

12. Factor Affecting Customer Service in Supply Chain Management of Small and Medium Enterprises: An Empirical Study of Jammu Region

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Abstract:

The purpose of the paper is to find out the dimensions of customer service in supply chain management (SCM) of small and medium enterprises of Jammu region. The paper used the empirical analysis in which convenient sampling techniques is used. In which a sample size of 50 has been taken from the business to business firms both in terms of suppliers and customers orientation. After the collection of data the exploratory factor analysis (EFA) is used to find out the different dimensions of the customer service in the supply chain management of small and medium enterprises. The paper finds different dimensions which help to improve the customer service in supply chain management which includes the customer segmentation, customer relationship, customer service strategy and service quality both in terms of customers and suppliers in business to business chain of the firms. The research is carried out in a small sample size and more over the customer service frame work of only business to business firms were find out which includes only the immediate customers and immediate suppliers of the firms. The propose system is a usable aid for decision making. The paper proposes an original approach to customer service orientation in SCM of small and medium enterprises that will change the decision of investors.

Keywords: Customer services, Supply Chain Management, Small and Medium Enterprises





Full Text:

1.1 Introduction

Supply chain management is way of maximizing efficient use of resources in achieving the supply chain customer service goals. Stevens (1990) describes the objective of the supply chain management is to achieve a balance between goals of high customer service, low inventory investment. It help to create a competitive advantage and greater profitability for the channel through coordinated attention to costs, better customer service, and lower inventories (Cooper and Ellram (1993). There were consensuses that supply chain management objectives which include those of lower cost at specific level of customer services or improved customer services. To understand this it is better to examine first more broadly the meaning of customer service. Customer service has alternatively been described as a process, a set of activity or a function to be managed within the firm which includes; a) order processing (invoicing or handling customer complaint), b) a performance outcome or measure (i.e., order fill rates, cycle time, percent on time delivery), c) a customer related objective or outcome (i.e., customer perception of availability, quality and timeliness), leading to customer value and satisfaction, or d) a management philosophy (Ellram, LaLonde, & Weber, 1989; Lambert & Stock, 1993; Langley & Holcomb, 1992). It is important to note that the customer service is an operational functional or outcome that contributes to the ultimate goal of customer value and satisfaction.

Stevens, 1990 described that customer service has been encompassing all points between customer and supplier (including delivery, pre and post sale service, technical service and financial packages). It has been also emphasized that customer service is the outcome or the operational function of the service provider whose ultimate goal is customer satisfaction and differential advantage achieved through value. In a supply chain context the customer service interface plays a significant role, supply chain management requires the key processes such as customer relationship management, customer service management, demand management, and order fulfilment which are focused on understanding and meeting customer requirements. The customer focus associated with the supply chain management



has significant implication for management of customer service activity and outcome. This emphasizes the importance of customer service in successful implementation of supply chain management.

The marketing perspective of customer service includes the elements of product design and maintenance, training, salesperson attitude and responsiveness, ease of customer interface with the firm, guarantees, and price, in addition to the element of logistics service. Since logistics service is a subset of overall customer service which includes elements associated with the handling, warehousing and delivery of products to meet customer needs. Mentzer et al., (1989), Rinehart, Cooper, & Wagenheim, (1989) put forward some important dimension of logistics service viz., delivery reliability, product availability, timeliness or responsiveness, accuracy, and freedom from damage. Moreover customer service is the unifying factor for integrating marketing and logistics, which result customer service of the firm (Rinehart et al.,; 1989). Thus, customer service can be thought of as an integrative activity both within the firm, between firms and within the channel.

With the integration of the customer service and organizational process, its impact on demand has been studied with the cost effective distribution (Mentzer et al., 1989). Manrodt and Davis (1993) put forward that earlier the customer service was only supplier oriented with little focus on identifying and meeting customer needs. But now a pressure to improve the customer service increasing, those firms that are successful in attaining the goal of customer service are in sustainable competitive advantage. With an increased focus creating value for customer and thus acquiring competitive advantage, the development of an appropriate customer service strategy has become an important aspect of the customer service in supply chain management.

The present research article focused on the factor customer service in supply chain management aspect of the small and medium enterprises of Jammu region. Since small and medium enterprises (SMEs) are the backbone of any developing economy but little concern about this sector has shown particularly in the rough topography like Jammu and Kashmir which motivated researchers to work for the improvement of SMEs in this region. Moreover in this paper the researchers are





going to find out the factor that will be important for the improvement in the customer service in supply chain management through empirical analysis.

1.2 Review of Literature

The development of supply chain management from the traditional purchasing and logistics functions has now become a broader strategic approach. This concept has merged into the modern era of holistic and strategic approach to operations, materials and logistics management (Tan; 1999, 2000). Cooper, Lambert, and Pagh (1997) has put forward the concept of supply chain management as an extension of logistics needed for some level of coordination of activities and processes within and between organizations, or as an all encompassing approach to business integration. Therefore, the relationship between Business to Business (B2B) firms depends upon mutual sharing of information and it was put forward by the contingency theory "fit" research. This theory emphasized on the information technology investment of the business firms to decrease the unpredictability of demand and to improve the supply chain integration and the performance of the firms (Iyer, Germain, Claycomb; 2008, 2009). Sukati, Hamid, Baharun, Yusoff (2012) also put forward an empirical result based on the classification of job functions of the supply chain management respondents i.e., corporate executive, purchasing, manufacturing/production, distribution/logistic, SCM, transportation, material, and operation from Malaysia manufacturing industries and found that there is a significant relationship between the supply chain management practice based on the mutual sharing of information, trust and supply chain performance. Thus the information and communication technologies have identified the potential paths for SMEs to improve the procurement practices and it has an impact of customersupplier relationships on procurement function in formulating Supply Chain Management (SCM) initiatives (Thagurathi; 2007). Thus, the integration of information technology with the supply chain management helps to improve customer service performance followed by financial performance.

Vickery, Jayaram, Droge, Calatone (2003) has put forwarded the research model using data from first tier automotive suppliers of North America region which shows direct relationship between (1) integrated information technologies





and supply chain integration, (2) supply chain integration and customer service, (3) customer service and firm performance.

Rasanen, Kannisto, Hara (2003) emphasized that Business-to-business (B2B) customer needs which has changed from the basic information communication technology (ICT) to market structure information which has increased the need for identifying individual customer segments and their needs. Therefore segmentation is one of the important functions of the organization for making the better customer relationship. Koo, Tao and Koo, (1999) on the basis of ISG (i.e important, satisfaction, gaps) questionnaire can help to give the different information about customers attitudes and preferences and it hepls for segmentation. Rasanen, Kannisto, Hara (2003) put forwarded segmentation model in the ICT service provider which is based on Palmer and Millier's (2003) and this includes the demographic variable based on the customer segments and their needs. Thus the segmentation also evolved on the basis of the environment in which Liang and Chang (2007) contradicts the conventional theory which holds that green supply chain management will cause more cost to SMEs, and lower firm performance of SMEs. But actually the empirical result show that there are great influence on the green supply chain management on the business performance of SMEs in China.

The competition was based on price with names and trademarks were of subordinate value. But now the retailers have grown substantially and are forcing their suppliers to improve the production and delivery of products. This makes the retailer more diverse and powerful, and hence forced the suppliers to adapt to the retailers service requirement (Gustafsson, 2003). Gustafsson also used the service delivery element as the basis for the segmentation of their customer and considerable emphasis on delivery and value added logistical services. Moreover Bernstein and Federgruen (2005) addressed the equilibrium behavior of supply chains in the context of two-level supply chains with a single supplier servicing a network of competing retailers, and non-competing retailers based on the retail price. For that matter Keskinocak and Tayur (2001) proposed that the supply chain from an operations perspective, which have three components i.e., sourcing or procurement, manufacturing and distribution, and inventory disposal. It would be



managed with the help of internet to provide value to customer. Narayana (2004) studied the small and medium firms on the bases of analysis of quality, cost of infrastructure facilities and business environment, results of which show that different region has its own competitiveness.

The inappropriate customer service strategies and services that customer does not need or want derails the marketing efforts of the firm's (Lambert and Stock, 1993). This not only reduces the credit worthiness but also reduce the market share as well as corporate profit of firm. So, Lamber and Stock (1993) has reviewed five approaches to strategy development viz., a) customer reaction to product/service failure, b) cost/revenue trade off, c) ABC analysis for profitable customer, d) internal and external customer service audits, and e) competitive position matrix, that help firms establish appropriate customer service strategies.

Cacho & Lariviere (1999) suggested that supplier reduce the probability of idle capacity through the capacity choice and allocation. Hence, Gilmore (1999), Gilmour and Harison (1996), Gilmour and Hund (1993) recognized that performance of supply chain can be improved through strategic audit framework i.e., a) six functional process capabilities viz., i) customer dialogue supply chain, ii) efficient distribution(logistics), iii) demand driven sale planning, iv) lean manufacturing, v) supplier partnering, vi) integrated SCM, b) technology capability, viz., i) integrated information system, ii) advanced IT, c) organization capability, viz., i) integrated performance measurement ii) team work, iii) aligned organization structure for the growth and development of the business firm. Therefore, implementing an individually responsive allocation mechanism, such as linear allocation which cannot guarantee the best allocation capacity, it nevertheless achieves a reasonably good allocation between the retailer and supplier. Hence Bhatnagar &Teo (2009) put forward the global service strategic view as the tradeoff between the logistic drivers viz., a) transportation, b) inventory c) information and facilities and the competitive measure indicators viz., a) financial, b) operational, c) customers to enhance the competitive advantage for global supply chain management to improve the customer service in supply. Thus the supply chain strategy utilizes inter firm coordination and the capability that facilitates achievement of objective focused on revenue growth, operation cost reduction



working capital and fixed capital efficiency to maximize shareholder value (Christopher and Ryals, 1999).

Therefore all the literature reviewed supports that the customer service is a basic prerequisite of service to customers before, during and after a purchase. It includes the series of activity which helps to design a product or service that met with the customer expectation and enhances the level of customer satisfaction (Turban et al., 2002).

The customer service of different firms depends upon the efforts of employees who can adjust themselves to the personality of the guest. Therefore from the point of view of an overall sales process engineering effort, customer service plays an important role in firm's ability to generate income and revenue. From that perspective, customer service should be included as part of an overall approach to systematic improvement.

Customer service relates to the relationship and understanding of the features and benefits of a product or service, the nature of the organization's customers—past, present and future, the entire transactional process, from a potential customer's initial awareness to post-purchase satisfaction. Since logistics customer service in the supply chain considerably differs for the large firms from the small firms. Small firms has to play dual role of the supplier and the customer; and first and foremost, should take an active part in creating and implementing a supply chain strategy (Dlogosz, 2010). Tippayawong et. al. compares two different groups of companies with different supply chain operation and evolved the Supply chain management logistic scorecard to know the strength and weakness of companies on four decisive areas, i.e., corporate and interorganisation alignment, planning and excution capability, logistics performance and IT implementation and management.

Small and medium enterprises are an important part of economic activity in Indian economy. Management of various issue such as inventory, warehousing, transportation, and partnership alliances, customer etc. become very critical for small and medium enterprises. Therefore these organizations are trying to implement supply chain management processes. For example transport is for many





SMEs the largest cost associated with their logistic activities and is a process that is repeated many times, throughout the distribution channels (Nooteboom et al., 1997). This makes the management of transport for SMEs as important process.

Hence a hypothesis has been deduced from the above literature review has been tested using the select scheduled prepared for the particular study. The hypothesis is as under:

H1: Customer Service in Supply Chain Management of SMEs has intact by these dimensions viz., segmentation, strategy, relationship and service quality.

1.3 Research Methodology

The data collected from the 50 small and medium sized enterprises of Jammu region. The persons contacted were the owners/ managers of the firms through the convenient sampling method. A pre-tested self developed schedule, prepared after consulting experts and review of literature. The response was received from all the 50 owners/ managers. Since the main focus of this research was to find out factors affecting the customer service in supply chain management so the research was based on the business to business orientation of these firms. Therefore the schedule contains the information on their customers and their suppliers differently on the basis of the dimensions identified during the review of literature. The dimensions covered in the schedule consisted of information on ordinal scale with seven point Likert scale which covered dimensions of segmentation, relationship, service strategy, and service quality by the firms to their customers and suppliers in which both the customer and suppliers dimensions have different items. After the data collection and tabulation, the data were then complied using the SPSS (19 Version). The data were reduced through the exploratory factor analysis using Principal Component Analysis with Varimax rotation that explores the data and provides the researcher with the information about how many factors are needed to best represent the factors of customer services. After the final run of the exploratory factor analysis only 67 items were retained out of the 150 items. These items best describes the objective of the study in details.

Since exploratory factor analysis used to find out the factors in which the KMO value with the degree of freedom and value of the chi square has been noted with 5 percent level of significance. According to the Malhotra (2002) the sampling



adequacy value between 0.5 and 0.7 are mediocre, 0.7 and 0.8 are good and above 0.9 are highly reliable. The value of the anti-image and communalities were find out to be above 0.5 and if any item having value less then this criteria was deleted and again the value of KMO noted without that items. After the final run of EFA the overall value of these measures lies above the 0.6 for the Cronbach alpha and KMO which is acceptable in nature. At last the final items were enclosed in the schedule were segmentation by the firms to their customers and their supplier (18 items), service strategy by the firm with their suppliers and their customers (23 items), service quality by the firm with their suppliers and their customer (7 items), and overall size of the firm (5 items). Thus the final outcome of this instrument would be laid down for the study in order to achieve the objectives of this study.

1.4 Data Analysis and Interpretation

Since the analysis was run on the customer service dimension of supply chain management of SMEs in Jammu region. Therefore our analysis was drawn on the business to business orientation of the firms. This orientation consists of suppliers and customers of the respondent firms. The data collected were both different for the customer orientation and the supplier orientation. The customer service in terms of suppliers and customers deduced through dimensions wise. The dimensions included in both the suppliers and customers consisted of a) service strategy b) service segmentation c) service relationship d) service quality.

1.4.1 Customer Service in Terms of Suppliers of the Firm

Service Segmentation: The overall mean score value of service segmentation was 4.78 and this is more than half of value of the scale on which the dimension has been recorded. The dimension segmentation having KMO value of 0.615 with varimax rotation and Kaiser normalization in which rotation covered in 3 iteration and the items included in this dimensions were found to be "segment firm on the basis of proximity of location" with factor loading value (FLV)=0.775, Mean Value (MV)=4.92, and standard deviation (SD=1.77), "on the basis whose promotion process easily served" with FLV=0.706, MV=4.52 and SD=1.47, "Segmentation firm on the basis whose distribution process is easily served" with FLV=0.667, MV=5.06, and SD=1.42, " segment firm on the basis of the stability to firm demand" with



FLV=0.810, MV=4.85 and SD=1.68 and "on the basis of cost of the product" with FLV=0.600, MV=4.56 and SD=1.78. The Chronch Bach alpha=0.587 which is more than the threshold value of 0.5 (Malhotra; 2002). The split half value of alpha with part I=0.579 and part II=0.393.

Service Strategy: The overall mean score value of the dimensions strategy 5.92 and after the final run the KMO value 0.728 with vari-max rotation and Kaiser Normalization in which rotation converged in 3 iterations. The reliability analysis of this dimension was came out to be Cronbach's Alpha was 0.780 which was above the threshold criteria. The dimension service strategy consist of items " audit the supplier capability" with FLV=0.649, MV=4.94 and SD=1.49, "use integrated supply chain management" with FLV=0.712, MV=4.50, and SD=1.84, "efficient distribution system" with FLV=0.638, MV=5.27, and SD=1.08, "use the integrated information system" with FLV=0.544, MV=4.46, and SD=1.91, "emphasis on product quality" with FLV=0.668, MV=5.60 and SD=1.16, and "flexibility to respond to unexpected demand change" with FLV=0.627, MV=4.75 and SD=1.55.

Service Relationship: The service relationship was one of the important aspects with overall mean square value of 5.88. The mean value approaching the higher end of the scale which implies that relationship played an important role in the customer service of supply chain management. The KMO value of the construct after the final run was 0.613 and the reliability value of the construct was 0.578, both these parameter was above the threshold value of 0.5 which show that construct was reliable for the further study. The construct service relationship consisted of items namely "supplier require shipment tracking ability" with FLV=0.856, MV=5.06 and SD=1.22, "transparent to each other" with FLV=0.802, MV=4.77 and SD=1.848, "long term relationship with the supplier" with FLV=0.711, MV=5.27 and SD=1.689, "regularly study supplier operation for planning" with FLV=0.655, MV=4.92 and SD=1.442, "joint committee" with FLV=0.584, MV=4.73 and SD=1.634, "in a hard time firm are willing to help supplier" with FLV=0.572, MV=4.90 and SD=1.679 and "loyality help in long term relationship" with FLV=0.550, MV=5.79 and SD=1.166.

Service Quality: The KMO value of the service quality dimension was 0.590 and the reliability value of Cronach's bach Alpha was 0.94 which was high reliable for the find out the customer service in terms of suppliers in supply chain management. The



items included in the service quality were "consistent to delivery" with FLV=0.700, MV=5.13 and SD=1.532, "response time is quick" with FLV=0.559, MV=5.67 and SD=0.975, "uncertainty case firm response time is quick" with FLV=0.431, MV=5.29 and SD=1.220, "third party SCM specialist" with FLV=0.521, MV=4.83 and SD=1.521, "flexible to unexpected demand change" with FLV=0.565, MV=4.96 and SD=1.398, and "delivered at promised time" with FLV=0.565, MV=5.38 and SD=1.23.

1.4.2 Customer Service in Terms of Customers of the Firm

Service Segmentation: The segmentation of customer with overall mean score value of 5.11 which implied towards the larger value. This explained that the service segmentation was an important dimension for the customer service aspect in terms of customers. The overall KMO value 0.609 calculated using principal component method with varimax rotation converged in 5 iterations. The items included in the service segmentation dimensions included "Product usage rate" with factor loading value (FLV)=0.753 Mean Value (MV)=5.48 and Standard Deviation (SD)=1.031, "Life cycle of the product" with factor loading value (FLV)=,0.708 mean value (MV)=5.19 and standard deviation (SD)=1.379, "Viability" with factor loading value (FLV)=0.490, mean value (MV)=5.60 and standard deviation (SD)=0.893, "Legislation of government of particular state" with factor loading value (FLV)=0.674, mean value (MV)=5.35, and standard deviation (SD)=1.158, "Value of product they demand" with factor loading value (FLV)=0.659, mean value (MV)=4.96, and standard deviation (SD)=1.529, "Customs duties" with factor loading value (FLV)=0.613, mean value (MV)=4.46 and standard deviation (SD)=1.750, "Firm size" with factor loading value (FLV)=0.811, mean value (MV)=5.19 and standard deviation (SD)=1.525, "Existing infrastructures" with factor loading value (FLV)=0.707, mean value (MV)=4.67 and standard deviation (SD)=1.667. The internal consistency of this dimension of scale was examined using Cronbach's Alpha and it was 0.832 with split half value of alpha I=0.893 and alpha II=0.651 and therefore it was above the selected threshold criteria.

Service Strategy: The service segmentation dimension in terms of customers of the firms in supply chain management comes out after the exploratory factor analysis consisted of items namely "Better customer service" with factor loading value (FLV)=0.916, mean value (MV)=5.15, communalites value (CV)=0.840 and standard



deviation (SD)=1.571, "development of core competencies" with factor loading value (FLV)=0.906, communalities value (CV)=0.824, mean value (MV)=5.48 and standard deviation (SD)=1.091, "Third party logistics" with factor loading value (FLV)=0.864, communalities value (CV)=0.752, mean value (MV)=4.96 and standard deviation (SD)=1.713, "differentiation strategy" with factor loading value (FLV)=0.848, communalities value (CV)=0.734, mean value (MV)=5.50 and standard deviation (SD)=1.011 with varimax rotation converged in 3 iteration with Kaiser normalization. The Kmno Value of this dimension was 0.488 and the value of chronbach's alpha value was 0.472 with split half value of alpha I was 0.168 and alpha II was 0.059.

Service Relationship: The KMNO value of 0.785 of relationship shows the importance in the customer service dimension of the firm and overall mean value of 5.37 which were both above the threshold criteria. Whereas the mean value approached towards the higher end which show that its important aspect in customer service of SMEs. The various items of this retained after the exploratory factor analysis were "Feel your customer safe and secure" with factor loading value (FLV)=0.780, communality value (CV)=0.696, mean value (MV)=5.00 and standard deviation (SD)=1.598, "Mutual trust between them" with factor loading value (FLV)=0.762, communality value (CV)=0.606, mean value (MV)=5.10 and standard deviation (SD)=1.729, "Close association and collaboration" with factor loading value (FLV)=0.712, communality value (CV)=0.568, mean value (MV)=5.25 and standard deviation (SD)=1.500, "Courteous and behaviour" with factor loading value (FLV)=0.541, communality value (CV)=0.303, mean value (MV)=5.69 and standard deviation (SD)=1.035, "Correct delivery of service at first instance" with factor loading value (FLV)=0.537, communality value (CV)=0.445, mean value (MV)=5.75 and standard deviation (SD)=1.000, "Delivery quality is duly analyised" with factor loading value (FLV)=0.502, communality value (CV)=0.340, mean value (MV)=5.69 and standard deviation (SD)=1.014, "understand need and expectation" with factor loading value (FLV)=0.435, communality value (CV)=0.352, mean value (MV)=5.35 and standard deviation (SD)=1.376, "customer care each other efforts" with factor loading value (FLV)=0.858, communality value (CV)=0.743, mean value (MV)=5.08 and standard deviation (SD)=1.528, "handle customer grievance quickly" with factor



loading value (FLV)=0.551, communality value (CV)=0.548, mean value (MV)=5.50 and standard deviation (SD)=1.414.. The Principal component analysis method used for extraction with varimax rotation which converged in 3 iterations. The internal consistency of this dimension analysised through the Chronbach's Alpha value was 0.735 with split half alpha value of alpha I was 0.451 and alpha II was 0.663 which were above the threshold value of the selected criteria.

1.4.3 Overall Size of the Firm

The overall size of the firm dimension consisted of five items which include "Market Share" with mean value (MV)=5.31, factor loading value (FLV)=0.675, standard deviation(SD)=0.926 and communality value (CV)=0.704, "Sales Growth" with mean value (MV)=4.06 factor loading value (FLV)=0.689, standard deviation(SD)=1.961 and communality value (CV)=0.540, "Return on Assets" with value standard mean (MV)=4..67, factor loading value (FLV)=0.605, deviation(SD)=1.655 and communality value (CV)=0.737, "Return on Investment" with mean value (MV)=4.54, factor loading value (FLV)=0.754, standard deviation(SD)=1.738 and communality value (CV)= 0.696 and "Overall Competitive Position" with mean value (MV)=4.81, factor loading value (FLV)=0.752, standard deviation(SD)=1.671 and communality value (CV)=0.672. The overall mean value of this dimension was 4.678 and the KMNO value was 0.820, with the internal consistency of Cronbach's Alpha value was 0.856 and the split half value of the coronach alpha were alpha I=0.820 and alpha II=0.697.

1.4.5 Interpretation

In SMEs of Jammu region, it has been found that most of the owner/ manager were dominated by the male which was authenticated by the report of the MSME Census 2005-06. According to the report of the census very less women owned or managed these units. The large firm consisted of well furnished department, that will see all the function of the organization differently but with coordination with each other. But in SME's all the functions were controlled by the team of five to ten person and most responsible person who will see all these functions was their owner or manager. These manager established relationship with their suppliers and customers according to their comfort. Therefore the result of the analysis concluded that focus needs to be placed on the relationship, segmentation, strategy and service



quality in terms of the suppliers but placed on the relationship, segmentation, and strategy in terms of the customer. The numbers of the items were excluded from the analysis due to the short-sightedness of the owner or manger of these small firms. The items those retained in this study show that in terms of their suppliers the firms manager or owner put emphasized on segmentation (includes, 'items proximity of location', 'process is easily served', 'distribution is easily served', 'cost of product',), strategy (includes, these factor were be the primarily comes out from the study.

1.5 Summary and Conclusion

In manufacturing units, inventory positioning in production and operations require urgent managerial attention not for cost reduction but for achieving optimum collaborative relationships among supply chain intermediaries and customer satisfaction. The result of the analysis concluded that focus needs to be placed on inventory classification, inventory codification, inventory standardization and inventory control techniques. Firstly, additional storage capacity in the vicinity of existing production facilities needs to be created for storing production inventories. Secondly, Mnemonic Coding method is reported to less popular because of its restricted usage, particularly when the number of items becomes large. JKI units should follow mnemonic coding in order to save time as this method have only 26 alphabets on which basis inventory codification is done. Thirdly, Inventory standardization is carried out by the managers so as to avail better discounts and reaping advantages of advance planning needed for intensive market coverage. Fourthly, Economic Order Quantity technique is reported to be more popular because it minimizes the total annual costs and least popular is High, Medium and Low technique because of its high investment of funds, cost of maintaining and controlling, space availability, pollution control aspects and upkeep of factor. The determination of the inventory holding position can assist decision makers in specifying the location of warehouses in the supply chain to achieve acceptable fill rates with minimum investment in non-revenue generating inventory. Market intelligence through feedback from retailers and wholesalers will also assist manufacturing organizations in procuring production inventories and positioning of finished inventories across supply chain. Effective linkages with R&D organizations



and universities will also prove effective in searching cost effective alternative sources of raw material and manufacturing products as per customer expectations. The data for the study was collected only from managers and neglected employees working at shop floor level. The results can also be applied to micro, small and large manufacturing units within J&K state and India. Finally, further elaborations to research into the nature & dynamics of counter implementation in non profitable organization can also be taken.

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