

Quality Management in Textile Industries

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Abstract:-Quality management makes sure that an organization, product or service is Stable during the manufacturing and sales as well as during the after sales services. Quality management is focused not only on product and service quality, but also on the means to achieve it. Quality management, hence, uses the QA(quality assurance) and QC(quality control) of the operations and products to achieve more stability and improvement in terms of quality. Quality control in textiles is concerned with being certain a product meets performance standards and customer expectations. Quality management in textiles is set of steps or guidelines designed to guarantee that a product or service meets certain performance standards. The goal of quality management is to ensure that an item meets the needs and specifications of the consumer population. Good quality Management also helps a company to more efficiently navigate manufacturing and production processes to cut down on mistakes and waste, and maximize profit. In the textile industry quality management is a program put into place from the very beginning of the textile manufacturing process, starting from the sourcing of raw fibers to the final stages of garment production.

Keyword:- TQM , Quality Control , Quality Management.

I. INTRODUCTION

Quality Management is the operation or function of supervising all objectives and tasks needed to maintain a desired level of excellence in terms of quality and standards. This will include the selection of a QP(quality policy), Creating and implementing latest quality planning and assurance techniques, and quality control and quality improvement. Quality Management is also known as Total Quality Management (TQM). In general, quality management focuses on long-term goals through the implementation of short-term initiatives. The wellknown example of a TQM can be the Toyota's introduction of the Kanban system. A kanban is a physical signal that creates a chain reaction, resulting in a specific action. Toyota made use of this effective idea to implement its just-in-time (JIT) inventory process. To make its assembly line more effective as well as efficient, the company came into a decision to keep just enough inventory on hand to fill customer orders as they were generated. Therefore, all

parts of Toyota's assembly line are issued a physical card that has an inventory number associated with it. Just before a car part or an accessory is installed in a car, the card is transferred up to the supply chain, effectively and efficiently requesting another of the same part. This ensures that the company is able to keep tight knowledge of its inventory lean and that they don't overstock unnecessary assets.

There is a wide variety of influential areas on which quality fitness of the textile industry is completely based on, such as - performance, reliability, durability, visual and perceived quality of the garment. Quality is generally defined based on or in terms of a particular framework of cost. Quality is of prime importance in any aspect of business. Customers demand and expect value for money. As makers of apparel there must be a constant interruption to produce work of good quality products. In the Textile industry quality control or quality monitoring is practiced right from the initial stage of sourcing raw materials to the stage of final finished garment. For textile industries and apparel industries product quality is determined in terms of quality and standard of fibers, yarns, fabric construction, color quality, product designs and the final finished garment products. However quality expectations and forecasts for exports are depended to the type or kind of customer segments and the retail outlets. Quality control or monitoring and the quality standards are considered to be one of the most important or essential aspects of the content of any job and therefore a major factor in training.

II. LITERATURE REVIEW

According to Ming-Kuen Chen and Wei-You Sun (2010) on the application of collaborative design in Taiwan's Textile industry, the textile industry in Taiwan had a very short life cycle in the textile market due to demand uncertainty in the market. The Taiwan's textile industry to 60 years to establish a complete highly efficient supply chain system through the concept of the collaborative design, enterprise masters the markets and share information with suppliers immediately to achieve time to market. This study introduced collaborative application in Taiwan's textile industry. Enterprise size has got a significant effect in information technology application. Spinning, Dyeing and Apparel industry relate to the selection of materials, pigments and clothing production, so their strategies are early involvement. Finally, the authors have

suggested that the textile industry in Taiwan should control the market information, and enhance their own knowledge and skills to achieve minimum production cost with the maximum product value. The study indicated that central manufacturers could maintain competitiveness in the global market only through collaborative design which integrated the central manufacturers, suppliers, and customers together.

According to Dalia M. M. Yacout & M. S. Hassouna(2016) Waste Management is a big area of concern in the textile industry when it comes to the Quality Management and Waste Reduction. In their publication it is clearly stated that Waste management is a successful instrument which can be used to minimize generated waste and improve environmental conditions. In spite of the large share of developing countries in the textile industry there are only limited information available concerning the waste management strategies implemented for textile industries. In the study by the authors , two waste streaming approaches for hazardous solid waste treatment of synthetic fibers were investigated to identify which approach was more eco-friendly. The study was applied to one of the largest textile plants for acrylic fiber manufacturing in the MENA region. The study confirms previous results in recommending waste treatment by incineration. Shifting waste treatment from land-filling to incineration would decrease the overall environmental impacts and will allow energy recovery. Incineration has a better environmental performance in terms of human health impact especially carcinogenic and eco-toxicity potentials. If the landfill is not properly designed or if a long-term leachate to groundwater occurs due to base failure, high eco-toxicity and carcinogenic potential can be expected.

The study conducted by Elizabeta Mitreva & Nako Taskov (2014) on Total Quality Management systems within the textile production Sector says that Quality should be sought not only within the production process and products, but also in all segments of the business processes, even in the employees manner or behavior. Based on the studies conducted by the authors in the textile sector an appropriate methodology has been designed for each feature of TQM philosophy. In order to design the quality system, the QC-CE-Pyramid model has been applied, according to which the system should be realized through the Deming's circle (PDCA), as well as the Ishikava approach(i.e., who, what, when, where).

According to Elizabeta Mitreva & Nako Taskov (2014) on basis for the design and implementation of the quality system and CAD Mechanism in the Textile Sector, In order to design an effective quality system the authors here have applied the Quality Control-CE model based on which the system should be go through the Deming's circle (PDCA), and the Ishikava approach (i.e. who, what,when, where). For each type of model, morphologic, syntactic, and semantic errors are characterized. The data has been verified successfully in order

to classify quality testing equipment's, which are made for soul purpose of detecting and repairing data discrepancies that may affect the simplification of the textile products. Here The current situation in the Textile logistic center is analyzed through the four pillars of the house of quality which are the internal standardization, methods and techniques for providing quality, education andmotivation and cost analysis of quality.

According to the study conducted by Anthony Baah (2010) on resource communication technology and marketing of textile products, in which he analyses whether resource communication technology has aided in the marketing of textile products in the U.S. textile industry. Here the contributions of human capital in the marketingdepartment, the marketing-demand information system function, and the product supplychain management (SCM) groups regarding the planning for and development of theintegration of IT resources at TenCate Geosynthetics North America (TenCate), are explored using an in-depth, open-ended interview methodology. The study consisted of 20 participants selected from TenCate's employees. The study has projected nine core themes co-related to the organization, connectivity to the global market, better customer service, competitive advantage through production, networking and automated certification, increased market share through the Internet, easier accessibility of information from customers, continuous monitoring of order and delivery processes, adequate knowledge of raw materials and finished goods inventory levels, accurate forecasting, and better packaging and labeling. These findings from the study support the conclusion that developing IT resources in U.S. textile firms and effectively integrating human capital with the retail vendors products and services, using hardware and software technology, enhanced the U.S. textile industry's competitiveness in the intensely competitive global market an hence ensured Greater customer satisfaction especially in terms of product quality.

The Study Conducted by Ivan K.W. Lai & Henry C.W. Lau (22 September 2011) On Quality Assurance through hybrid risk management model, Which says that In today's business environment many uncertainties are affecting the business operations of Textile Industries world wide, they include financial crisis, terrorist attacks and natural disasters. These risks can have significant impact on both the short- and long-term performances of a business organizations and these organizations are likely to suffer loss if they do not actively manage these risks. The hybrid risk management model provides a comprehensive risk analysis tool using a top-down approach that helps an enterprise to gain a better understanding of its risks and have a better chance of success in continuing the business. The proposed model not only provides theoretical merits to the literature, but also applicable to different industries for risk management practices and the lower the risk the ability to maintain the product quality during the services between the company and the customers

will be much higher thus leading to greater customer satisfaction.

There are some active studies going on to determine whether there is any significant connection between employee satisfaction and the productivity in connection with the product quality maintenance. One such study by Indumathy.R.(Vol.6, Issue No.1, 78-90 2012,) On quality of work life among workers explores the Textile Industries in Tirupur District. Tirupur District Is a textile Hub and has maintained that label for a very long time. The Author states that a happy and healthy employee will give better turnover, make good decisions and positively contribute to organizational goal. The good quality of work life will not Just invite young and new talents but also upholds the existing experienced talents.

The Currency rates and its differences between country to country play a vital role when it comes to the Quality Management of products during imports and exports. Hui Siang Tan(August, 2006) the authors journal studies about the textile industries in Malaysia. This study investigates the relationship between currency exchange rates and the imports and exports of the Malaysian textiles and apparel industry over a twelve-year period. The researcher concluded that only textile imports had a significant negative correlation with the currency exchange rate in the Malaysian textile industry. The researcher believes that pegging the currency exchange rate is only good for the short term, and in the long term, will only hinder Malaysian economic development.

The Journal by Hasanuzzaman (International Journal of Information, Business and Management, Vol. 9, No.1, 2017) discusses on the factors that influence implementation of quality management system in Bangladeshi textiles industry. Bangladeshi Textiles industry follow QMS but not in an organized way. In this Journal, those factors that influence implementation of quality management system in Bangladeshi Textiles industry, challenges to implement, current practices have been discussed. Now a day's buyers are very conscious about their product quality. So each and every garments producer should give first preference to its valuable buyers. In this case if it's possible to maintain quality management system in organized way, the buyers will be convinced to give more orders in Bangladesh. From the study It proves that there are no industries which uses QMS properly somewhat they are using some of them. It is also predictable that in future if Quality Management System is maintained in proper way, Bangladeshi Textile industry will lead in this thriving sector.

Abdlhakeem A. Kilishi (2014) This Journal discusses on trade policy, consumer preference and the performance of textile industry. The author has stated that consumers preferences on textile materials is closely aligned with the Quality Management concept. The Product Quality has a vital role in the consumer market these days and once the consumer

preference is clarified the company or organization would be able to thrive in the textile sector because in textile sector the product is very closely associated with the consumer preferences. The Journal says that first, consumers in Nigeria prefer foreign textile to locally made textile. Second , differences in quality and availability are factors that drive consumer's preference towards foreign textile. Third, Nigerian textile industry is not performing efficiently and that consumers preference for foreign textile, limited demand from home market (domestic market).

III. FINDINGS AND SUGGESTIONS

- In recent years, quality management has become topical in management circles. The language of quality has spread throughout manufacturing industry into service industries and also into the public sector.
- The Textile industries have a very high potential for becoming the market leader in its segment, Most of the textile sectors in different countries lack the proper use and utilization of proper TQM or Quality Management techniques.
- Quality Planning (QP), Quality Assurance (QA) and Quality Control (QC) are the three main practices used for Quality Management.
- Difficulty to implement proper TQM or Total Quality Management is the Major disadvantage of TQM.
- Waste Management with Quality Management ensures environment friendly production as well as higher consumer interest.

IV. CONCLUSION

Total Quality Management is used by many business organizations around the world and has proven to be very effective. It is a verified and authentic method for implementing a quality conscious culture across all the vertical and horizontal sections of the organization. Total quality management is a management approach centered on quality, based on the participation of an organization's people and aiming at long term success .This is achieved through customer satisfaction and benefits all members of the organization and society. In other words, TQM or the Total Quality Management is a utility for managing an organization in a particular way which enables it to meet the stake-holders needs and expectations efficiently and effectively, without compromising or diluting the ethical values. The implementation of Quality Management and its effective techniques will help in streamlining the processes, and ensures a proactive work system which is ready to counter deviations from the ideal state to any desired state. Quality Management formation has got almost only positive effects on the employees in terms of satisfaction, product quality, customer satisfaction, and strategic business performance.

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