

Quality Control System of a Garment Manufacturing Company: A Case Study on Brandix Casualwear Bangladesh Limited

Mohammad Maksudul Karim¹

¹Assistant Professor, Dept. of Management Studies, Comilla University

Abstract: *In this 21st century not only product manufacturers and service providers but also consumers are very much concern regarding product or service quality. In this aspect all over the world organizations both manufacturing or service providing are quest for quality. Quality product or service is the first priority of the customers. Organization adapted many new initiatives to ensure its product quality or service. Due to Globalization organizations established their manufacturing plant in different countries of the world and the organizations try their level best to ensure the same product quality or service all around the world. Due to technological upgradation organizations get many facilities to ensure quality. Besides this, organization's own philosophy to assure quality also motivate organizations to take various measures to ensure product or service quality. To be competitive, to get strong market share and good reputation in the market organizations compete with each other. By using state of the art technology organizations are involved in fierce competition. Brandix as a foreign company try its level best to ensure product quality to satisfied customers. The study observed the quality control system of this company.*

Keywords: *Quality, Quality control, Quality assurance, Quality management, Leadership*

1 Introduction

Quality control in terms of garment manufacturing, pre-sales and posts sales service, delivery, pricing, etc. are essential for any garment manufacturer, trader or exporter. Certain quality related problems, should never be over looked. The consumers want to get high quality products in low price. The products should reach the consumers with right quality depends on the cost. Quality management is the aspect of the overall management function that determines and implements the quality policy. Quality assurance covers all the process within a company that contributes to the production of quality products. The inspection is carried out by representatives of the current production and the result record on control chart. The aim of garment inspection is to visually inspect articles at random from a delivery in order to verify their general conformity and appearance with instruction, description or sample received.

This paper also discuss about the various quality standards used by Brandix Casualwear BD Ltd. Second, Brandix Casualwear BD Ltd have deployed certain TQM practices (customer focus and top management commitment) at much higher levels than others, namely information and analysis system, education and training, employee empowerment, and process management.

1.1 Company Profile

The history of Brandix dates back to 1972, when Lux Shirts Limited forayed into the then virgin apparel-manufacturing industry. By 1981, Kuruwita Textile Mills was acquired and set the pace for a series of acquisitions that followed to mould and shape what is now the Brandix Group. LM Apparel, Gil Garments,

Phoenix Fashions, Kuruwita Manchester Textile Mills, Eden Fashions and Lakeside Garments all formed this growth strategy over a period in excess of three decades.

Sensing the sector's tremendous potential for growth, in 1990, the group established A&E Lanka followed by Lux Shirts Kahawatte in 1992. In 1993, the Kuruwita Textile Plant was commissioned and LM Collections set up. It was also during this year that formative steps were taken to consolidate the business under MASTLanka Limited. In 1996, the group took its first tentative steps to establish overseas production facilities with the setting up of Eden Fashions (Maldives) whilst concurrently investing in Ocean Lanka and Finitex Textile Finishing.

Brandix is Sri Lankas Largest apparel export having 32 manufacturing facilities and employing over 30,000 associates. Brandix Casualwear Bangladesh Ltd is the flagship company of Brandix in Bangladesh. The factory with its state of the art facilities is located in Comilla EPZ. The factory has started its commercial production in February 2011 and is already the largest employer in Comilla EPZ. With social commitments always in the force, we have already initiated health and hygiene interventions amongst our female associates. As a responsible corporate, we are also into Green initiatives and Endeavour to be one of the leaders in the field of environment conservation in Bangladesh. We deeply value our human resources and Endeavour to offer the best work environment suiting individual aspirations. To consolidate our expansion till now, we require the under mentioned personnel at our factory for immediate placement The Brandix factory is designed for maximum use of natural light, and uses energy efficient bulbs and motors. Shrewd use of natural ventilation enables reduced use of air-conditioning and the building and heating elements have been insulated for energy efficiency. Brandix is the biggest apparel exporter of Sri Lanka, employing 40,000 people in Bangladesh, India and the island nation. Officials said its foray into India is based on the "Fiber to Store" concepts and uses the advantages of scale and strong business fundamentals to leverage global expertise to offer 'total solutions' within the site. Brandix, its officials say, was the first apparel manufacturer in the world to receive ISO 50001 standard on energy management systems for its eco centre at Seeduwa, the Group's manufacturing hub in Sri Lank for M&S. In 2008, the Brandix eco centre became the first garment factory in the world to get a platinum rating from the US-based Leadership in Energy and Environmental Design (LEED).

1.2 Objectives of the study:

The main objective of this study is to know and have a clear idea about the concept of quality control system of the company. Along with this objective some other objectives of the study are as follows:

01. To get an idea regarding the leadership practices in the company;
02. To understand the policy guidance of customer satisfaction;
03. To get an idea about the employee involvement in the company;
04. To know the present supplier partnership scenario;
05. To know the present situation of performance measurement.

2 Methodology of the study

The study has been done on the basis of the following methodology:

To collect the data both primary and secondary sources were used. A self constructed questionnaire was administrated to collect primary data considering the objectives of the study. The questionnaire consists of open-ended questions, which was distributed to the quality control manager and quality assurance manager and to the respective staffs. The respondents were personally questioned and the questionnaires were filled in by the interviewer based on the response of the respondents. Some books on quality management, different journals and other publications regarding quality and the internet were also used as a secondary source of information.

3 Literature Review

A study by IoanMilosan in 2011 from the Transilvania University of Brasov, Romania entitled “Studies about the Total Quality Management Concept” provides a different perspective on the implications of a Total Quality Management system. MilosanExplains, “Total Quality Management is an organizationalstrategyfoundedontheideathatperformanceinachievingaquality educations achievedonly through involvement with the perseverance of the entire organization inimproving processes permanently. The objectiveis to increase the efficiency and effectiveness in satisfying customers (p.45). Later onin her study, Milosanconcludes,“TQM refers to an integrated approach by management to focus all functions and levels of an organization on quality and continuous improvement”(p. 45).Milosan’s research surmised that there are six key elementsto successfully implement a TQM process: confidence, training, teamwork,leadership, recognition,and communication. By focusing on three different quality management models, she cametothe realization in this study that TQM needs to focuson usingall of these key elements to create a “continuous flow” of small and progressive improvements from the very bottom of the organization, and work its way up through the rest of the hierarchy. As an overarching statement, she confines a successful TQM strategy as a “lasting commitment to the process of continuous improvement” (Milosan 45).

In urbanized countries such as UK, USA and JAPAN, total quality management has been a current issue for many years in all business sectors, mainly the manufacturing industry. However, in a developing country like India, even though it has successfully developed substantial manufacturing industry in the last two decades, TQM has made little impact. In manufacturing systems, quality management focuses primarily on technical issues such as equipment reliability, measurement of defects and statistical quality control techniques (process control). But quality management has penetrated into other areas such as product design, research and development, human resources practices (employee empowerment) team work, customer relations and organizational culture. Quality management pervades through the entire organization. Idris et al.(1996) conducted a survey of Malaysian manufacturing companies already registered to ISO 9000, with a view to examining their status as regards TQM implementation. Less than a third of the responding companies claimed to have RQM, but there was a strong minority claiming to have made substantial progress towards total quality practices. Theses authors also describes the Malaysian SIRIM model of total quality training for a company, which is multi-step process involving the adoption of such practices as a quality improvement process, Quality Control Circles(QCC) and TPM. Samson and Terziovski (1999) used a larger database of 1,024 usable

responses from Australian and New Zealand manufacturing organizations to examine the relationships between TQM practices, individually and collectively, and firm performance, the study showed that the relationship between TQM practice and organizational performance is significantly in a cross-sectional sense. Based on 698 usable responses from Australian and New Zealand manufacturing organizations, Dow et al. (1999) employed confirmatory factor analysis (CFA) to identifying nine quality practices. Nine quality practices include workforce commitment, shared vision, customer focus, and use of teams, personnel training, co-operative supplier relations, use of benchmarking, advances manufacturing systems, and use of just-in-time principles.

Salaheldin Ismail Salaheldin (2003) conducted a study on implementation of TQM strategy in Egyptian manufacturing firms. The study aims to explore the critical resisting and driving forces that inhibit or promote the implementation of total quality management (TQM) strategy in Egypt, in an attempt to determine whether TQM can be implemented effectively in this developing country, a force-field analysis was used for identifying the salient factors affecting TQM implementation in Egypt. The findings indicated that forces that promote or prohibit TQM implementation obtained in one developing country might be generalizable to another less developed country. The investigation identified some driving forces that promote the implementation of TQM strategy by the Egyptian manufacturing firms. G.Karuppusami and R. Gandhinathan, (2006) identified critical success factors of total quality management by using pareto analysis. The authors discussed even though there has been a large number of articles published related to TQM in the last few decades, only a very few articles focused on documenting the critical success factors (CSF's) of TQM using statistical methods. An examination of 37 such TQM empirical studies resulted in compilation of 56 CSFs. Implementation difficulties exist to operationalize such a large number of CSF's in organizations. The study analyzed and sorted the CSF's descending order according to the frequency of occurrences using the quality tool "Pareto analysis". A few vital CSF's were identified and reported. In manufacturing industries, automobile companies are more interested in implementing TQM. There are two main reasons: first, automobile manufacturing is the largest manufacturing activity in the world. secondly, increasing global competition over the past decade has forced automobile companies to improve quality and efficiency. Therefore, they are more willing to implement TQM in order to improve quality, and in turn to survive in the market. Therefore, TQM is found to be well established in the automobile industry as compared to other industries. Baba MdDeros, et al, (2006) conducted a study on benchmarking implementation framework for automotive manufacturing SMEs. The researchers described the need for a framework and its relationship with benchmarking and TQM then proposing benchmarking implementation frameworks. The frameworks were categorized into two broad types based on the different writer's background and the approach on how they view the benchmarking implementation process. The researchers suggested a conceptual framework for benchmarking implementation guides them through from the start to end of the benchmarking process. The framework was validated at six pilot case study companies, which gave useful comments and suggestions regarding the usefulness and applicability within the SMEs context.

4 Scenario of Quality Control System in Brandix Casualwear Bangladesh Limited

A set of co-ordinate activities to direct and control an organization in order to continually improve the effectiveness and efficiency of its performance. Each Quality management systems (TQM, ISO etc) and its elements (Statistical process control (SPC), Kaizen, Advance product quality planning and control (APQP), have a distinctive applicability. It is necessary that the approach selected suits current and future needs of the organization.

Manufacturers are now a day facing intensive global competition. The key to competing in the international market place is to simultaneously improve both quality and productivity on continual basis. The major purposes of the use of Brandix production are to increase productivity, improve product quality and manufacturing cycle time, reduce inventory, reduce lead time and eliminate manufacturing waste.

Bangladesh unit of apparel maker Brandix Group has snagged an environmental award from British retailer Marks & Spencer for its effort to significantly ramp down energy use and carbon footprint, The Sri Lanka-based group's Comilla factory, which can churn out 350,000 pieces of garments a month, has managed to cut back on energy consumption by 27 per cent, water use by 45 per cent while carbon emission by an estimated 60 per cent-part of its agenda to follow global ethical sourcing practices, they said. Brandix Casualwear Bangladesh Ltd, a concern of Sri Lanka's largest garment exporter, launched operation in Comilla industrial zone in April 2011 and the factory specializes in manufacturing of woven garments for men, women and kids. "Commitment to eco-friendly manufacture is in the DNA of the Brandix Group and it is encouraging to see this manifesting itself in our overseas operations as well.

4.1 *Development of Human Resources*

Training and Development is one of the core values of Brandix and we are fully committed to it. The ultimate aim is to ensure that all employees are provided the opportunity to attend training that will enhance their job capability and stimulate career growth. This Learning and development function at Brandix will support the organization's philosophy of investing in its people and providing them with the opportunity to develop their potential. T&D programmers are based on gathering individual needs, business needs and skills requirements of the business targeting future growth across the group. The learning arm of the company focuses on many spheres of intelligence such as leading and managing teams, strategic thinking, working under pressure, innovating thinking, communication and negotiation, planning and execution, technical training and customized business solutions.

4.2 *Training & Development Tools*

1. On-the-job training
2. Well designed and structured programs are facilitated through workshops/role play, case studies, Videos, they are workshops, etc.
3. Participation in local and overseas programmers
4. Coaching and mentoring by leaders who act as teachers
5. Benchmark visits/field visits.

6. A Performance Improvement Plan (PIP) for low performers for skills enhancement
7. Peer reviews and 360 degree feedback and counseling for employee development
8. Recognition schemes to encourage development
9. A knowledge center is being currently developed to equip our executive employees with the required knowledge for business and performance
10. Specifically tailored Leadership Training programs that foster our future leaders.

4.3 Practice of leadership

The Art of Leadership at Brandix Casualwear Bangladesh Ltd encompasses multiple assortments of ingredients across a canvas destined for iconic esteem. It is an art we have perfected, displaying explicitly that BCB LTD has impressed and inspired both the industry and the corporate sector. We have carved an indelible slate of pioneering initiatives and customer-centric innovations that has placed us on a firm platform within the Textile Industry in Bangladesh. Our leadership blueprint has been based on a simple formula; to always have our customers at the very core of our being. It is this formula that has strengthened us and has led us to constantly promote best practices through every decision we make, ensuring that the impact our business has made on each of our stakeholders is a positive one. This ensures that we take the lead as a customer-centric business, with dramatic growth on key customers; and to be the forerunners for innovation, while developing new trends that are set to take over the market and in turn, position the industry as the leader. Our commitment to every aspect of our business and its far reaching effects means that we are the frontrunners in sustainability; protecting and supporting our precious resources for the future as we drive and pioneer green initiatives which set an example in the industry. Having firmly positioned ourselves among the garment Top 50, ranked as one of the best performing on the Bangladesh and becoming the mill that has maintained the highest turnover in the country, we know that leadership runs through our veins. We have mastered the Art of Leadership which has made us a benchmarked role model for the industry and the nation. This is how we unfold our story of perfecting this art.

4.4 Customer satisfaction

The best in what Brandix product or its innovation or its system and procedure .customer satisfaction is our commitment .to assure them that Brandix will only give them best .this also means that the company will constantly strive to move upward and upwards, to ensure that its customer expectation will continue to be exceeded. Brandix is also committed to making sure that it will present its customer with total solution derived from outcomes of constant study and analyze of market and market trends .intertwining its unique brand of service excellence that has surely been the hallmark its customer centricity in these year.

It is interesting that Brandix has been intent on diversifying its vendor base, taking leadership in permeating iconic solutions, not only to meet brand expectations but also seeing a viable incline in vendor confidence for Brandix. Notching approximately 60% sales revenue outside the Brandix Group, clearly displays that TJJL has gained the confidence and trust of external vendors, some of who are Omega Group, mas Holdings, Hirdaramani Group and few other garment vendor groups. Continuing to strengthen vendor base through timely effective solutions will be the focus in its leadership strategy in the next few years, working directly with brands to spur new opportunities via innovation, instigating the Sri Lanka vendor base to garner a better foothold in the industry.

Continuing to be comprehensively customer centric, Brandix is also strengthening its partner relationships and forging new relationships to accelerate print solutions. This is further augmented with its emphasis on strengthening reliability through on time delivery, accent on quality and continually raising the bar in customer service. The levels of trust the Company garnered from customers has been truly remarkable. This is the result of an in-depth understanding the Company has on each brand's requirements which has enabled to align its resources and value chain accordingly. In addition, by working collaboratively with vendors and designers, Brandix is surely optimizing its offer.

Corporate Governance

Corporate Governance refers to the framework through which the relationships between all the stakeholders in a company are maintained. The key stakeholders include the shareholders, directors, and management of a company, as defined by the corporate charter, by laws, formal policy and rule of law. Also included are community, customers, suppliers, employees and other related institutions such as Customs, BOI, and other government entities.

Corporate governance forms a core part of the corporate philosophy of Brandix. For Brandix, good governance is a pursuit that provides the framework for sustainable growth of the business. Brandix strives to ensure that Company meets with the highest ethical standards in corporate conduct. The Board of Directors, led by the Chairman, is responsible for the good governance of the Company. At Brandix, the Company has chosen to follow a collection of best practices on Corporate Governance jointly issued by the Institute of Chartered Accountants Bangladesh and the Securities and Exchange Commission (SEC) issued in July 2008 and revised in 2011, Dhaka Stock Exchange (DSE) listing rules, the requirements of statutory obligations. These best practices of Corporate Governance are being adopted and are being implemented into business processes. Employees are actively involved in planning and implementing the processes that are required to meet Corporate Governance Best Practices individually and as teams with clear roles and responsibilities. The compliance to statutes is reported to the Audit Committee quarterly. At the date of this annual report, the Company is compliant with the Corporate Governance Rules identified above.

4.5 Innovation power

Using its high end in-house technology and in optimizing machinery productivity, finer gauge products have been developed by Brandix, which has inspired new concepts for the European market. The advantages of these products include clean and sheersurfaces, excellent draping and stability and better pilling imbuing a rich persona with good stretch and recovery abilities, making it ideal for high performing fabric used in intimates, sports and sleepwear.

Ultracut, is yet another pioneering Brandix innovation, an absolute cotton comfort fabric mixed with the richness of lycra, the ultimate solution for intimates. Engineered exclusively by Brandix, Ultracut sets itself apart from other synthetic competitors, given its dexterity, delicacy and flattering characteristics of contouring against the body. It is the ultimate cotton solution.

Brandix's innovation platform is firmly constructed on investing in the best technology available, given that this will be the key in growing its product portfolio and strengthening leadership status. Brandix saw the commissioning of a carbon sueding machine for silky fabric surfaces with a mechanised finish, a fleece and brushing machine which broadens its product offerings and the Martin Dale pilling tester enhancing fabric testing capabilities. Young blood including more additions from the textile design team, has been fused into its extraordinary R&D team whose knowledge portals continue to be enhanced. This team remains the secret potion that's applied to its leadership quest. It is they who will map trends, analyze markets and present innovative solutions, paving the way consistent business growth.

4.6 The Future in Perspective

Having embarked on a strategic plan that will drive Brandix to further entrench its leadership status With in Sri Lanka, and Bangladesh with in iterative taken to position it to be leaders in the region, continues to strengthen the blueprint it has innovation, quality, customer centricity, sustainability and people. From a business growth perspective, it has a very optimistic outlook for the future. Similar top's focus on Eastern Europe this year, it foresees immense growth opportunities in numerous untapped markets. The Company intends to pursue these opportunities aggressively by innovating and improving its product offerings, which will naturally encourage market share growth. While the Company addressed immediate capacity constraints through investment in organic capacity additions and strategic outsourcing, it remains focused on our regional expansion strategy. The current capacity utilization is exceptionally high, which signals the hallmark of a healthy mill. The Company intends to sustain these high utilization levels it moves into growing capacity and business. It firmly believes that production capabilities can be leveraged at various locations, given the strength of strategic partnerships and the expansive product portfolio that the Company intense to develop.

5 Findings of the study

. The major findings of the study are given below:

- I. Given its regional expansion plans and immediate investments in capacity, modernization, product capability and energy efficiency, coupled with Brandix Ltd proven capability to deliver results, Brandix Ltd will be able to continue to deliver strong value to shareholders in the coming financial year and onwards as well
- II. The impressive financial performance enabled us to declare a strong interim dividend of 0.50tk and propose a final dividend of 0.80 taka per share, bringing the total dividend for the year to 1.30 take per share – a very generous 73.87% payout of annual net profits, and well above our dividend payout policy of 33.33% of net profit.
- III. During calendar year 2013, Brandix Ltd main geographic markets the United States and Europe showed a pickup in demand compared to the previous year, though Europe gained ground at a slower pace. Exceptionally cold winter in the United States during the Q4 of FY 2013/14, had an adverse impact on retail sales but we are already seeing signs of a recovery.

- IV. BrandixLtd is the first pioneering step offshore, signing a two-year technical and management consultancy contract with Ocean India Private Limited at an annual fee of US \$780,000. With this contract, BrandixLtd became the first fabric mill in Sri Lanka to conduct consultancy services to a foreign mill.
- V. This inherent commitment has led Company to instill a green framework. This is a framework that cascades its green consciousness from a top down approach, where top management takes leadership in ensuring that the impact on the environment through business is minimized and initiative to reduce energy consumption at TJL for the past two years, the results have been extremely rewarding. Electricity consumption reduced by 5% per meter of fabric delivered, furnace oil requirements reduced by 1% and total energy consumption declined by a noteworthy 10%.

6 Recommendations

- I. Government and BGMI should carefully monitor and supervise the TQM practices in Bangladesh.
- II. BGMI must monitor the adherence of TQM practices guidelines by the concern authority.
- III. Coordination among concerned authorities.
- IV. Speeding up awareness and effective capacity building.
- V. Immediate concentration on sartorial lending policies and procedures.
- VI. Shifting of different categories of industry (such as, garments, textiles, and tannery) to a proper location.
- VII. Awareness of top management about TQM practice.
- VIII. Encouraging manager to practice TQM.
- IX. Maintain a schedule training program to the employees for promoting themselves.
- X. Management Information System should be effective which will enable to take correct decisions at correct time at policymaking level.
- XI. Legal and regulatory consideration.
- XII. Brandix Casualwear Bangladesh Ltd can open some more new strategy and by practicing important that they can enhance their business volume.
- XIII. Brandix Casualwear Bangladesh Ltd should digitalize its operation activities by the way
- XIV. Brandix Casualwear Bangladesh Ltd should expand its product and improve quality in change with time process.
- XV. Brandix Casualwear Bangladesh Ltd should segregate central decision making which resolve for delaying any purpose for their office approval.
- XVI. Brandix Casualwear Bangladesh Ltd should try to arrange more training programs for their officials. Quality training will help the official to enrich them with more up to date knowledge.
- XVII. To attract new customer should innovate different product.

7 Conclusion

Many organizations may not use the term TQM anymore but is still very much part of most business thinking. It is seen as being a way in which a business can add value to its product and to gain competitive advantage over its rivals. The study revealed that there is a positive correlation between the implementation of TQM and high productivity and quality.

Innovation, effective working capital management, an unrelenting focus on delivering process efficiencies, and a strong order book built on customer and product diversification all helped Brandix achieve its landmark performance. Further, with a strong balance sheet containing, Brandix is well placed to launch itself into the next phase of its journey.

Looking in to the future, given regional expansion plans and immediate investments in capacity, modernization, product capability and energy efficiency, coupled with Brandix proven capability to deliver results, Brandix will continue to deliver strong value to shareholders in the coming financial year and onwards as .

Thus all the TQM parameters considered in this study are positively related to high productivity and quality. In Bangladesh every garments manufacturer should give first preference to its valued customers. Now-a day buyers are very much quality conscious. If it becomes possible to maintain a high Quality system of inspection policy, the buyers shall be motivated to place more orders in Bangladesh. So, it is possible to set different modern quality procedures and quality management techniques in Bangladesh for the betterment of its RMG sector

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