
UNIT 3 CUSTOMER FOCUS IN SUPPLY CHAIN MANAGEMENT

Objectives

After reading this unit, you would be able to:

- understand the key processes required to enhance customer focus in the supply chain;
- define Efficient Customer Response (ECR);
- define Quick Response (QR) and Accurate Response (AR); and
- examine chain relationship within and beyond organization.

Structure

- 3.1 Introduction
- 3.2 Customer Service
- 3.3 Functional vs. Innovative Products: SCM Issues
- 3.4 Efficient Consumer Response
- 3.5 Quick Response and Accurate Response
- 3.6 Chain Relationship within and Beyond the Organization
- 3.7 SCM as a Core Strategic Competency
- 3.8 Summary
- 3.9 Self Assessment Questions
- 3.10 References and Suggested Further Readings

3.1 INTRODUCTION

Management of a supply chain means managing all the different processes and activities that produce value in the hands of the ultimate consumer. A supply chain can be viewed as the network of entities through which the material and information flow. Those entities may include suppliers, carriers, manufacturing sites, distribution centers, retailers and customers. [1]. Effective streamlining of the supply chain can improve the customer service levels dramatically, reduce excess inventory in the system, and cut excess costs from the network of the organization. [2]

Supply Chain Management competency contributes to an organization's success by providing customers with timely and accurate product delivery. The customer is any delivery destination – from consumers' homes to retail and wholesale businesses to the receiving docks of a firm's manufacturing plants and warehouses. The customer being serviced is the focal point and driving force in establishing Supply Chain Management performance requirements. It is important to clearly understand customer service deliverables when establishing Supply Chain Management strategies.

The customer-focused marketing is built on three fundamental concepts.

- The essence of a marketing orientation to business policy
- Developing Supply Chain Management competency as strategic resource to customer service planning
- The changing nature of most desired Supply Chain Management practice to accommodate product life-cycle requirements.

This unit will discuss the customer focus in Supply Chain Management.

3.2 CUSTOMER SERVICE

A customer-focused strategy needs to accommodate and develop a combination of products and services that satisfies customers. One of the key factors for successful marketing is the availability of products and services to the customers, when and where desired by them.

Basic customer service is defined in terms of availability, performance and reliability.

- **Availability** is the capacity to offer inventory when demanded by a customer.
 - Normally this is achieved by stocking adequate inventory in anticipation of demand from customers.
 - Inventory stocking plans take into consideration forecasted demand, sales popularity, importance of a product in the product line, profitability and the value of the merchandise.
 - Safety stock is kept to take care of demand forecast error and any unanticipated operational or delivery problems. The availability depends on three performance measures: stock out frequency, fill rate and orders shipped.
- **Operational Performance** can be measured in terms of speed, consistency, flexibility and malfunction/recovery.
 - Speed is the time taken for executing an order. With the level of development in information, communication and transportation technology/systems, the lead-time will continue to be shorter.
 - Consistency is reflected by execution of large number of orders in expected delivery time.
 - Organization's ability to respond to unexpected situation or request for unique customer service shows the flexibility.
 - Preventing malfunction and having contingency plans for prompt recovery can add value to customer service programme.
- **Reliability** is one of the most important dimensions of customer service quality. Customers' confidence can be built by providing advanced accurate information on the status of their orders, rather than giving surprises.

A customer-focused firm will do well to state the level of basic service commitment in terms of availability, operational performance and reliability to all customers.

The common interpretations for customer service are easy to do business with and sensitive to customer needs. LaLonde and Zinszer suggested three dimensions of customer service [5]:

- i) As an activity – that can be managed.
- ii) In terms of performance levels – can be accurately measured
- iii) As a philosophy of management – showing the importance of customer focused marketing

They defined: “Customer service is a process for providing significant value-added benefits to the supply chain in a cost effective way.” Excellent customer service performance is likely to add value for members of the supply chain. A customer service programme needs to be evaluated of its performance through measures like goal attainment and relevancy.

A primary reason for SCM becoming an important managerial issue in the nineties stems from increased national and international competition. Customers have multiple sources from which to choose to satisfy demand; locating product throughout the

distribution channel for maximum customer accessibility at a minimum cost becomes crucial. The dynamic nature of the market place makes holding inventory a risky and potentially unprofitable business. Customer's buying habits are constantly changing and competitors are continually adding and deleting products. Demand changes only make it almost sure that the company will have the wrong inventory.

3.3 FUNCTIONAL VS. INNOVATIVE PRODUCTS: SCM ISSUES

Marshall L. Fisher observed [4] that in some cases, costs have risen to unprecedented levels because of adversarial relations between SC partners as well as dysfunctional industry practices such as an over reliance on price promotions. A framework was devised for deciding which SC is the best for a particular company's situation. Products can be classified into two categories, either primarily functional or primarily innovative based on their demand patterns. It helps a manager to understand the nature of demand for their products and devise the SC that can best satisfy that demand. The root cause of the problems faced by many SCs is a mismatch between the type of product and the type of SC.

Functional products are the staples, which satisfy basic needs, don't change much over time, have stable, predictable demand, long life cycles and available at a wide range of retail outlets/grocery stores. Their stability invites competition and leads to lower profit margins. (See Table 3.1)

Fashion apparel and personal computer manufacturers introduce innovations to avoid low margins and to give customers reason to buy their products. But, the demands for these products are unpredictable, life cycle is short and profit margin is high. They also require a fundamentally different SC than functional products. (See Table 3.2)

SC performs two distinct types of functions: a physical function and a market mediation function. Physical function includes converting raw materials into parts, components and finished goods, and transporting all of them from one point to the next in the SC. Market mediation function is less visible but equally important and ensures matching of offerings with customer's preferences.

Each of these two functions incurs physical costs (costs of production, transportation, inventory storage) and market mediation costs arising out of marked down or lost sales opportunities and dissatisfied customers.

Table 3.1: Functional Versus Innovative Products: Differences in Demand

	Functional (Predictable Demand)	Innovative (Unpredictable Demand)
<i>Aspects of Demand</i>		
<i>Product Life Cycle</i>	More than 2 years	3 months to 1 year
<i>Contribution margin</i>	5% to 20%	20% to 60%
<i>Product Variety</i>	Low (10 to 20 variants per category)	High (often millions of variants per category)
<i>Average margin of error in the forecast at the time production is committed</i>	10%	40% to 100%
<i>Average stock out rate</i>	1% to 2%	10% to 40%
<i>Average forced end of season markdown as percentage of full price</i>	0%	10% to 25%
<i>Lead time required for made-to-order products</i>	6 months to 1 year	1 day to 2 weeks

Table 3.2: Physically Efficient Versus Market-Responsive Supply Chains

	Physically Efficient Process	Market-Responsive Process
<i>Primary Purpose</i>	Supply predictable demand efficiently at the lowest possible cost	Respond quickly to unpredictable demand in order to minimize stock outs, forced markdowns and obsolete inventory
<i>Manufacturing focus</i>	Maintain high average utilization rate	Deploy excess buffer capacity
<i>Inventory Strategy</i>	Generate high turns and minimize inventory throughout the chain	Deploy significant buffer stocks of parts or finished goods
<i>Lead-time focus</i>	Shorten lead time as long as it doesn't increase cost	Invest aggressively in ways to reduce lead time
<i>Approach to choosing suppliers</i>	Select primarily for cost and quality	Select primarily for speed, flexibility, and quality
<i>Product Design Strategy</i>	Maximize performance and minimize cost	Use modular design in order to postpone product differentiation for as long as possible

A global brand can be greatly benefited by having gathered knowledge of customers and their choices, through channel partners; and can create global products, which may need to be adapted as per local preferences.

Activity 1

Define Customer Service for two organizations— one offering a product (Colour Television) and another one offering a service (Personal Banking). What are the targets you will set for these organizations for achieving a high image on customer service and evaluating the performance level?

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3.4 EFFICIENT CONSUMER RESPONSE

Since 1980s, many organizations have been going through, the job of reengineering their business process and it involved revisiting their supply chain. One Efficient Consumer Response study estimated that 42 days could be removed from the typical grocery supply chain, freeing up \$30 bn in current costs and reducing inventory by 41% in USA. A study by A.T.Kearney estimated that supply chain costs represent more than 80% of the cost structure in a typical manufacturing company. For retailers, this figure is 70 to 80 %. These numbers indicate that even slight improvements in the process can translate into millions of dollars on the bottom line.

Some of the critical success drivers to achieve improvements have been suggested, and these are:

- Well-defined processes with well-defined guidelines for decision making;
- Removal of the organizational and functional barriers;

- Early visibility to changes in demand all along the supply chain;
- A single set of plans that drives the supply chain operations and integrates information across the supply chain.

Some of the learning from case studies on SCM

a) *ABC Foods Company:*

- Materials common across businesses are purchased centrally to take advantage of economies of scale, other items exclusive to a given business unit are purchased by the unit,

Supply strategy includes four key practices:

- i) Consolidation of the supplier base,
 - ii) Development of supplier partnership,
 - iii) Penetration into supplier performance,
 - iv) Commitment to Quality.
- Manufacturing plants are strategically located throughout the US, based on supplier or customer base,
 - Distribution network includes facilities strategically located based on customer demographics, as well as transportation efficiencies. Some of these facilities are self owned and third parties operate others.
 - Main focus in distribution was to establish customer partnerships, which was based on ECR concepts including continuous replenishment.

The ECR includes the following strategies:

- 1) Widespread implementation of EDI (Electronic Data Interchange), up and down the supply chain; both between Supplier and Manufacturer, Manufacturer and Distributor, Distributor and Customer.
- 2) Greater use of POS (Point of Sales) data obtained by greater and more accurate use of bar coding.
- 3) Co-operative Relationship between Manufacturer, Distributor, Suppliers, and customers.
- 4) Continuous Replenishment of inventory and flow through distribution. (Like JIT (Just-in-time), Cross Docking)
- 5) Improved Product Management and Promotions.
- 6) Could be the best source of Competitive Advantage.

One of the most beneficial aspects from ECR could be building relationship with the Customers:

- Customer satisfaction improves, as customer gets what he wants
- Capturing database of customer through a smart card device and link it to his purchase patterns in terms of item, quantity, size and time-offering volume or value bases incentive scheme.
- Make use of such database to forecast future demand and thereby achieving better customer service and less stock out situations.
- Inform customers of new arrivals – through direct mailers.

Since the ECR is a strategic option for an organization, we first need to understand what factors have driven a firm to re-look at their current strategy and what are the options an organization has to respond to such factors, keeping in mind past performance and internal capabilities and resources.

Once a strategic option has been chosen after evaluating possible alternatives, firm is required to go through the process of implementation, which includes structure and systems, people, skills, values and culture, resources and leadership.

The Efficient Consumer Response concept popularly known as ECR is a strategic choice for many organizations to survive/grow in the current business environment, which is driven by competition, speed, technology, customer satisfaction and ever-changing customer preferences. ECR provides a competitive advantage to differentiate from other players.

ECR movement, which followed another movement called Quick Response in textile/apparel industry, initially started in grocery industry to respond to the following customer service expectations, most efficiently and effectively.

- They get what they want, when they want it, and as much quantity as they need.
- They get it at the most competitive price
- They achieve satisfaction or delight, through customer value addition.
- They feel good of having received attention.
- They feel happy being cared for.
- They enjoy being listened to and being served quickly.

In order to fulfill these expectations organizations will be required to re-orient and review the areas like structure and systems; people, skills, values and culture; resources and leadership.

Structure and Systems

ECR has a long-term impact on the effectiveness of the value delivery system to the customers, by way of a collaborative relationship between manufacturers, wholesalers, retailers, brokers, and transporters through application of advancement in Information and Communication Technologies (ICT). Therefore, the structural changes may be necessary to enhance and focus on proper co-ordination and collaboration among channel partners. Many organizations have switched over from product focus to customer focus.

Application of technology for data capturing and processing to help quick and accurate decision-making is a must. EDI and Bar Coding technology can only enable transfer of POS data to the channel partners and avoid losses due to over/under stocking of products throughout the channel. Through integrated EDI; purchase order, delivery order, Invoice, Shipping bill, Stock Information, Truck Movement Information can be exchanged between channel partners.

Earlier firms used to produce goods as per their capacity and convenience to achieve economy of scale and profitability. Now the manufacturing plans are customer driven and there is major dependence on POS data at SKU level (stock keeping unit) for forecasting, in many organizations. New product introduction system will be required to draw major inputs from customer feedback or customer survey. It has to be done at a faster speed than the competitors and frequency has to be improved due to shortening of PLC. Even an innovation can't assure a very long-term stay and benefits. Moreover, failure rates are also to be reduced.

Another important system change necessary for more meaningful decisions, is to introduce Activity Based Costing (ABC) instead of using full cost allocation systems. The Internet revolution will create a new dimension in achieving ECR. Channel partners can share data through common sites and consolidate/ process the same, for useful decision making and information sharing, in a most cost effective way.

People, Skill, Values and Culture

Based on the current status of the organization in terms of availability of human resources and skills, the firm has to review the needs for training of existing resources and acquiring required skill through recruitment. In case of adoption of advance technologies, one has to review its imperative for the organization to acquire new skills.

As this new concept thrives on efficiency, speed, responsiveness and the customer satisfaction, the values and culture of the organization have to make necessary adjustment and proper realignment to meet the new challenges.

Category Management requiring cross-functional skills to decide on product-mix, assortments (flavor, pack size, colour etc), co-ordination with manufacturing, purchases, shipping/transportation, accounts, contribution/profitability analysis, new product development, customer service etc, will require new skills.

Resources

Major investment will be necessary to acquire the new advanced technologies and the necessary skills required to operate it. Integrated Supply Chain Network demands adoption of similar relevant technologies by the channel partners. In a situation when some of these Channel Partners are not able to arrange for the resources, the manufacturer/marketer may be required to find financial resources with an objective to achieve total Supply Chain efficiency.

It is very important to note that each partner and the links in the value delivery chain must perform efficiently and continuously strive for further improvement. Even one inefficient link can result in sub optimal performance for the total chain.

There may be a serious need to improve transportation facility to improve on “Speed to Market” advantage. This can be done through owning additional trucks or by outsourcing.

Leadership

In order to adopt ECR concept as a differentiator, sound leadership can play a very important role. To drive the organization and channel partners through the change process may not be an easy task. Therefore, success of implementation will depend on the leadership qualities.

The leadership has to ensure executive support, commitment to change and empowerment, which are the key areas for successful ECR implementation. For example, wherever cross docking will be possible the tasks of and need for a distribution center will be minimum or nil. This may call for some unpleasant decisions from the leadership.

Strategic Alliances can facilitate new product development/introduction and market access or ensuring timely delivery and is coming off age now. Rediff.com has created such alliances with the partners like product/service suppliers, transporters/couriers and payment facilitators to be successful in their e-commerce venture.

What are the learning inputs you could get from the example of ABC Foods Company for implementation of ECR?

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3.5 QUICK RESPONSE AND ACCURATE RESPONSE

Quick Response is a retail sector strategy, which combines a number of tactics to improve inventory management and efficiency, while speeding inventory flows. Most QRs are between manufacturers and retailers only. When fully implemented, QR applies JIT principles through the entire supply chain, from raw material suppliers through ultimate customer demand.

Customer's sales are tracked immediately using EDI with bar code technology. It allows manufacturer to notify raw material suppliers and schedule production and deliveries as required to meet replenishment needs. This allows inventory reduction, speeding response times, lowering number of out of stock products, reducing handling and obsolescence. QR was first implemented in Textile & Apparel industry and an adaptation called ECR was implemented in grocery industry.

In order to fully understand the role of supply chain management in an industry it is necessary to study in depth the complexity of the supply chains for specific product groups, number of constituents in each level of the chain, the impact of constituents' performance in the value delivery system in general and to their customers of the chain in particular, their awareness of this impact and which are the areas that need performance improvement for overall efficiency and effectiveness of the value delivery system.

With the application of advanced Communications and Information Technology in the system, now each of the constituents would be able to serve its customer better and improve the value delivery process. The partners in the chain must understand what kind of support need to be provided to each other to ensure overall cost and value optimization of the system.

Some learning experience from case studies

a) *Apparel Manufacturer*

- The company sells lower priced brands to discount stores and upscale line to department stores. It has 20000 SKUs and sold through 6000 different accounts.
- Their efforts were on reducing costs within their exiting SC instead of producing overseas and utilizing time as a speed -to-market advantage.
- Apparel manufacturing is done at 2 units in US and another one offshore. All products are finished at one site and then shipped to two distribution centers.
- Implemented flow replenishment along with EDI connections with several major customers. It replenished inventory at the retailer without a purchase order from the retailer. Products are replenished daily or in economical batches, based on POS transactions transferred from the retailer on a daily or weekly basis,

b) ***Electronic – An Electronics Company***

One division produced corporate computer networks and secondary storage for desktop computers. With ever-changing electronics trends, products are short lived and often engineered to order.

- SC is a global network that delivers products and services from the supply base to the end customer through an engineered flow of information and material.
- SC comprises of: mining concerns, component manufacturers, assemblers, distributors, resellers/integrators, retail, end users, return depots and recycling Partners.
- Information is communicated across nodes using various methods to assure delivery of marketing programs. An engineering change order initiates an implementation process, which involves all departments affected by it. Information and communication must flow within predetermined normal response times and these are critical in maintaining strong vendor relationship and assuring delivery of programs within marketing requirements.

The uncertain market reaction to innovation increases the risk of shortage and excess supplies. High profit margins and the importance of early sales to capture market share for new products, increase the cost of shortages. At the same time short life cycle increases the risk of obsolescence and thus costs of excess supplies. So, most important is to read early sales indication or other market signals and to react promptly. Crucial flow of information occurs not only within the chain but also from the marketplace to the SC. The critical decisions about inventory and capacity are as to where in the SC to position inventory and available production capacity in order to hedge against uncertain demand. Suppliers should be chosen for their speed and flexibility, not for their cost alone.

A leading Japanese apparel manufacturer produces its basic styles in low cost Chinese plants keeping production of high fashion styles in Japan, where the advantage of being able to respond quickly to emerging fashion trends more than offsets the disadvantage of high labour costs.

A lean, efficient distribution channel is exactly right for functional cars, but totally inappropriate for innovative cars, which require inventory buffers to absorb uncertainty in demand. The most efficient place to put buffers is in parts, but doing so directly contradicts the just-in-time system that automakers vigorously adopted.

Mass Customization

National bicycle's success of a responsive supply chain was part of new movement called mass customization – building ability to customize a large volume of products and deliver at close to mass-production prices.

Accurate Response System

Sport Obermeyer, manufacturer of fashion skiwear, adopted a blending of three strategies of reducing, avoiding and hedging against uncertainty [4].

- To reduce uncertainty, company solicited early orders from 25 largest retailers. This enabled them to forecast national demand with a margin of error of just 10%.
- Once employees were told of the benefits of shaving off each day in lead time by way of saving the cost of air-shipment, they found many ways to shorten the lead time.

- Company asked six members of a committee to forecast for all products and selected those styles when all six individual forecast agreed. Using this average forecast as well as data on the cost over and under production, it developed a model for hedging against the risk of both problems. The model worked out the quantity of each style to make in the early production season (which begins a year before the retail season) and how much to make in February, after early orders are received. This approach, called “accurate response”, has cut the cost of both over and under production in half – enough to increase profits by 60%. It also resulted in 99% product availability.

The “accurate response” system distinguishes those products for which demand is relatively predictable from those for which demand is relatively unpredictable, using blend of historical data and expert judgment.

The relatively predictable category should be made furthest in advance in order to reserve more manufacturing capacity for making unpredictable products closer to the selling season. This enables companies to make smaller quantity in advance, see how well is the response for different items early in the selling period and then based on that information, decide which products to make more of.[6].

Unpredictable demand and short-lived products are the hallmarks of the world market for apparel. Demand for fashion apparel, being a function more of taste than of objective consumer needs, long range forecasts tended to be highly inaccurate. Thus resulting shortages (stock outs) represent lost sales opportunities, surpluses represent lost revenues consequent to successive reductions (Markdowns), often to a point below the cost of production.

Due to growing demand uncertainty, retailers discontinued the practice of ordering large quantities of products in advance of the selling season and warehousing them until sold. Instead they ordered goods much closer to the selling season, in small initial quantities that could be replenished as the season progressed. Retailers essentially looked at indirect costs such as those associated with high inventory levels and long lead times.

This pushed the manufacturers to expand product variety, shorten order- fulfillment lead times and achieve higher order-fill rates. These trends drove the Quick Response movement.

The Quick Response Movement

“Quick Response” was the term used by textile and apparel manufacturers and retailers to describe buyer-seller partnership relationship in which the buyer transmitted orders via EDI and the seller promised to fill orders quickly. Many other features, as listed below could be added to these two basic elements, depending on the preferences and capabilities of the partners.

- UPC code symbols attached to product by the manufacturer, and scanned at POS by the retailer
- Electronic Purchase Orders transmitted to vendor
- Vendor marking of retail prices on garments (Pre-retailing)
- POS data by store, transmitted to vendor
- Advance Shipping Notices received from vendor in advance of shipment
- Electronic Invoicing
- Electronic Funds Transfer

The quick response movement had grown with the objective of strengthening the competitive position of the domestic manufacturing industries in the “fiber-textile-apparel” chain.

By April 1993 industry standards had been widely adopted by textile producers, apparel manufacturers, retailers, and transport companies. This enabled the retailers and suppliers to develop partnerships with the objective “to have the right quantities of the right goods in the right place at the right time”[8].

Operating on a Quick Response System apparel and textile retailing operations are tied up to the manufacturing operations, to provide the flexibility needed to quickly respond to shifting markets. The strategy consists of a combination of business practices and technology which are aimed at capitalizing on domestic manufacturers’ strongest competitive advantage – proximity to the domestic markets – by providing more suitable and acceptable products, higher customer service levels, and shorter lead times than those offered by foreign competitors. QR is intended to reduce overall inventory levels, increase inventory turns and avoid forced markdowns as well as stock outs [9].

Under QR mode, retailers and apparel manufacturers eliminate much of the risk inherent in the current system. Forecast error is reduced by planning assortments much closer to the selling season, performing consumer preference tests, limited introductions to pre-test and fine-tune specific style, colour, size options. Inventory risk is reduced by producing smaller initial orders and re-ordering more frequently throughout the season based on actual sales data from the POS, which is collected at the full SKU level.

Although imported goods may cost the retailer much less initially, foreign manufacturers generally require long order lead times (often nine months or more) that may result in larger and more risky inventory investments and consequently more chances of forced markdowns and stock outs at the retail level.

Estimates of the average length of time it takes for a new style of garment to make its way through the traditional apparel pipeline, from fiber production to retail presentation of a finished piece range from 56 to 66 weeks, with garments in actual production only 6% to 17% of that time.

Most important element of QR strategy is an effective information pipeline, characterized by shared information and efficient information flows. Kurt Salmon Associates has outlined a two-step implementation procedure for achieving an effective QR system. The first step is to establish QR partnerships with customers and suppliers and implementing the VICS (Voluntary Inter-Industry Communication Standards)-endorsed standards of the following technologies: UPC product marking, EDI computer-to-computer communication of transactions and shipping container marking with bar codes to streamline distribution.

The second step aimed at developing real-time merchandising and short-cycle, flexible manufacturing, involves the use of point-of-sale data analysis to identify trends, CAD to make important product design decisions closer to the retail selling season, and flexible manufacturing technologies to allow the timely, economical production of small lot sizes.

Though it is contended that a quick response of 30 working days is achievable with currently available technologies, but typically it takes over four times as long, requiring 8 days for placement of store order, 32 days for fabric sourcing and planning, 7 days for cutting, 20 days for sewing and a staggering 58 days for the goods to make onto the sales floor, for a total of 125 days [9].

Impact of Technology

Never has so much technology and brainpower been applied to improving supply chain performance. Point-of-Sale scanners allow companies to capture the

Customer's voice. Electronic Data Interchange lets all stages of the supply chain hear that voice and react to it by flexible manufacturing, automated warehousing, and rapid logistics. And new concepts such as quick response, efficient consumer response, accurate response, mass customization, lean manufacturing, and agile manufacturing offer models for applying the new technology to improve performance [4].

3.6 CHAIN RELATIONSHIP – WITHIN AND BEYOND THE ORGANIZATION

Organizations that work without functional barriers are likely to achieve coordination within the various components of the supply chain. This also necessitates the integration of data across the enterprise so that all planners in the SC share common information. It is important for organizations to have horizontal and vertical visibility into their SCs.

Advanced Manufacturing Research, a Boston-based consulting firm, developed a supply chain model, which emphasizes material and information flow between manufacturers and their trading partners [1].

The changes required by the management, are due to the following changes:

- Greater sharing of information between vendors and customers
- Horizontal business processes replacing vertical departmental functions
- Shift from mass production to customized products
- Increased reliance on purchased materials and outside processing with a simultaneous reduction in the number of suppliers
- Greater emphasis on organizational and process flexibility
- Necessity to coordinate processes across many sites
- Employee empowerment and the need for rules-based, real-time decision support systems
- Competitive pressure to introduce new products more quickly.

Most product supply systems are out of balance with customer requirements. Each link in the product supply system should be individually capable of producing and delivering what customers order each day. The entire supply chain is only as capable as the weakest link in the system.

Having pursued cost cutting measures aggressively, many companies have reached the point of diminishing returns within their organization's own boundaries and believe that better coordination across corporate boundaries- with suppliers and distributors – presents the greatest opportunities. This has coincided with the emergence of electronic networks that facilitate closer coordination.

Uncertainty is inherent in innovative products and requires efforts to find how to cope with it by creating a responsive SC. A company can employ three coordinated strategies to manage uncertainty:

- Striving to reduce uncertainty by finding sources of new data that can serve as leading indicators or by having different products share common components to the extent possible so that demand for components becomes more predictable.
- Avoid uncertainty by cutting lead times and increasing the SC's flexibility to produce to order or at least make it at a time closer to when demand materializes and can be accurately forecast.

- Hedge against the remaining residual uncertainty with buffers of the inventory or excess capacity.

Dispersed Manufacturing – Dissected Value Chain- Management of Chain Relationship

As companies focus on their core activities and outsource the rest, their success increasingly depends on their ability to control what happens in the value chain outside their own boundaries. In 1980s, the focus was on supplier partnership to improve cost and quality. In today's faster-paced markets, the focus has shifted to innovation, flexibility and speed [7].

Li & Fung is Hong Kong's largest export trading company and innovator in the development of SCM. On behalf of its customers, mostly retailers of US and EU, they work with an ever expanding network of thousands of suppliers around the globe, sourcing clothing, toys, fashion accessories, luggage. It draws on Hon Kong's expertise in distribution-process technology – a host of information intensive service functions including product development, sourcing, financing, shipping, handling and logistics.

This group's one breakthrough was dispersed production and dissecting the value chain- Labour intensive middle portion is done in southern China and the front and back ends of the value chain in Hong Kong.

Instead of considering which country do the best job overall, they adopted an idea of doing it globally by way of pulling apart the value chain and optimizing each step. For an example when it received an order from a US buyer to produce 10000 pcs of garments, they might decide to buy the yarn from a Korean producer but get it woven and dyed in Taiwan. The buttons and zippers might come from Chinese plants. Then, because of quota and labour conditions, make the garments in Thailand. If buyer needs quick delivery, divide the orders to five factories in Thailand. Effectively it was customizing the value chain to best meet the customer's needs. Five weeks after the receipt of the order 10000 garments arrived on the shelves in US, all looked like coming from one factory, with colours and everything perfectly matched. This is a new type of value added, a truly global product. Though the label would show "Made in Thailand", but it's not a Thai product. The manufacturing process was dissected and looked for the best solution at each step. The benefits outweigh the costs of logistics and transportation [7].

Similarly, it may be observed that the main pillars of success for ECR are the Integration, Collaboration, Co-ordination, Trust, Openness, and Sharing of information as well as benefits among all the channel partners, supported by advanced Information & Communication Technologies.

Forming close, ongoing relationships even with the carriers or logistic service providers can help to have distinctive competitive advantage in speed to customer, reliability, availability or other customer service factors.

The efficiency and effectiveness of customer service is possible through dedicated and motivated channel partners, which partly comes through a well-maintained relationship at each level. Suppliers, Distributors and Retailers need to trust each other to establish long-term relationships and provide optimum value to the customer. Efficient new product introduction and sales promotion can be explored by way of collaborative relationships among trading partners.

Relationship Marketing is the practice of building long term satisfying relations with suppliers, distributors, retailers and customers – with an objective to have their long-term preference and business. This is achieved by delivering high quality on time,

good service and fair prices to other parties over a period of time. It also results in strong economic, technical, and social ties among them and reduce transaction cost and time.

The ultimate outcome could be building a unique company asset called a Marketing Network, consisting of all stakeholders: customers, employees, suppliers, distributors, retailers, advertising agencies, university scientists, transporters and any other service providers. The competition, in future, will be between whole networks- rather than between the companies.

The company's challenge is to reactivate the dissatisfied customer through customer win- back strategies. It is easier to retract lost customers than to find new ones. The cost of attracting a new customer is estimated to be five times the cost of keeping a current customer happy. The emphasis is now shifting from making sales to building relationship. Apart from use of computers, information and communication technologies, fundamental changes in operational relationship are required. High tech without high touch may not provide a long-term differentiator.

Strategic Issues

The strategy of differentiation to satisfy specific customer requirements based on logistics performance/competency is becoming increasingly popular. In the present century, there is a pressing need of clear strategies to be distinctly different and unique, offering something different from their rivals.

Organizations have been rushing to implement the latest ideas on management and struggling to fit all the pieces together: TQM, TPM, Reengineering, Time-based Competition, Benchmarking, Restructuring, Downsizing, Cost Reduction, ERP Implementation and Supply Chain Management.

All these improvements are necessary just to stay in the game. But, that is not sufficient because, if everybody is competing on the same set of variables, then the standard gets higher but no company gets ahead. Therefore, organizations need to create distinctive competitive advantages continuously [3].

Manufacturers will have to increasingly think in terms of delivering value to customers/end-users, and this will require a complete rethinking in the way a company would need to operate its supply chain in the future.

Activity 3

“Li and Fung of Hong Kong has been very successful in a complex and competitive business environment by way adopting dispersed manufacturing, dissected value chain and effective management of chain relationship” - do you agree with the statement. How do you implement a similar system for an international book publisher based in Delhi? What are the technological advances that can be useful for this business situation?

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3.7 SCM AS A CORE STRATEGIC COMPETENCY

An effective marketing mix strategy integrates resources for these activities into an effort that maximizes impact on customers. SCM attempts to satisfy time and place utility by ensuring satisfactory performance of timing and location of inventory and other related services, as per customer requirements in a most cost effective manner. SCM competency is a tangible way to attract customers, who value performance on time and place.

One of the successful implementation of SCM as a business strategy was the cooperative alliance of Wal-Mart and Procter & Gamble. Both the firms individually committed to build SCM competency before proceeding with their joint partnership. The inventory availability and customer response time of an organization's service program may vary based on the prevailing market opportunity and competitive situation.

The SC problem is mainly a calendaring game, intimately tied to the time-phased nature of decision-making cycles in the business world. Therefore, one must examine the scope of the decision being made, as well as the authority of the decision maker. Since decisions, made at each of the strategic, tactical and operational levels, differ significantly, the solution procedures embedded in these tools vary. These tools should be configured so that they are fully integrated, which will reduce implementation costs as well time-to-benefit [2].

Managing SC means managing across traditional functional areas in the organization and also interacts with customers and suppliers. The cross-boundary nature of management called for incorporating SC goals and capabilities into the strategic plan of the company and use SC to achieve a sustainable competitive advantage [1].

3.8 SUMMARY

Supply Chain Management competency contributes to an organization's success by providing customers with timely and accurate product delivery. Excellent customer service performance is likely to add value for members of the supply chain. Many organizations have switched over from product focus to customer focus. It is important to clearly understand customer service deliverables when establishing Supply Chain Management strategies. This unit has discussed the customer focus in Supply Chain Management. It had deliberated on the key processes required to enhance customer focus in the supply chain

3.9 SELF-ASSESSMENT QUESTIONS

- 1) How can customer service be improved by proper implementation of SCM?
- 2) What are the fundamental concepts on which customer focused marketing is built on?
- 3) Can you define Basic Customer Service?
- 4) Why SCM became an important managerial issue during 1990s?
- 5) Do you see any difference between a functional and an innovative product? How these differences influence the supply chain design and its performance objectives?

- 6) State some of the strategies that are followed in implementation of Efficient Consumer Response (ECR).
- 7) How ECR can facilitate building customer relationship?
- 8) In order to achieve benefits of ECR, which are the organizational issues, a firm has to review and re-orient it?
- 9) What are the salient features of Quick Response System? For what kind of product it has been found to be beneficial and why?
- 10) Briefly explain the “Accurate Response System”?
- 11) Which are the technological advances, which have made possible the application of concepts like ECR and QR?
- 12) How the chain relationship can contribute to the success of SCM. Is it necessary to extend this relationship beyond the chain, to further achieve the objectives of SCM?
- 13) Do you think that there is a linkage between SCM and CRM (Customer Relationship Management)?
- 14) Can SCM be considered as a strategy for differentiation? If yes, why and how this should be exploited.

3.10 REFERENCES AND SUGGESTED FURTHER READINGS

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