

Understanding the difficulties of implementing TQM in garment sector: A case study of some RMG industries in Bangladesh

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Abstract

Readymade Garment (RMG) sector is trying hard to position themselves at the top-level across the globe. To achieve this goal, managers are utilizing total quality management (TQM) system. But most of the organizations find it difficult to implement satisfactory. The main purpose of this paper is to identify the barriers of TQM implementation, in Bangladeshi RMG sector. The research methodology adopted was comprehensive literature review on TQM barriers followed by a questionnaire survey. The result shows that lack of management commitment, lack of continuous improvement, lack of quality culture, and lack of knowledge about quality cost are the major barriers present in RMG industries. Our present study is unique in terms of identifying the difficulties faced by managers while implementing TQM in RMG sector. Finally, the study ends by highlighting some of the managerial implications as well as presents the further research study scope in the area.

Keywords: TQM, QM, organizational change, continuous improvement.

1. Introduction

Today's competitive business environment has made many organizations to focus on their improvement of quality of product and service performance [1, 2, 3, 4]. As business activities are becoming more globalized in the recent time, the organizations are forced to restructure their processes and systems such that, they are more customer-oriented and focused towards their needs and requirements [4]. In order to cope-up the above issues, Total quality management (TQM) is understood to be a well-recognized management strategy applicable to every organization sector. Many benefits such as improved organization performance and customer satisfaction could be achieved by applying TQM tools and techniques [4, 5, 6, 7]. Therefore, TQM is an effective approach for improving performance of a business [8,9]. But, many industrial organizations have claimed that it is difficult to implement TQM in a satisfactory and efficient way in their organizations, as they notice various obstacles, which hinder implementation of TQM [10, 11].

Bangladesh is one of the best garments manufacturing countries in the global market. Now, it becomes the second largest textile and garments exporter in the world. According to information of BGMEA in 2016, there are 5265 RMG industries throughout the country. In the last fiscal year, around 76% of export earnings came from this sector. Currently 4.2 million workers are working in this sector. The average labor cost per hour is only \$0.3 in this country. RMG industries are playing a vital role in terms of export earnings, increasing employment, decreasing poverty and empowering women.

In context to the above statistics and observations of the RMG industries, the study of TQM barriers has become essential in this sector. Implementation of TQM in RMG industries represents a formidable challenge and managers are seeking for those barriers that are actually hindering the successful implementation of TQM.

Our research objectives are:

- i) To identify and understand the possible barriers of TQM implementation on the basis of statistical analysis performed on field data.
- ii) To rank the TQM barriers in accordance with collected data.
- iii) To identify and understand the possible reasons of these barriers.

Four sections have been oriented into the rest of the paper in the following way. The first section provides a complete literature review relating to the barriers to implementation of TQM. The second section covers the methodology used for this research. The third section covers the results and discussion of the findings; and the conclusions of the research study are summarized in the forth section.

2. Literature review

The concept of TQM was first introduced in the 1920s when statistical approach was first used in the quality control in the factories in America. This management approach is aimed at incorporating awareness of quality in all organizational processes.

Total Quality Management (TQM) is a systematic approach to manage all organizational activities efficiently. TQM can help an organization to achieve their corporate goals of providing quality goods or services at an optimum price at the right time.

Many studies have been conducted regarding the barriers of TQM implementation throughout the world. They are summarized below:

As discussed by the Lee [3], several barriers have been investigated during the implementing TQM for the organizations such as: Cultural and employee barrier, infrastructure barrier, managerial and organizational barrier

A survey conducted in India in 1998 revealed the following as barriers impeding the implementation of TQM: lack of long-term supplier relationship, continued dependence on traditional incentive schemes, numerical targets, performance rating, slogans for improving productivity, and not identifying and providing the right type of training for each and everyone as demanded for every job [8].

Claver et. al., [12] mentioned that, in most of the cases TQM activities fails due to not linking management's compensation to achieve quality goals and lack of training in areas such as group discussion, communication techniques, quality improvement skills, problem identification and problem solving techniques.

Seetharaman et. al., [13] examined the TQM implementation in a USA manufacturing company using structured interviews of employees from different functional areas of the organization. Emphasizing people-oriented factors, such as motivation and empowerment, he found that poor inter- departments communication was a real barrier for implementing TQM.

According to review results of Amar and Zain [14] in 2002, the following eight interventions are the core barriers of TQM: Human resource, management, attitude towards quality, organizational culture, interdepartmental relations, information, method and training.

The study of Jun et. al., [15] had established several factors that were seen to be the barriers against the successful implementation of TQM. Among the factors, lack of employee training, failure to tie management's compensation to achieving quality goals, and employee resistance to change in an industry were the most critical.

Ziaul Huq [16] mentioned that, in most of the cases TQM activities fails due to the unrealistic expectations of employee commitment, absence of process focus, lack of information flow, lack in education and training, and failure to create a continuous improvement culture.

Bhat and Rajashekhar [8] in his study in India found that, lack of customer orientation, lack of planning for quality, lack of total involvement, lack of management commitment, and lack of resources appears in reality to be the fatal flaw of many TQM initiatives.

A study by Venkatraman [17] in Libya found that the main difficulties encountered during the implementation of TQM are lack of teamwork and problem solving procedures, lack of customer satisfaction.

In India, Talib et. al. [11] surveyed the obstacle faced during TQM implementation. The result showed some major obstacles were: lack of management commitment, poor attitude towards quality, organizational culture and inter departmental relationship, wrong method of training, lack of resources, resistance to change, lack of vision, etc.

Tam and Sebas (2013), in their study, found several factors working against TQM implementation. The major barriers cited by the author including employee's resistance to change and frequent turnover of employees.

Mosadeghrad [5] found the following contributing factors leading to ineffective TQM implementation: inadequate knowledge of managers' about TQM implementation, frequent top management turnover, poor planning, vague and short-termed improvement goals, lack of consistent managers' and employees' commitment, lack of a corporate quality culture, lack of team orientation, lack of continuous education and training and lack of customer focus. Human resource problems, cultural and strategic problems

Likewise, Talib and Zillur (2015), who studied TQM implementation in India service industries, identified quality problems as listed below: lack of top-management commitment, employee's resistance to change, and lack of coordination between departments. The least significant barrier was high turnover at management level.

The current study differs from the past research in the sense that, it has particularly identified the barriers of TQM implementation in RMG sector in Bangladesh. No other study in this sector has identified the barriers of TQM implementation so far.

3. Research design

3.1 Target Population: At present there are near about 5150 export oriented garment industries in Bangladesh (BGMEA, 2015-2016). For the study, 3488 garment firms had been considered as population on the basis of the importance of the locations.

3.2 Sampling Procedure: For the study purpose, 133 garment manufacturing units were initially selected as sample using stratified sampling technique which is shown in table 1. Due to time and budget constraints, lastly we had considered 71 firms by using purposive sampling technique.

3.3 Sample Size: The difficulty in accessibility into the garment industries has made the sample selection very restricted. A total of 71 garment firms had been selected initially. Due to inconsistency in the response, 11 garment firms have been excluded. Finally, 60 firms have been selected as sample which is statistically a good size.

Table 1. Distribution of sampling Units

Locations	Total number in that location	Sample number from each location
Dhaka	3058	128
Gazipur	163	7
Narayangan	131	5
Savar	75	3
Chittagong EPZ	35	2
Dhaka EPZ	26	2
Total	3488	133

4. Data Analysis and discussion

Seventy-one Garment industries were selected from a list provided by the BGMEA. A letter was sent to each of the selected companies inviting them to participate and describing the purpose of the survey. The letter explained that the survey consisted of a structured interview with the managing director, quality director or quality manager. The letter was followed by a phone call to the managing director of each company. Sixty companies agreed to participate in the survey. This constitutes 84.5 per cent of the 71 companies invited and indicates the high level of interest in TQM exhibited by the companies.

Tables 2. Analysis of survey results

Categories	Number of companies	Percentage of each categories
1.No plan for ISO 9001:2008	2	3.3
2. Planning for ISO 9001:2008	22	36.7
3.Implemented ISO 9001:2008	22	36.7
4. planning for TQM	12	20.0
4. No plan for TQM	2	3.3
Total	60	100

Almost all the RMG companies in Bangladesh have realized the importance of quality improvements as indicated in table 2. About 96.7 per cent of the companies are planning for ISO 9001:2008, have implemented ISO 9001:2008, are planning for TQM or have implemented TQM. Nearly 93.4 per cent of the companies are aware of TQM but only 20 percent are actually planning for it. Only one company within the group has been practicing TQM partially for last three years. This is a low percentage which can be improved if the 73.4 per cent of ISO 9001:2008 companies can be encouraged to advance to TQM.

4.1 Calculating the average opinion of the participant

The average rating of each of the five categories was tabulated against the pillars of TQM as shown in table 3. The average ratings ranged from 3.20 for the company with no plans for ISO 9001:2008 to 4.80 for those who have no plan for TQM. Taking the general average rating as 3.0, all the companies were above average.

Table 3. Average ratings of opinion for each of the categories.

Barriers of TQM	Category					Weighted Average
	No plan for ISO 9001:2008	Planning for ISO 9001:2008	ISO 9001:2008 certified	Planning for TQM	No plan for TQM	
1. Lack of top-management commitment to quality	3.50	4.20	4.60	4.60	4.80	4.40
2. Lack of focus to customer	3.50	3.80	4.00	4.00	4.40	3.92
3. Lack of knowledge about Quality cost	3.50	2.80	3.80	3.80	5.00	3.46
4. Lack of Quality systems	2.50	3.60	4.40	4.40	5.00	3.80
5. Lack of continuous improvement	3.00	3.40	4.00	4.20	4.80	3.81
Average rating	3.20	3.56	4.16	4.20	4.80	

4.2 Ranking of TQM barriers in terms of their relative importance

This analysis has considered the weighted average rating of all TQM barriers and ranking each of barrier with is shown in the table 4.

Table 4. Ranking of TQM barriers according to weighted average value (Strongest to the Weakest)

Strongest	Lack of top-management commitment to quality	4.40
	Lack of focus to customer	3.92
	Lack of continuous improvement	3.81
	Lack of Quality systems	3.80
Weakest	Lack of knowledge about Quality cost	3.46

5. Obstacles for TQM implementation

During our survey, we have find out some important causes for each of the TQM barriers. These causes are discussed elaborately in the following paragraphs.

5.1 Commitment to Quality

1) Lack of senior management commitment: Quality policies are not actively communicated to all employees. With such reluctance and lack of commitments from this top level of managers, the quality message may not even reach in its original form. More than 50 per cent of the RMG firms in Bangladesh have no commitment towards quality from their management side.

2) Lack of long-term strategy or vision: Despite the need of long-term strategy for quality, managers are still looking for short-term strategy like profits, costs, sales turnover, return on investments, and so on. Nearly 20 percent (Twelve out of seventy-one) firms are sending their employees for training on regular basis.

3) Lack of time spends on TQM activities: In most of the cases, the managers are not interested to take quality management initiatives. Some managers see quality as a lesser function than other departments like finance, production or marketing. As a result, less time is spent on quality issues. It is found from our survey that, senior managers probably spend less than 5 per cent of their working time in a week for managing quality.

5.2 Quality Systems

1) Barriers created by quality certification and measurement issues: Most of the RMG firms are using their quality certifications like ISO 9001:2008 for marketing purpose to increase sales rather than commitments to continuous quality improvement.

2) Monotony in record keeping: Due to the excessive paperwork, employees are losing their interest on ISO 9001:2008 quality systems. As a result, it is adding little value to quality improvement.

5.3 Customer Focus

1) Lack of customer feedback system: Very few companies are continuing their customer feedback system through receiving customer complains. This type of survey is very much essential for determining customer satisfaction with the company's products. About 40 percent of the firms are not conducting their customer feedback system.

2) Lack of quick response to customer complaints: Most of the firms have no customer contact department. They are giving less attention to the quick response of customer complains. But quick response to the customer complains is the most important key for customer satisfaction. Among the firms having customer feedback system, only one percent of them have quick customer response system.

5.4 Increasing Growth and Profitability

1) Barriers between various departments functions are: TQM implementation is highly affected by Power and politics within the organization. It is a common scenario in most of the companies that, marketing, HR, finance people pay less attention to TQM culture rather than production. Continuous improvement is not possible without the co-operation and communication between the departments.

2) High labor turnover: Now a day, high employee turnover rate is the most of critical issue for all RMG firms. This decreases the willingness of the employer to spend effort and money to train their employees regarding TQM. Regular improvement of the quality is discontinued due to high turnover rate of the employee in the organization.

5.5 Quality Costs

1) Not keeping the quality cost report: Majority of the company do not have any idea how to address the loss of the company due to poor quality. Mealy 3 percent of the firms keep the record of cost of quality.

2) Lack of awareness about the cost of quality loss among the employee: As most of the firms are not maintaining the quality cost report, they fail to make their employees aware of losing their profits due to poor quality. Thus, the level of scrap and rework at shop floor are increasing day by day.

6. Conclusion

In this paper, we investigated the important barriers of TQM implementation in RMG sector in Bangladesh. The key aspect of this study is to identify some findings of TQM barriers in the contest of Bangladeshi RMG sector. These findings will contribute to enhance the knowledge of successful implementation of TQM in RMG sector of similar developing countries. Among too many obstacles identified during each and every step of TQM implementation, this study has found some important obstacles for Bangladeshi RMG sector; they are: lack of management commitment, lack of continuous improvement, lack of quality culture, and lack of knowledge about quality cost. It is very much essential to acknowledge and understand the factors that can obstruct the success of TQM program for better attainment of efficiency.

6.1 Implication, Limitations, and future study

This study will helps in better understanding for those Bangladeshi managers that are planning to implement TQM in their organizations. Companies currently implementing TQM, or thinking about implementing TQM, will improve their chances of success if they are more sensitive to these barriers. Although different organizations have different degrees and frequencies of occurring obstacles in TQM implementation, but there are some common barriers exist in every organization.

There are some limitations in our study. First, limitation is the response rate. It needs to be increased. Second limitation is that, the present study is performed in Bangladeshi RMG sector. For this reason, these findings are difficult to use directly in other sectors and regions.

In future, similar study should be conducted in other sectors to investigate whether the barriers of the present study exist in that sector or not. By comprehending the potential severity of such obstacles, industries are in a better position to realize and solve the problems which may appear in near future. Therefore, the companies can get an experience from a better perceiving of TQM barriers.

7. References

- [1] S. Al-Zaabi, N. Al-Dhaheri, N., and A. Diabat, "Analysis of interaction between the barriers for the implementation of sustainable supply chain management", *International Journal of Advanced Manufacturing Technology*, Vol.68, No.1, pp. 895-905, 2012.
- [2] L. Shen, L. Olfat, K. Govindan, R. Khodaverdi, and A. Diabat, "A fuzzy multi criteria approach for evaluating green supplier's performance in green supply chain with linguistic preferences", *Resources, Conservation and Recycling*, Vol. 74, No.4, pp. 170–179, 2013.
- [3] D.H. Lee, "Implementation of quality programs in health care organizations", *Service Business*, Vol.6, pp. 387-404, 2012.
- [4] Sit, W.-Y., Ooi, K.-B., Lin, B. and Chong, A.Y-L., "TQM and customer satisfaction in Malaysia's service sector", *Industrial Management and Data Systems*, Vol. 109, No.7, pp. 957-975, 2009.
- [5] A.M. Mosadeghrad, , "Why TQM programmes fail? A pathology approach", *The TQM Journal*, Vol.26, No.2, pp. 160-187, 2014.
- [6] F. Talib, Z. Rahman, and M.N. Qureshi, "An empirical investigation of relationship between total quality management practices and quality performance in Indian service companies", *International Journal of Quality and Reliability Management*, Vol. 30, No.3, pp. 280-318, 2013.
- [7] F. Talib, "An overview of total quality management: understanding the fundamentals in service organization", *International Journal of Advanced Quality Management*, Vol.1, No.1, pp. 1-20, 2013.
- [8] K.S. Bhat, and J. Rajashekhar, "An empirical study of barriers to total quality management implementation in Indian Industries", *The TQM Magazine*, Vol.21, No.3, pp. 261-272, 2009.
- [9] F. Talib, Z. Rahman, and M.N. Qureshi, "Analysis of interaction among the barriers to total quality management implementation using interpretive structural modeling (ISM) approach", *Benchmarking: An International Journal*, Vol.18, No.4, pp. 563-587, 2011a.
- [10] F. Talib, Z. Rahman, M.N. Quershi, and J. Siddique, "Total quality management and service quality: an exploratory study of management practices and barriers in service industries", *International Journal of Services and Operations Management*, Vol.10, No.1, pp. 94-118, 2011b.
- [11] F. Talib, Z. Rahman, and M.N. Qureshi, , "An Empirical Study of Barriers to TQM Implementation in Indian Service Industries", *Proc. of First International Conference on Industrial Engineering (ICIE 2011)*, Paper No. 126, pp. 1072-1084, 2011c .
- [12] E. Claver, J.J. Tari, and J.F. Molina, "Critical factors and results of quality management: an empirical study", *Total Quality Management*, Vol. 14, No. 11, pp. 91-118, 2003.
- [13] A. Seetharaman, J. Sreenivasan, and L.P. Boon, "Critical success factors of total quality management", *Quality and Quantity*, Vol. 40 No. 5, pp. 675-695, 2006.
- [14] K. Amar, and M.Z. Zain, "Barriers to implementing TQM in Indonesian manufacturing organizations", *The TQM Magazine*, Vol. 14, No. 6, pp. 367-72, 2002.
- [15] M. Jun, S. Cai, and R.T. Peterson, "Obstacles to TQM implementation in Mexico's Maquiladora industry", *Total Quality Management*, Vol. 15 No. 1, pp. 59-72, 2004.
- [16] Z. Huq, "Managing change: a barrier to TQM in implementation in service industry", *Managing Service Quality*, Vol. 15 No. 5, pp. 452-69, 2005.
- [17] Venkatraman, S. (2007), "A framework for implementing TQM in higher education programs", *Quality Assurance in Education*, Vol. 15 No. 1, pp. 92-112.