

Integration of Quality, Health & Safety, Environment and Social accountability under a single Management System

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Abstract

The aim of this paper is to integrate quality, health & safety, environmental and social accountability standards under a comprehensive management system. To attain a specific function these compliance standards have been expanded separately at different occasions. Handling with these individual management systems and confirming their in-line position with organizational business objective are always found difficult. The current situation has accelerated the demand for integrating individual management standards in conjunction with business objectives of the organizations. A holistic TQM approach can effectively consolidate the existing quality, health & safety, social accountability and environmental operations into an indivisible and cross-functional management system. To some extent, the current management standards are treated as a subgroup of TQM. The benefits of such fusion exceed the sum of fractional benefits of individually handled management systems. The synthesis does not intend combining a few management standards conjointly, rather it means projecting the several disciplines in unique management standard based on their cross-functional inter connections. Actually, it is analytical in nature on the basis of the compliance criteria of OHSAS 18001, ISO 9001, ISO 14001 AND SA 8000. The main finding of this study concludes that, integration is feasible based on their philosophical analogies between TQM and other management standards. This paper will contribute in the way that, it establishes a model of integrated management system accompanying its implementation instructions in connection with TQM.

Keywords

TQM, QM, organizational change, continuous improvement.

1. Introduction

Readymade garments (RMG) sector is one of the most important sectors in Bangladesh. It has started its journey in the late 1970s. Foreign trade, employment opportunity, mitigation of poverty, and delegation of power to the women are the four important areas where this sector can play an important role. At present, there are around 3.6 million workers are doing their work in this sector (Mahmud, 2012; Khan, 2006; Pojasek, 2006). The previous literatures provide evidence that, working condition of this sector is very poor and does not match with the ILO labour standards (Khan, 2006; Turk, 2009; Dasgupta, 2002; Morshed, 2007). A lot of dust is being generated during cutting and sewing of fabrics in the garment industry. Sometimes, the harmful chemicals are also released from the fabric. When these chemicals saturate the air, it creates difficulties in breathing and eye irritation of the workers. Fatigue, headache and dizziness frequently occur due to the inhaling of solvents used for cleaning fabric and garments. According to the doctor's opinion, the breathing of dust and solvents is one of the most common causes of various lung diseases which are very dangerous for human health. As a result, it will not only influence on the worker's health, but also result in reduction of productivity, product quality, increased absenteeism, and turnover of staff (Mahmud, 2012; Pojasek, 2006; Alam et al., 2004; Dasgupta, 2002).

Besides this, crowded working area is a common scenario of this sector. This is one of the main causes of major occupational hazard and injuries (Turk, 2009). Death from fire and the building collapse are the two most common hazards that usually happen in this sector. Majority of the time, the owners of the garment industry overlook the labour rights, and standards. Some examples of major violation of labour standards and rights are irregular wage payment, sudden dismissals from the job, wage deduction, hazardous working environment, and child labour.

At present, most of the literatures have widened the definition of stakeholder. Customer, employee, social community are now considered as the stakeholders of RMG industry. They are very much concerned about the previously mentioned problems and they are always closely monitoring the present situation. It is very understandable to all that, garment industries are facing such difficulties due to their inattentiveness in compliance commitment. Accordingly, the foreign buyers are now strict in compliance standards before placing any import order (Pojasek 2006; Alam et al., 2004; Dasgupta, 2002). With regard to entertain the international buyers, it is necessary to elevate working conditions, occupational health & safety, social accountability through compliance practices in this sector.

At present, some sensible RMG firms have begun deploying some effective management systems which are listed in table 1. Some previous studies have successfully determined some common compliance standards that are practicing in RMG sector. They are ISO 9001 (quality), ISO 14001 (environmental), OHSAS 18001 (health & safety), SA 8001 (social compliance).

To take care of individual management systems covering quality, environmental, and safety & health issues and guarantee that they are in-line with organizational objectives can be problematic (Khan, 2006; Turk, 2009; Jorgensen et al., 2006). Therefore, combination of different management systems is an important foot step towards the more useful way of addressing the quality, environmental, safety & health, social accountability issues in the industry.

We have derived our research objectives as:

- i) To investigate the present condition of various compliance standards in RMG industries of Bangladesh.
- ii) To develop an integrated management model covering quality, environmental, safety & health, social accountability issues.
- iii) To prepare a common instructions for implementation of TQM along with integrated management system.

Rest of the paper is oriented in the following way. The second section provides a complete literature review relating to present scenario of various compliance standards in RMG industries of Bangladesh. The third section covers the methodology used for this research. The fourth section covers the reason and way of integration of different management system. The fifth section covers the guideline for implementation of new integrated management; and the conclusions of the research study are summarized in the sixth section.

2. Literature Review

Several papers have been examined regarding the working conditions of the Bangladeshi RMG sector. It is found that, most of the firms in this sector frequently neglect the international labour standards, working conditions, and Codes of Conduct (Pojasek, 2006; Turk, 2009; Jorgensen et al., 2006; Dasgupta, 2002). Particularly, the recruitment policies provide no written formal document (e.g. contract and appointment letter). So, it is highly informal compared to western standards. Therefore, they are staying at the risk of losing their jobs at any moment. Nevertheless, fear of losing their jobs and lack of alternative job opportunities compel workers to continue in unsatisfactory employment (Khan, 2006; Turk, 2009; Alam et al., 2004; Jorgensen et al., 2006; Bansari, 2010). The practice of continuous work schedule, wage penalties, physical and verbal abuse are regular in this sector. Management of RMG firm does not ensure security for their women workers. For this reason, the women workers are facing physical abuse and sexual harassment problems inside as well as outside the factories. Many researchers (Khan, 2006; Pojasek, 2006; Alam et al., 2004) suggested that to overcome the security problems of the garment workers in Bangladesh, it is necessary to take regulatory measures and its strict implementation. It is also necessary to monitor the current situation by the government agency.

Some study (Mahmud, 2012; Turk, 2009; Dasgupta, 2002; Morshed, 2007) advocates that, the key role of Cambodian labour unions in the clothing sector and as mediator's between workers and factory owners to settle disputes and discuss wages (Bansari, 2010; Morshed, 2007). In order to prevent turmoil in the RMG sector, few study (Dasgupta, 2002; Morshed, 2007; Karapetrovic & Jonker, 2003) argued for fortify social compliance issues and labour standards to improve wages, working hours, overtime, job security, the right to form trade unions, social security and also occupational health and safety.

It is now clear from this literature reviews that, the working conditions of the RMG sector are below standard. Even, it does not meet the minimum requirements of ILO standards. Some of the examples of poor working conditions are: the absence of trade unions, informal recruitment, and irregular payment, sudden termination, wage discrimination, excessive work, and abusing child labour. Additionally, the workers become sick from the various kinds of diseases due to the unhygienic environment. Several workers are killed in workplace accidents, fires and panic stampedes. Absence of an appropriate implementation of laws for protecting workers' rights and maintaining workplace safety is the key concern for workplace accidents. Necessary changes become mandatory in this sector because it is an important source of foreign exchange earnings.

3. Research Methodology

The methods of study are explained according to three distinct phases:

Awareness (Phase I): To ensure sustainable development, an organization has to confirm its continual improvement in all sectors including quality, environmental, safety & health, social accountability. These four types of management systems are applied in the form that is more separate. Dealing with separate management system is always problematic. So, the factory owners must need to concentrate on their integration.

Data collection (Phase II): Descriptive survey was conducted in this study. It uses secondary data that are collected from different case studies, and literature review. The main sources of our secondary data are research journals, articles, thesis papers, annual reports of different RMG industries.

Integration (Phase III): To integrate the different management systems, there are so many techniques. Based on literature review; integration on the basis of their common structure has gained a highest popularity. So, the author has given much attention on integration based on their functional linkage.

Continuous improvement philosophy of TQM can be more suitable for integrating the mentioned management systems. The scope of the study was confined to four major standards and their relationship with TQM.

4. Reason for Integration

There are several management systems to address the issue like quality of the product, protection of worker's right, safety of environment and workplace, which are listed in Table 1.

Table 1: Several management systems used throughout the world

Areas	Compliance standards available
Quality management	ISO9001, ISO1471, ISO28001, HOKLAS, TS 16949, ISO 100002, BAPT
Environmental management	ISO 14001, COC/FCS, IECQ, WEEE, ROHS
Social accountability management	SA 8000, ICTI, AA1000, WRAP, CSR, ETI
Organizational health & safety	OHSAS 18001, RSA audit, F&IU(SM)

The above mentioned management systems are often treated as independent management systems within the organization. Because these standards focus on a particular function within the organization and their audit system are completely function oriented. Each compliance standard has its own policy and objectives. These management systems are also referred to as the compliance standards. For example, social accountability, environmental, occupational health & safety, and quality are commonly used compliance standards in RMG sector of Bangladesh. The organization needs to measure, monitor and evaluates its performance against the predefined objectives (Pojasek, 2006; Jorgensen et al., 2006; Dasgupta, 2002; Beckmerhageniet al., 2003). Therefore, companies must tolerate the individual visits conducted by different audit cells at various time conforming to their schedule and procedure. Consequently, the frequency of audit and their cost increase significantly. Furthermore, in order to face individual audits of different management systems the authority has to change factory set-up with frequent interval. It is actually an annoying task to do. Most of the cases, the factory blunders to conform the compliance demands and receives major audit objection. Therefore, there is no alternative way to overcome the difficulties associated with audit objections until they are cleared by the audit team.

Moreover, several changes are needed at different disciplines within the organization to ensure the continuous improvement. Change in one discipline may create problem to the other discipline. From the previous literatures, the

author has identified some major limitations of separate audit. They are the replication of efforts, misalignment of audit objectives from the original goal, limited shearing of audit resources and expertise of auditor. Therefore, it is less effective to run different management systems individually rather than an integrated management system.

5. Comparative Scope TQM and other Compliment Standard

There is a demand for implementing two or more management systems in an integrated way (Bansari. 2010; Jorgensen et al., 2006; Rasmussen, 2007). Therefore, a common framework is very much essential for integrating different management systems. To create such framework for any integrated system is a complex process. An integrated management system extracts the common requirements of different management systems into a single comprehensive system for easier management and operation. There are ten common elements in ISO 9001, ISO 14001, OHSAS 18001 and SA 8000. They have been developed to be compatible with each other. It is hoped that, any organization that implements any one of the standards, can easily incorporate the other three management systems. Incorporating the different individual management systems, will provide decisive organizational movement and more attention in the area of quality, occupational health & safety, environmental and social accountability. An integrated management system is shown by schematic representation in figure 1.

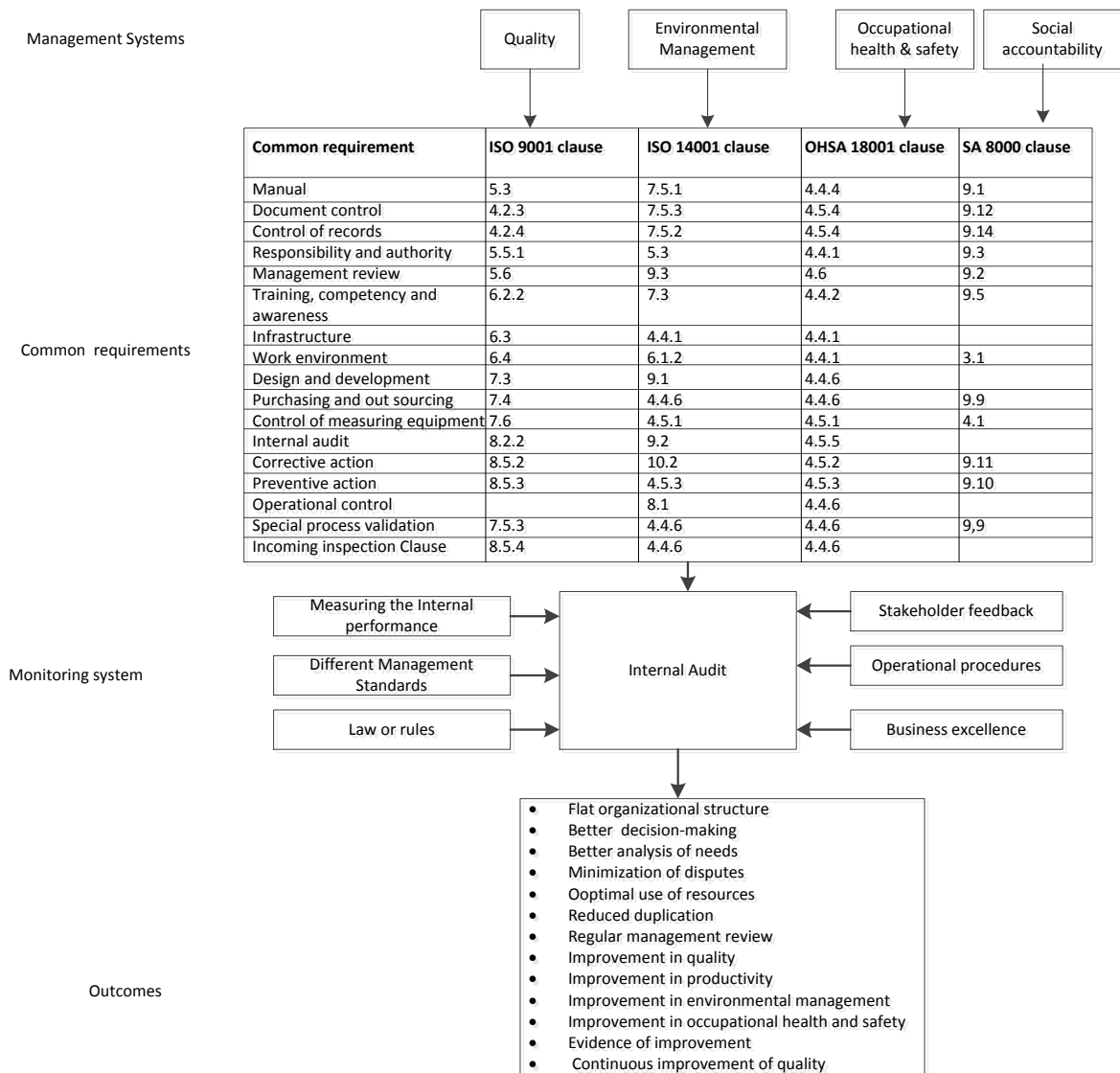


Figure 1: A proposed framework for an integrated management system

Assimilation of individual management systems does not indicate tying up a number of separate systems all together. It actually indicates aggregating based on their inter-linkages (Morshed, 2007; Salomone, 2008). Actually, the different organizational actions are nothing but the accumulation of various disciplines like quality, occupational health & safety, environmental and social accountability. On the other hand, audit for the integrated system should be comprehensive in the sense that audit system is relevant to any discipline of management system. For this reason, joining the similar parts cannot make the audit truly universal. In order to make an audit truly universal, it is necessary to project different disciplines in a single audit system. At the same time, the audit must have the capability to assess the performance of various functions of an organization. It desires the requirement of a high degree of uniformity among the different functional audits. Subsequently, the level of combining the management systems should be handled towards the superior regulation of all process within the organization (Bansari, 2010; Vrassidaset al., 2010).

Table 2: Philosophical similarities between TQM and other compliance standards

Philosophy of TQM	Other compliance standards
Employee participation	Employee participation is one of the important elements of TQM implementation. Success of any business relies on the harmonic interconnection among the staffs, which in turn reflected into their participation in teamwork. It is obvious to emphasize team spirit and moral of the employee. There are some approaches that can improve the moral of the employee. They are regular payment, formal recruitment, job security, no wage penalties and discrimination etc. These are the common requirements for social compliance also.
Employee training	Appropriate training must be ensured among the employees. Training may be provided on different sectors, but the main purpose of the training is same for all management systems. The purpose of the training is to increase employee's capability to execute a task. Conducting a task much depends on skill, and knowledge of an employee. If the workers have good understanding about the working methods or systems, there is likely to be a greater degree of commitment and motivation and consequently higher productivity levels (Simon et al., 2012). For this reason, training is considered as critical success factor of TQM and other management system implementation.
Continual improvement	The organization has to develop continual improvement culture in the related disciplines (e.g. quality, occupational health & safety, environmental and social accountability) for achieving its goal. When the people experience of making a few improvement, each improvement tends to lead to new possibilities. Improvement can become a habit, with everyone trying to find a better way of working. This culture ensures that all employees will participate in the process of continual improvement (Santos, 2002). Thus the probability of success in business will increase.
Employee empowerment	Empowering the employee means motivating them to perform better. This would increase skill, efficiency, and effectiveness of employees which really promote TQM. So, it is another critical success factor for TQM implementation.
Leadership	Each management system has its own goal. The role of the leadership is to motivate the people towards the goal. So, leadership is considered as an important factor for successful implementation of all other management systems.
Delegation of authority and responsibility	Assigning authority and responsibility to the employee is important. If it is not possible to make someone responsible for achieving organizational goal, then everyone may waits for someone else to do the job. Finally, the organization fails to achieve its goal. Although the goal may be different for different management systems, but in each system top management should

Philosophy of TQM	Other compliance standards
	support the people below them and authorize them to do all their activities mentioned in the respective policy and keep them responsible for their actions.

Actually, TQM looks after each and every area of a complete business process. Consequently, TQM will rationalize company's overall quality system and all operational processes. As mentioned earlier that, the operation process of an organization reflects the projection of different discipline like quality, occupational health & safety, environmental and social accountability. They are considered as a subgroup of TQM. Relationship of various management systems with TQM are outlined in Table 2.

The previous out line clearly shows that, the connections between TQM and other compliance standards. Therefore, these critical factors can form a common basis for the core structure of an integrated management system. Leadership, employee participation, delegation of authority and responsibility, employee training, employee empowerment and continual improvement are equally important for successful implementation of both TQM and other management standards. If the integrated management system is formed based on common structure of different management systems, then it (integrated system) will ensure the harmony in the area of quality, occupational health & safety, environmental and social accountability.

6. Guideline For Implementation Of New Integrated Management System In Association With TQM

The new integrated management system will possess the same philosophy as TQM. It consists of four compliance standards. They are commonly used in Bangladeshi RMG sector. So, it (integrated system) can be implemented in an organization along with TQM. Again, the TQM implementation process consists of four stages that will create a continual improvement cycle.

6.1 TQM awareness

It is necessary to increase the awareness of TQM inside the organization. Immediately, the senior management need to be engaged in examining the present operating procedures. In order to identify the further scope of improvement, it is necessary to consider the strength and weakness of an operating process.

6.2 TQM preparation

Over this period, the organization will gather knowledge and look for necessary tools and techniques for successful implementation of TQM. This is the ideal time for an organization to prepare itself for the TQM implementation. Critical stages of TQM adoption cover planning, execution, review, and modification functions.

6.3 Planning stage

During this time, an organization will formulate an effective plan for TQM implementation in association with IMS. During this phase, the organization will also develop a cross-functional team and identifies significant impacts of activities along with standards.

6.4 Execution stage

During this period, authority of process improvement is transfer to the line management and allows them to develop a operational goal and objectives in each discipline with a co-ordinate manner. Team spirit and efforts should be activated with training support.

6.5 Review stage

In this phase, an organization measures, monitors, and evaluates its achievement against its pre-defined targets. Feedback system also helps to assess the internal performance and conduct benchmarking exercise with competitors and world-class performers. The organization should conduct performance audit of IMS to identify the areas that require improvement and non conformance that must be corrected.

6.6 Modification stage

It is necessary to perform periodical modification on the scope, objectives, procedure, and process to fascinate TQM implementation.

7. Conclusion

Industrial firms have already realized that, they need to create their products with good quality under safety environment and better working condition. It is essential because it will ensure sustainability of the firm in the competitive global market and associated diversification of customer requirements. Consequently, assimilation of several management standards is very much obligatory. Management sub-systems like quality, health & safety, social accountability go hand-in-hand with each other. For example, the primary aspect of improving product quality is to increase the productivity. On the other hand, the main reasons for protection of environment are to ensure quality of life inside and outside the company and improvement of company's public image. Quality of life inside the company means creating safe and secure working condition for the employees. It will eliminate or minimize risk to worker, increase the moral of the employees and reduce the rate of absenteeism due to occupational disease. This would also increase employee's eagerness to improve their quality of work.

Several authors (Khan, 2006; Pojasek, 2006; Jorgensen et al., 2006; Beckmerhageniet al., 2003; Vrassidas et al., 2010) have presented their approach for efficient integration of different management sub-systems in terms of their compatibilities. But the main finding of this paper highlights that, compatibilities among the sub- management systems alone cannot ensure the sustainability of an integrated management system in the global market. Total integration may not be feasible without understanding the interrelationships among these management systems in terms of their cross -functional competence. So, alignment of these sub-systems under the broad conceptual management can further increase the scope of integration. The wider scope of integration will not only ensure the compatibilities among the sub-systems, but also ensure their cross-functional competence. In this regard, TQM has an ability to accumulate all cross-functional activities in an organization. Therefore, the philosophical similarities between TQM and proposed management system will ensure complete integration.

According to Rasmussen (2007), there is not a single international standard for IMS. The process of developing IMS on the basis of national standards is still in progress. Progressive integration of different management systems is a common practice in today's competitive market. Requirements of different systems vary in terms of their scope, control, monitoring, and follow up actions. So, opportunities of integration on the basis their commonalities decreases with the increase number of function specific management systems. Therefore, degree of compatibility in case of multiple management systems is a major limitation of this model. In this circumstance, the author suggests integration under the common philosophy of a wider management system will be the best strategy.

It is possible to develop an integrated management system on the basis of the similarities found in different management system. Nevertheless, the philosophical similarities between TQM and other management systems have not been tested empirically. It should be given emphasis in the future studies on identification of some other philosophical similarities between TQM and other management systems. It will be helpful to make an integrated management system more reliable.

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