system business of computers and laptops and can dictate terms to its buyers as buyers do not have multiple options to choose from. The profitability of companies can shrink if the suppliers have a higher bargaining power.
- **Threat of substitute products or services:** When multiple and close substitutes are available in the market for a particular product, customers are likely to switch suppliers easily. A firm in such a case must resort to competitive pricing to retain its customers. When few substitutes exist for a product, consumers are willing to pay a potentially high price. If close substitutes for a product exist, then there is a limit to what price customers are willing to pay. The problem becomes severe if substitutes are available at much cheaper price (case of launch of Reliance Jio). A company should strive to build its brand and customer loyalty to thwart the threat of substitutes.

  Substitutes could be from within the industry or from a different industry. The paper industry faces threats from e-book market. When more people switch to public transport as trains, the demand for vehicles comes down.
- **Threat of new entrants:** The threat of new entrants largely depends on the barrier to entry and perceived profitability in an industry. If an industry is profitable and the barriers to entry are low, new firms could enter the industry leading to excess supplies and reduced prices. Some examples of barriers to entry are intensive capital requirement, sophisticated technology, legal factors, limited access to raw material & labour etc. Industries which require huge amount of capital or sophisticated technical

knowhow might not have a high threat of new firms entering into the industry. Airline industry is a case where very few new firms enter the business because of the capital requirements. Another barrier to entry could be legislation which restricts newer firms to start the business, like in the case of defense industry. Certain industries (for example medicines) are largely driven by patents and new firms might find it difficult to enter the industry. An industry where threat of new entrants is low is more profitable than an industry where new entrants can easily enter the industry.

- **Intensity of competition/rivalry amongst firms:** Some markets are more competitive than others. In highly competitive industries, firms resort to cut-throat competition to win more customers. The competitive rivalry is higher when an industry has high number of firms and is lower when there are few large players dominating the market. The intensity of competition is higher:
  - When firms are of more or less equal size.
  - Extra capacity exists in the industry
  - Difficulty in differentiation in the products.
- **High exit barriers -** This is a case where the exit costs are high and hence firms must continue in the industry despite excess capacity at industry level.
- **Higher fixed costs -** Firms would want to produce as much as possible to keep the unit costs low leading to surplus capacity.

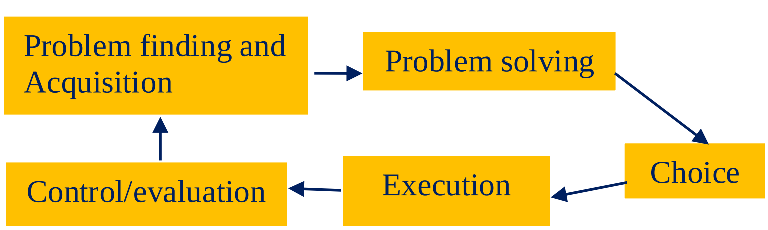
Since these five forces are ever-changing, Porter's framework needs to be employed as a dynamic analytical tool. This is because competition is a dynamic process; equilibrium is never reached and industry structures are constantly being reformed. The five forces analysis helps a firm to better understand the industry value chain and its competitive environment.

Value Shop Model or Service Value Chain

This concept aims to serve companies from *service sector*. In value shop principle, no value addition takes place. It only deals with the problem, figure-out the main area requires its service and finally comes with the solution. This approach is designed to *solve customer problems rather than creating value by producing output from an input of raw materials*. **Ne model has the same support activities as Porter's Value Chain but the primary activities are described differently.** In the value shop they are:

- Problem finding and acquisition.
- Problem solving.
- Choosing among solutions.
- Execution and control/evaluation.

Infrastructure
Human-resource management
Technology development
procurement



The management in a value shop focuses on areas like problem and opportunity assessment, resource mobilization, project management, solutions delivery, outcome measurement, and learning.

Case Study

Competitive Advantage

Question 28:- Wireless is a manufacturer of mobile phones. The company operates in a market that is dynamic, extremely competitive and consumer centric. The market is broadly fragmented into those customers who are price conscious looking only for basic features and those who are technology savvy wanting to try out the latest offering. Wireless manufactures phones that cater to both these segments.

Mobile A has the very basic features that a customer requires from a phone. It is marketed to attract the price conscious customers. There are many other manufacturing who have similar product offering for this market, Mobile Z offers the latest technology features and an attractive design. Wireless has invested substantial amount in research and development that has resulted in Mobile Z having many unique features. It is marketed to attract customers willing to try out newer products. The research has also yielded results whereby a large section of the design of Mobile A and Z can be standardized to have a similar components and engineering. This would enable Wireless to enter into agreements with its suppliers to provide components. Just in Time based on the production schedule. With this change, the quality of Mobile A is expected to improve thereby improving its sales off take manifold.

Online shopping has given customer complete access to the prices of phones offered by different manufactures. This channel of shopping contributes to almost 70% of the sales. Huge discounts by its rivals has forced Wireless to reduce the prices of Mobile A as well. This has stretched its profit margins. Various cost reduction measures have been initiated to maintain profitability. Mobile Z on the other hand is currently doing well since it is targeted at a more niche segment of customers. Wireless is able to charge premium price for Mobile Z. The latest news in the industry of personal devices like mobiles, laptops etc. is the use of Artificial Intelligence and Augmented Reality to enhance user experience. The technical staff at Wireless fell that this could be the next new frontier that could really change the way we use our devises, most of which could even go redundant.

Required

(i) IDENTITY the strategy that Wireless is using for Mobile A and Mobile Z.

(ii) Discuss the risks involved in each of these strategies.
ADVISE Wireless to sustain its Current strategy for Mobile A?

Solution: (i) Wireless is following the "low cost strategy" for Mobile A and "differentiation strategy" for Mobile Z. Mobile A is being offered at discounted rates to meet the prices of its competitors. This is being done in order to gain market share from its competitors. To maintain its profitability, Wireless has to find means to keep its manufacturing, distributing and other costs low.

Mobile Z is being perceived by customers as a unique product, with features different from its competitors. This is "differentiation strategy". Differentiation can be achieved from superior product quality, innovation and customer responsiveness.

(ii) The risks involved in a "low cost strategy" for Mobile A is that any price reduction by Wireless will be followed by an equivalent price reduction by its competitors. This price war will ultimately eliminate players who are unprofitable. This strategy will put margins under pressure. The company has to find ways to its costs low on a sustained basis. The "low cost advantage" will be lost once its competitors find a way to lower their costs as well. The other risk would be to that the quality of the product could be impacted negatively due to lowering of costs.

The risks in differentiation strategy is that it will work only when customers are not price sensitive. The mobile market that Wireless operates is a competitive market. As long as certain customers are will to pay extra for additional features, Mobile Z will have a competitive advantage. If these customers also become price sensitive, they fail to see the value for paying extra for the additional features, the sales of Mobile Z will start falling. The other risk in this strategy would be in the ability of competitors to replicate the features of Mobile Z. Therefore, Wireless should protect its intellectual property rights in order to prevent its competitors from replicating the design and features of Mobile Z. It only when these risks are contained, that Wireless would be able to maintain its premium price for Mobile Z for its unique features.

An external risk factor for Wireless would also be from the developments in the fields of Artificial Intelligence and Augmented Reality. Wireless has to constantly monitor and assess how these technological developments can impact its business. It must be flexible to adapt to changes as they take place, in order not to become redundant in business.

(iii) "Low cost advantage" can be maintained by copying designs rather than creating them, attaining economies of scale by high-volume sales, getting discounts on bulk purchases and gaining learning and experience curve benefits.

Learnings and experience from research for Mobile Z can be leveraged for Mobile A. Standardization of design for Mobile Z and A would improve the quality of the product since the design is based on a product that has premium range of customers. Since these features can improve the sales of Mobile A, costs would benefit from economies of scale due to larger production volumes.

Bulk purchase of components for Mobile A and Z gives Wireless the advantage of negotiating for discounts on purchases. It could also negotiate for favorable delivery terms, like just in time purchasing agreements. This would reduce the inventory holding costs for Wireless. All this contributes towards lowering the costs of production of Mobile A. This will help Wireless sustain its low-cost advantage.

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Question 30:- WDG is a family owned business. The Family owns 80% of the shares. The remaining 20% is owned by six non-family shareholders. It manufactures Cardboard Boxes for customers which are mainly manufactures of shoes, cloths, crackers etc. Now, the board is considering to join the paper Tubes market as well. Paper Tubes, also known as Cardboard Tubes, are cylinder-shaped components that are made with Cardboard. Paper tube can be used for a wide range of functions. Paper Tubes are usually ordered in bulk by many industries that rely Paper Tubes include food processing. Shipping and the postal service, automotive manufacturing, material handling, textile, pulp and paper, packaging, and art etc. The Paper Tubes cost approximately 1% - 3% of the total cost of the customer's finished goods. The information about Paper Tubes is as follows:

(i) The Paper Tubes are made in machines of different size. The lowest cost machine is of `1,89,000 including GST @ 5% and only one operator is required to run this machine. Two days training program is required to enable untrained person to run such a machine efficiently and effectively. A special paper is used in making Paper Tubes and this paper remains in short supply.

(ii) Presently Five major manufacturing of Paper Tubes have a total market share of 75% offer product rangers which are similar in size and quality. The market leader currently has 24% share and the four remaining competitors hold on average 12.75% share. The annual market growth is 3% per annum during recent years.

(iii) A current report “Insight on Global Activities of Foreign Based MNC’s” released the news that now MNC’s are planning to expand their packaging operations in overseas market by installing automated machines to produce Paper Tubes of any size.

(iv) Another company, HEG manufacturing a small, however increasing, range of Plastic Tubes which are capable of housing small products such as foils and paper-based products. Currently these tubes are on an average 15% more costly than the equivalent sized Paper Tubes.

Required:

ASSESS whether WDG should join the Paper Tubes market as a performance improvement strategy?

Solution:

To assess the feasibility of joining Paper Tubes market, Michel Porter’s Five forces model’s can be used. It analyses the competitive environment of an industry. It is an important tool for understanding the competitive structure of a particular industry. This complete analysis includes five forces: buyer’s bargaining power, suppliers bargaining power, the threat of substitute products, the treat of new entrants and the intra industry competition.

While applying this model to the above case, it can be observed that the low cost of the machine along with the fact that an untrained person will only need two day’s training as to be able to operate a machine will form comparatively low costs of entry to the market. Therefore WDG may reasonably consider high threat of new entrants.

Customer’s (buyer) Power could be high since customers buy Paper Tubes in bulk along with the fact that there is insignificant difference between the products of alternative suppliers. Paper Tubes cost approximately 1%-3% of the total cost of the customer’s finished goods also indicates that customer’s power is high.

The fact that the special paper from which the tubes are made remaining in short supply, signals high threat from suppliers. Hence suppliers may raise their prices that would result in reduction of profit.

Five major players with 75% market share, offer product ranges which are similar in size and quality, besides the market is a slow growing i.e. annual growth of 3% indicate high rivalry among competitors.

A little real threat from a substitute product exist since HEG manufactures a narrow range of Plastic Tubes. This threat might go up if the product range of HEG is expanded or the price of Plastic Tubes goes down sharply.

Major threat from potential new entrants can be seen, as foreign based MNC’s are planning to joining this market and it seems that these giant corporations might be able to gain economics of scale from automated machines and large production lines with manufacturing flexibility.

WDG might enter this market due to low capital investment but this would also lead to other potential entrants. The easy entry, threat of substitute, the existence of established competitors

in the market, the possible entry of a MNC's and competitors struggling due to slow growth market are putting the potential of WDG into the question to achieve any sort of competitive advantage.
Joining this market might be a good move, if WDG would be able manufacture Paper Tubes at lowest cost within the industry. To assess feasibility, WDG must take into consideration all possible synergies between its existing operations of Card Boxes and the proposed operations of Paper Tubes.
From the available information joining the market for paper Tubes does not seem to be attractive. Thus WDG should go for other alternative performance improvement strategy.

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Question 32:- S-Mart was founded in 1990 as a departmental store catering to the entire household requirements (from grocery to clothing) of middle income groups. The company since has grown leaps and bounds and inaugurated its 100th store in 2017. S-Mart is known for high quality products which are available at discount to the market price at its store. The company claims to give at least 5% discount on listed price across product segments. The sales of company have grown 30% on Y-o-Y basis. The company has highest net profit margin and highest return on equity in the industry.
S-Mart has tie-ups with more than 500 vendors across India who provide high quality products on demand. S-Mart pays all its suppliers in advance and hence enjoys preferential pricing as compared to its competitors. The company procures products using the Just-In-Time (JIT) philosophy which helps it to keep low level of inventories and thereby freeing up significant amount of working capital. The products are directly delivered to the stores by company owned trucks and mini-vans and hence, there is no requirement of warehouses to store products.
The company sells products which are required by households on a day to day basis and is not keen to sell premium products which have higher margin but lower demand. This ensures that inventory is moved out of the stores faster and increases the inventory turnover ratio. The company owns all the stores which it operates under its brand name.
There is no third-party franchisee appointed to operate the stores. Since the products are directly procured from he manufactures and sold to customers, there are no intermediaries in between.
S-Mart invests in superior quality products and high level of customer services than aggressive marketing. The company believes that it can attract more customers by offering quality products at reasonable prices rather than spend huge amount on marketing. However, need based marketing activities are carried out by the company. S-Mart aims to build customer loyalty through high level of customer service at its store.
S-Mart is one of the few companies which has witnessed a low employee turnover in the industry in which it operates. The motivation level of employees are very high which results in excellent performance across all levels. Company rewards its employees generously through employee stock options plan. The company conducts training sessions for its employees periodically to equip them with latest techniques in areas of procurement, sales, marketing and customer service. The result of these efforts is clearly visible in the company's growth.
The company has a solid Information Technology infrastructure for all its activities. The company has leveraged technology across all departments - be it procurement, logistics or sales. It has implemented SAP-R3 which is one of the leading Enterprise Resource Planning system

globally. Various reports relating to inventory levels, sales, liquidity position etc. are available on a real-time basis to the senior management.

Requirement

Map the various activities performed at S-mart to the Porter's Value Chain model

Solution:

Introduction

Value chain is defined as "a chain of value added activities; products pass through the activities in a chain, gaining value at each stage". Value chain focuses on systems, and how business inputs are changed into business outputs purchased by customers. The entire set of activities that a business undertakes to covert inputs to outputs are interlinked to each other. A business carries out these activities to earn a profit or margin.

A business should undertake only those activities which add value to the end product being delivered to the customer. A value chain analysis helps business identify those activities which are not adding value (in other words wasteful activities). An example of a wasteful activity could be unnecessary storage of products which increases the inventory and working capital requirement. Such activities must be removed to ensure that the margin of business improves. Value Chain Analysis is one way of identifying which activities are best undertaken by a business and which are best outsourced.

Porter's value chain classifies activities into primary activity and secondary activity.

Primary Activities

Primary activities are those activities that are directly related with creating and delivering a product to the end customers. The following activities are considered as primary activities—

Inbound Logistics

Inbound logistics involves arranging inbound movement of materials or finished goods from suppliers to the manufacturing plants or retail stores. Since S-Mart is not involved in manufacturing, all the activities that it undertakes to deliver the products to its retail stores would form part of Inbound Logistics. The company has its own transport fleet to ensure timely delivery of products to the retail stores. The company also has a JIT system in place which ensures minimum inventory level. A reason why the company uses its own fleet of trucks is to ensure that there are no failures on the supply side. In JIT systems and especially in retail business, it is very important that stock outs are avoided.

Operations

Operations involve those activities which are concerned with conversion of input into outputs in case of manufacturing companies. In retail business, it comprises of those activities which are concerned with running of stores, planning of inventory levels of various products, deciding the layout of various stores etc. The company operates through 100 stores which are owned by itself. The company does not have franchisee or agent model for operation of its stores. The ownership of the stores ensure that the quality standards are maintained across various stores and customer get the best value. Since the stores are owned, the company does not face any risk of closing the stores due to expiry of lease arrangements. The company can also invest to build the best layout for the stores.

Outbound Logistics

These include planning and dispatch, distribution management, transportation, warehousing, and order fulfillment. In case of a retail business, this includes activities carried out to deliver the product to the customer. S-Mart operates through its own stores and there are no outsourcing or franchisee arrangements. The company does not have any warehousing requirement as the product are directly delivered to the retail stores. The customers directly pick up the products from the stores and there is no transport requirement in this case. The company must however ensure that the customer waiting time is low at the time of invoicing and checkout from the store.

Marketing & Sales

Marketing and sales are the means whereby consumers and customers are made aware of the product which is ultimately sold to them. The activities include selling products to the end customers covering activities like product management, price management, promotion and marketing management. S-Mart builds customer loyalty by offering high quality products at affordable pricing. The company does not spend a huge amount on marketing.

Service

In case of manufacturing industry, service generally refers to the after sales service which are required to maintain the value of product and includes activities like installation, repair etc. In case of retail stores, service would encompass a superior experience at the stores and managing return of products by the customers. S-Mart aims to build customer loyalty through high level of customer service at its store.

Secondary Activities

Secondary activities are those activities which support the primary activities in their function. The following are the broad classification of secondary activities:

Procurement

Procurement refers to the processes of acquiring various products and include activities like identifying sources of these products, vendor selection, placing an order, purchase of products etc.

The company deals with over 500 vendors across India on advance payment terms to procure high quality products at preferential pricing. This helps the company get better discounts which it can pass it onto the customers. This ensures that the company does not carry the burden of discounts being offered to the customers.

Technology Development

Technology spans across all the primary activities of an organisation. It includes activities like process automation, an Enterprise Resource Planning (ERP) system, inventory management systems etc. The company has implemented SAP R/3 - an ERP package which helps in the management of various functions of procurement, logistics and sales. A robust system is always necessary to ensure that the JIT systems work effectively. Such systems assist in real-time monitoring of inventory levels and triggering purchase orders when inventory levels are low. The entire flow of products from an order placement till the delivery to customer can be tracked seamlessly.

Human Resource Management

This involves areas of recruiting, managing, training, developing and rewarding people within an organisation. S- Mart has a very low employee turnover and a very high level of employee motivation. The company rewards all its employees generously and conducts periodic training and development programmes for its employees. This ensures that the employees are highly motivated which translates into a consistently high performance.

<u>Infrastructure</u>

This includes not only the physical infrastructure but also all departments of management, finance, legal which are required to keep the company's store operational. All these are important for organisation's performance in primary activities.

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