

## Implementing Total Quality Management Principles in The Apparel Manufacturing Sector: Ghana in Perspective

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**ABSTRACT:** *This study focused on understanding the implementation of TQM in the apparel manufacturing sector. Due to the lack of TQM studies in Ghana and especially in the apparel manufacturing business, there was a need to conduct a study to reposition the operational strategies in the apparel sector in Ghana. A mixed-method approach was employed to attain valid, reliable and reproducible conclusions. The population focused on apparel manufacturing firms in Ghana. Questionnaires and interviews were employed to gather data. The key findings indicate that the fundamental obstacle to implementing TQM was the lack of knowledge and misunderstanding of TQM principles and their benefits by both owners and workers alike, as well as outdated technology and poor infrastructure. Again, in the context of Ghana, financial constraints posed a significant challenge.*

**KEYWORDS:** apparel manufacturing, TQM, TQM principles, TQM implementation, Ghana

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### INTRODUCTION

The apparel manufacturing sector has traditionally been a significant contributor to the Ghanaian economy, providing income for many individuals and playing an essential role in the country's GDP. Nevertheless, in recent times, this sector has been facing numerous challenges (Zanu, 2023; Quarcoo et al., 2013) that have the potential to undermine its development and sustainability, including inconsistent product quality, inefficient production processes, and a lack of customer-centric focus, among others. While the sector has acknowledged these challenges, there has been

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limited systematic effort in tackling them, particularly in implementing Total Quality Management (TQM) principles.

TQM, which emphasizes continuous improvement and a customer-focused approach to delivering quality, has enhanced productivity, reduced waste, and increased customer satisfaction in various industries worldwide (Sweis et al., 2019; Syduzzaman et al., 2016; Talha, 2004).

However, there seems to be a limited understanding and implementation of TQM principles within the Ghanaian apparel manufacturing sector. This has resulted in less-than-optimal performance, characterized by significant variations in product quality, delays in production schedules, high defect rates, and an unsatisfactory level of customer satisfaction. This problem is compounded by a lack of comprehensive research on the challenges, potentials, and practicalities of implementing TQM principles within this specific sector in the Ghanaian context. Thus, there is a crucial need for an in-depth study to evaluate the state of quality management in Ghana's apparel manufacturing sector, identify the challenges that hinder the effective implementation of TQM principles, and propose viable strategies to overcome these challenges.

The potential implications of not addressing this issue could include a further decline in the quality of products produced, decreased competitiveness in both local and international markets, reduced customer satisfaction, and, ultimately, a decline in the overall growth and profitability of the Ghanaian apparel manufacturing industry. Hence, the problem to be addressed is: how can the apparel manufacturing sector in Ghana successfully implement TQM principles to enhance product quality, improve production efficiency, increase customer satisfaction, and remain competitive in an increasingly demanding and globalized market?

TQM is an essential field that needs to be understood. With quality, cost, delivery, and flexibility, client focus is of additional competitive importance to proactively adopt appropriate operational strategies in these changing environments (Coffin & Tang, 2022; Balaji, 2012). TQM is a management approach that emphasizes on continuous improvement as well as the involvement of all employees in an organization. While TQM originated in the manufacturing industry, its principles can be applied to various sectors. One of the core principles of TQM is employee involvement and empowerment. In the context of apparel manufacturing, this means that employees at all levels, from production workers to managers, are encouraged to actively participate in the decision-making process and contribute their ideas and expertise (Wijaya et al., 2023; Wijethilake et al., 2023).

As inferred by Welikala and Sohal (2008), TQM aims to harness their knowledge and insights by involving employees at an early phase of the manufacturing process. This early participation allows employees to identify potential issues, suggest improvements, and make informed decisions that can enhance the overall quality of the apparel manufacturing processes. The benefits of early employee participation in TQM are several-fold. First, it allows for the early detection and prevention of defects or errors, reducing the likelihood of costly rework or product recalls. Second, it promotes a culture of continuous improvement, where employees are encouraged to proactively

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identify and address process inefficiencies or bottlenecks. Streamlining operations and eliminating waste can result in significant time and energy savings.

Moreover, by involving employees in decision-making at an early stage, TQM fosters a sense of ownership and accountability among the workforce (Ababneh, 2021). When employees feel valued and have a stake in the process, they are more motivated to contribute their best efforts, increasing productivity and efficiency. Furthermore, TQM emphasizes the importance of collecting and analyzing data to inform decision-making. By involving employees early on, data and feedback can be gathered from those directly involved in the manufacturing process. This data-driven approach enables organizations to make more informed decisions, identify trends, and implement corrective actions promptly. TQM has become one of the most efficacious practices in assisting businesses to improve competitiveness and success by guaranteeing sustainable growth (Chaurey et al., 2023; Maistry et al., 2017). Besides, while there is a strong relationship between TQM and market orientation regarding customer satisfaction, TQM has been found to possess a robust and positive influence on organizational performance (Delic et al., 2014).

Notwithstanding efforts made in the different disciplines to embrace innovative strategies and implementation techniques, sustainable growth in industries such as the apparel industry has become a major concern in the past few decades, both in developed and emerging economies (Barouch & Kleinhans 2016). Gul et al. (2021) infer that each employee must appreciate that the organization's general purpose is to fashion a higher value for customers. Likewise, it is acknowledged that the influence of TQM on monetary matters like profits, earnings, market share and growth rate is the consequence of the robust and direct impact of TQM on non-financial matters like shifting organizational culture, productivity, employee morale as well as innovation (Dadhich & Hiran, 2022).

In an attempt to advance business excellence, TQM has been found to have very robust cultural and behavioural elements in preparing and nurturing managerial as well as operational processes. Total quality management conceptions developed to improve quality, as well as the control of quality in manufacturing and process engineering, are widely applied (Wickramasinghe & Perera 2016). This includes the apparel manufacturing industries, where the concepts are gradually being embraced as these theories are acknowledged by the apparel industry and promote free trade. As a result of globalization, customer requirements have amplified (Flint et al. 2011) as they demand higher quality products and services, which are mirrored by growing competition to the highest level, and the need for excellence has become a strategic feature in achieving competitive advantage. Consequently, businesses have adopted various managerial approaches to cope with any current or future challenges, and some organizations have adopted TQM as one of the managerial and organizational methods to achieve long-term profitability, sustainability and competitiveness (Veltmeyer & Mohamed 2017).

## **LITERATURE REVIEW**

TQM's role in a competitive advantage remains unexplored within the context of management and organizational improvement studies. It can precisely be defined as a philosophy regarding quality that infers the involvement of all and sundry in the business in a quest for quality, encompassing suppliers and customers. Indeed, in TQM, the customer is the pivotal point, as they drive the business. Thus, customer satisfaction is the leading driving force. Each person in the organization, from the topmost chief executive, up to the bottom-most workers, has a part to play in this venture (Flint et al. 2011)

Total Quality Management necessitates all organization personnel to refine the products, processes, and services. Therefore, TQM focuses on long-term success by identifying and prioritizing customer desires, setting and aligning objectives, and affording deliverables that lead to customer satisfaction and delight. Nevertheless, the critical subject of the current study is how to advance the quality of the apparel industry in Ghana by implementing TQM in practice, which could be a challenge. TQM applications differ extensively with product categories, business settings, management philosophies and practices etc. This embroils three (3) areas of transformation in an organization; individuals, technology as well as the organizational structure (Rodrigues & Pinho 2010).

### **Implementation of Total Quality Management**

Several studies infer that the majority of TQM programmes are not capable of realizing their specified objectives. They contend that there are fundamental defects in the TQM philosophy. Nevertheless, in contrast, the mainstream researchers favour the argument that nothing is flawed regarding the TQM philosophy. Instead, organizations are not capable of implementing the approach successfully. For instance, according to Mosadeghrad (2014), TQM failures may be ascribed more to the failure to execute and manage them as a system and less to any fundamental faults in the system or its constituents. This demonstrates that how TQM is executed has to be considered. Thus, a variety of strategies and frameworks on the positive implementation of TQM philosophy are obtainable in the literature. Numerous leading researchers, including Deming, Crosby, Juran, Oakland and Dale et al., have addressed these characteristics. In the same way, models such as ISO 9001:2008 and the EFQM Excellence Model have further provided frameworks for implementing TQM philosophies.

### **Pillars of Total Quality Management Implementation**

Implementing Total Quality Management in practice necessitates an organizational culture and climate. This takes time and endurance to finish the process. The procedure does not happen overnight; the outcomes may not be appreciated for a long period of time. Numerous stages must be taken in the process of shifting to quality management in an organization. The study acknowledged six (6) qualities for successfully implementing a TQM program. They include customer focus, process focus, prevention and inspection, worker enablement and compensation,

fact-based decision-making, and receptivity to feedback. TQM identifies that a faultlessly manufactured product is worthless if it is not what the consumer desires.

Consequently, it can be said that quality is consumer driven. This means that the objective of customer satisfaction must be assimilated into the preparation processes and then continued day-to-day. For continuous improvement, customers' desires must be constantly measured and fulfilled. The firm must be organized to acquire the essential evidence for the identification of customer needs and to acquire consistent and swift feedback on the quality levels of presently available products/services (Colan & Micu, 2021; Phan et al., 2019; Grigorioudis & Siskos 2010).

Workforce motivation plays an essential that focusing on customer satisfaction. An inspired worker can achieve more than the unmotivated ones. Customer anticipations often differ from one customer to the other. Thus, organizations these days employ a planned system to detect and prioritize customer demands and then align an establishment's products or services to meet those priorities. To do this, it employs adaptations of Quality Function Deployment, a strategic tool in which the opinion of the consumer is captured in a sequence of matrices that enable the analysis of product/service quality features, costs, reliability, and the usage of innovative conceptions and technologies for enhancement in light of consumer needs (Karatepe, 2013).

Firms must intensify awareness of quality at different levels and fashion simple approaches to implement suitable programs to begin with. Furthermore, they must realize certain levels of development by inducing an approach to quality. Moreover, lack of awareness, as well as poor information regarding TQM benefits, leads to diverse understandings and beliefs regarding what TQM must result in, for example, whether it will be measured by refining the performance of human resources or increasing profit. Indeed, raising TQM awareness will contribute successfully to realizing numerous benefits, principally concerning the business's workforce (Maistry et al. 2017).

The apparel manufacturing industry plays a significant role in modern economies because of its role in clothing humanity (Parschau & Hauge, 2020), as well as its flexibility and ability to innovate. In nearly every country, apparel manufacturing industries perform a significant function in providing employment prospects and supporting large-scale manufacturing of garments (Mottaleb & Sonobe 2011). Thus, apparel manufacturing sectors must remain competitive as they are considered the lifeblood of a modern economy because of the changing trends in the world textile and apparel trade. Apparel manufacturing sectors are often suppliers of apparel products to large retailers and consumers; consequently, a lack of product quality could affect the competitiveness of these retailers. TQM as a philosophy is of particular importance to the apparel manufacturing sector operating in a developing country since it can foster continual improvement through a systematic, integrated consistency.

Apparel manufacturing firms, as inferred by Burris (2015), have some inherent advantages over other manufacturing organizations, such as being closer to the customer, being more flexible in their operations, being able to be innovative, having more workforce involvement and having more



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effective communication systems. Balaji (2012) infers that the potential advantage for apparel manufacturing industries is the natural visibility and involvement of the managers, and if they are committed to driving the TQM effort, then their approach will be visible and apparent to all employees. However, Balaji (2012) noted that apparel manufacturing firms planning to implement TQM need an approach better tailored for the small organization context and focused on changing processes.

## **MATERIALS AND METHODS**

Mixed methods research which combines qualitative and quantitative approaches to gather comprehensive and multi-dimensional information (Niglas, 2010), was adapted for this study for several reasons: in a country like Ghana, with unique cultural, economic, and social contexts, qualitative methods such as interviews can help capture the nuanced realities of implementing TQM. This deep understanding can provide a holistic view of the ground realities and contextual factors that could influence the implementation and effectiveness of TQM. Secondly, data triangulation through mixed methods increases the validity of research findings. Thirdly, implementing TQM principles can be a complex process and might face various challenges. Qualitative research methods can help identify these challenges in a detailed manner. Fourthly, through qualitative case studies and in-depth interviews, researchers can identify critical factors that led to successful or unsuccessful TQM implementations. These insights can provide practical lessons for other apparel manufacturers in Ghana and similar contexts. Finally, while qualitative methods provide deep insights, they often have limited generalizability. Incorporating quantitative methods allows for broader surveys that can lead to findings more representative of the larger population. Thus, a mixed-methods approach was useful for deriving concrete and actionable insights.

A total of 189 workers from 20 fashion firms in the Kumasi metropolis in the Ashanti Region were sampled to participate in the study. Purposive sampling techniques were employed in selecting the participants from apparel manufacturing firms in these two regions. Purposive sampling is the technique where subjective judgements are used to choose resolutely groups that the researcher believes will represent the population. The study employed both qualitative and quantitative strategies in data collection and analysis that are appropriate for a sequential design. Mixed methods research is further an effort to legitimate the application of various procedures in clarifying research questions rather than limiting or restraining researchers' choices. The study was approved by the Ethics Review Board (ERB) of UNEM Ghana. The study adhered to the ethical principles outlined in the Declaration of Helsinki and received written informed consent from all participants. Ethical issues employed in the study included informed consent, confidentiality, anonymity, and privacy.

**FINDINGS****Table 1: Implementing TQM in the Apparel Manufacturing Industry**

| Variables   | SA%      | A%       | N%       | D%       | ±SD%     | M<br>(±±SD) |
|---|----------|----------|----------|----------|----------|-------------|
| Provide leadership through top management's commitment and participation  | 27(14.3) | 66(34.9) | 84(44.4) | 6(3.2)   | 6(3.2)   | 3.54(.890)  |
| Education and training needed for quality awareness education   | 81(42.9) | 54(28.6) | 45(23.8) | 5(2.6)   | 4(2.1)   | 4.07(.981)  |
| Planning must be done by assessing the firm's current reality to ascertain its current needs  | 45(23.8) | 46(24.3) | 54(28.6) | 40(21.2) | 4(2.1)   | 3.47(1.132) |
| Supplier quality audit must be established  | 63(33.5) | 45(23.9) | 54(28.7) | 23(12.2) | 3(1.6)   | 3.76(1.096) |
| Personnel must appreciate where the firm is headed, what it hopes to accomplish and the operational principles that will steer its priorities and decision making | 53(28.0) | 64(33.9) | 36(19.0) | 16(8.5)  | 20(10.6) | 3.60(1.270) |
| Identification of critical success factors that will help the firm to focus on meeting its objectives   | 18(9.5)  | 45(23.8) | 82(43.4) | 27(14.3) | 17(9.0)  | 3.11(1.057) |
| Development of measures to monitor and track progress.  | 45(24.1) | 81(43.3) | 19(10.2) | 21(11.1) | 21(11.1) | 3.77(1.397) |
| Identification of key customer groups, including employees, customers, suppliers, and vendors   | 45(23.8) | 63(33.3) | 27(14.3) | 36(19.0) | 18(9.5)  | 3.43(1.297) |
| Solicit customer feedback   | 36(19.0) | 72(38.1) | 36(19.0) | 27(14.3) | 18(9.5)  | 3.52(1.371) |
| Development of an improvement plan based on customer feedback from each group   | 36(19.0) | 72(38.1) | 36(19.0) | 27(14.3) | 18(9.5)  | 3.43(1.221) |

**Source: Fieldwork (2023)**

Table 1 indicates the respondents' views on how TQM can be implemented in the apparel manufacturing industry to improve productivity and product quality. From the table, 93 respondents representing 49.2% agreed to the provision of leadership through management's commitment and participation (M=3.54), 135 respondents representing 71.5%, agreed to the use of education and training needed for quality awareness education (M=4.07), 91 representing 48.1% agreed that planning must be done by assessing the firm's current reality to ascertain current needs (M=3.47). It can be noted from the responses that various TQM techniques can be used to effectively implement TQM in the apparel industry to improve productivity and product quality. Respondents strongly asserted that providing leadership, education and training, planning, supplier quality audit, identification of customer groups, soliciting customer feedback and development of improvement plans based on customer feedback are effective techniques for implementing TQM.

**Table 2: Extent of implementation**

| Statements  | VLE%     | LE       | ME       | SE       | NAA     | M ( $\pm$ SD) |
|---|----------|----------|----------|----------|---------|---------------|
| Top management must learn about and decide to commit to TQM   | 81(42.9) | 45(23.8) | 63(33.3) | 0        | 0       | 4.10(.870)    |
| The firm must assess the current culture, customer satisfaction, and quality management systems.            | 81(42.9) | 18(9.5)  | 72(38.1) | 18(9.5)  | 0       | 3.86(1.085)   |
| Top management must identify core values and principles to be used and communicate them                     | 45(23.8) | 45(23.8) | 72(38.1) | 18(9.5)  | 9(4.8)  | 3.52(1.099)   |
| A TQM master plan must be developed   | 81(42.9) | 27(14.3) | 36(19.0) | 45(23.8) | 0       | 3.76(1.234)   |
| The firm must identify and prioritize customer demands and align products to meet these demands.            | 54(28.6) | 27(14.3) | 63(33.3) | 36(19.0) | 9(4.8)  | 3.43(1.221)   |
| Management must map the critical processes through which the firm meets its customers' needs                | 63(33.3) | 45(23.8) | 81(42.9) | 0        | 0       | 3.90(.870)    |
| Management must oversee the formation of teams for process improvement efforts.                             | 45(24.1) | 36(19.3) | 76(40.6) | 29(15.5) | 1(.5)   | 3.51(1.039)   |
| The momentum of the TQM effort must be managed well   | 36(19.0) | 81(42.9) | 27(14.3) | 36(19.0) | 9(4.8)  | 3.52(1.142)   |
| Managers must contribute individually to the effort through planning, training, coaching, and other methods | 72(38.5) | 37(19.8) | 44(23.5) | 21(11.2) | 13(7.0) | 3.72(1.274)   |

**Source: Fieldwork (2023)**

Table 2 represents respondents' views on how much TQM can be implemented in Apparel Manufacturing. The majority, 108 respondents representing 57.1%, agreed to a large extent that management must map the critical processes through which the firm meets customer needs (M=3.51), 117 representing 61.9 agreed to a large extent that the momentum of TQM effort must be managed well (M=3.52), and 109 representing 58.3% agreed to a large extent that managers must contribute individually to the effort through planning, training, coaching and other methods (M=3.72). From the responses, it can be concluded that top management must commit to TQM, firms must assess current culture, customer satisfaction and quality management systems, and TQM masterplans must be developed to large extents to implement TQM effectively. Furthermore, customer demands must be identified and prioritized, management must map critical processes, and TQM efforts must be well managed. That notwithstanding, managers must contribute individually to TQM efforts through planning, training, coaching and other methods. Other TQM processes must also be evaluated and revised when necessary to large extents to implement TQM effectively.



| <b>Table 3: Barriers to TQM implementation Statements</b>      | <b>N</b> | <b>Min</b> | <b>Max</b> | <b>M</b> | <b>±SD</b> |
|--|----------|------------|------------|----------|------------|
| The absence of tangible improvement from previous efforts      | 189      | 1          | 5          | 3.48     | 1.099      |
| The absence of recognition from employee involvement           | 189      | 1          | 5          | 3.57     | 1.053      |
| The absence of leadership, business experience and expertise   | 189      | 1          | 5          | 3.67     | 1.130      |
| The absence of commitment from staff                           | 189      | 1          | 5          | 3.38     | 1.434      |
| Increased complex paperwork                                    | 189      | 1          | 5          | 3.57     | 1.297      |
| The absence of support, incentives and resources               | 189      | 1          | 5          | 3.81     | 1.405      |
| Difficulties in a change of culture and management             | 189      | 1          | 5          | 3.24     | 1.415      |
| inadequate knowledge and comprehension of quality              | 189      | 1          | 5          | 3.71     | 1.281      |
| The absence of technological facilities                        | 189      | 1          | 5          | 2.90     | 1.448      |
| Resistance to change   | 189      | 1          | 5          | 3.57     | 1.333      |
| Frequent employee turnover                                     | 185      | 2          | 5          | 3.88     | 1.000      |
| Absence of motivation  | 189      | 1          | 5          | 3.48     | 1.223      |
| Lack of understanding of TQM concepts                          | 189      | 1          | 5          | 3.33     | 1.361      |
| Quality is not measured effectively                            | 189      | 1          | 5          | 3.48     | 1.183      |
| Management decisions are short-term-oriented.                  | 189      | 1          | 5          | 3.38     | 1.294      |
| The strategic plan is not customer-driven                      | 189      | 2          | 5          | 4.00     | 1.072      |
| The high costs of implementing TQM compensate for the benefits | 189      | 1          | 5          | 3.62     | 1.256      |
| Lack of commitment from workers                                | 181      | 2          | 5          | 3.70     | 1.055      |
| Top management is not committed to quality                     | 189      | 1          | 5          | 3.67     | 1.087      |
| Employees are not enabled to implement quality improvement     | 185      | 2          | 5          | 4.02     | .983       |

**Source: Fieldwork (2023)**

Table 3 depicts respondents' responses on the Constraints/Barriers faced during the Implementation of Quality Improvement Initiatives. From the table, most of the respondents agreed to the following constraints/barriers; absence of tangible improvement from previous efforts (M=3.48, ±SD=1.099), absence of recognition from employee involvement (M=3.57, ±SD=1.053), absence of leadership, business experience and expertise (M=3.67, ±SD=1.130), absence of commitment from staff (M=3.38, ±SD=1.434), increased complex paperwork (M=3.57, ±SD=1.297), the absence of support, incentives and resources (M=3.81, ±SD=1.405), difficulties in a change of culture and management (M=3.24, ±SD=1.415), inadequate knowledge and comprehension of quality (M=3.71, ±SD=1.281), and the resistance to change (M=3.57, ±SD=1.33). However, most respondents disagreed with the absence of technological facilities (M=2.90, ±SD=1.448).

The above discussions provide a vivid basis for the barriers to implementing TQM in the apparel industry. The barriers identified included factors relating to worker recognition, leadership, commitment, support, incentives and resources, motivation etc. This suggests that the above-mentioned factors must be addressed to ensure to smooth implementation of TQM. It is, however, important to state that respondents agreed with the relevance of technology in TQM implementation.

**Table 4: TQM prospects**

| <b>Variables</b>                                  | <b>N</b> | <b>Min</b> | <b>Max</b> | <b>M</b> | <b>±SD</b> |
|---|----------|------------|------------|----------|------------|
| Improving product quality for customers           | 189      | 1          | 5          | 3.81     | 1.055      |
| Improving the working environment                 | 189      | 2          | 5          | 4.10     | .813       |
| Improving teamwork and problem-solving procedures | 189      | 1          | 5          | 4.00     | 1.276      |
| Increasing the firm's profits                     | 189      | 2          | 5          | 4.00     | 1.026      |
| Increasing employee satisfaction                  | 189      | 2          | 5          | 3.95     | 1.136      |
| Reducing waste                                    | 189      | 1          | 5          | 4.10     | 1.380      |
| Improving customer satisfaction                   | 189      | 1          | 5          | 3.95     | 1.366      |
| Meeting customers' requirements                   | 189      | 1          | 5          | 4.19     | 1.142      |
| Improving customer relations                      | 189      | 2          | 5          | 4.14     | .943       |
| Reduction of operation defects                    | 189      | 1          | 5          | 3.95     | 1.400      |

**Source: Fieldwork (2023)**

Table 4 shows respondents' views on the prospects/benefits of TQM implementation. From the table, most respondents agreed to the following benefits/prospects of TQM; improving product quality for customers ( $M=3.81$ ,  $\pm SD=1.055$ ), improving the working environment ( $M=4.10$ ,  $\pm SD=.813$ ). It can be deduced from the above discussions that the benefits/prospects of TQM cannot be over-emphasized. Respondents agreed that TQM improves product quality, work environment, teamwork and problem-solving procedures, employee satisfaction, customer satisfaction, and customer relations, makes companies meet customer requirements, increases turnover and builds strong relationships with suppliers. Moreover, TQM ensures that companies reduce waste, reduce customer complaints, and enhances company reputation.

**Table 5: Top Management Commitment**

| Statements   | N   | Mi Ma |   | M    | ±SD       |
|--|-----|-------|---|------|-----------|
|  |     | n     | x |      |           |
| Top management continually demonstrates their commitment to quality                        | 189 | 1     | 5 | 4.10 | .923      |
| Top management is inclined to allocate adequate time and resources for quality improvement | 189 | 2     | 5 | 4.14 | .992      |
| Top management Learn from problems   | 189 | 1     | 5 | 3.62 | 1.21<br>7 |

**Source: Fieldwork (2023)**

This table perused how the use of TQM through managerial and operational processes can improve competitiveness and sustainable growth. With regards to Top Management Commitment, most of the respondents agreed that Top Management should continually demonstrate their commitment to quality (M=4.10, ±SD=.923), should be inclined to allocate adequate time and resources for quality improvement (M=4.14, ±SD=.992) and must learn from problems (M=3.62, ±SD=1.217). The views suggest that Top Management's demonstration of commitment to quality, allocation of time and resources to quality improvement and learning from problems are effective ways of using TQM through Managerial and Operational processes to improve competitiveness and sustainable growth.

**Table 6: Employees Empowerment**

| Statements   | N   | Min | Max | M    | ±SD  |
|--|-----|-----|-----|------|------|
| My firm empowers rather than control   | 189 | 3   | 5   | 3.57 | .662 |
| Employees are stimulated to come up with innovative ideas and suggestions to enhance their job | 189 | 2   | 5   | 3.76 | .752 |
| Employees have authority in their positions to take necessary actions when needed              | 189 | 2   | 5   | 3.86 | .891 |
| Management involves employees in the decision-making process                                   | 189 | 2   | 5   | 3.43 | .730 |

**Source: Fieldwork (2023)**

Table 6 shows how the use of TQM through employee empowerment can be done to improve competitiveness and sustainable growth. From the table majority of the respondents agreed to the following; that the firm empowers rather than control (M=3.57, ±SD=.662), employees are stimulated to come up with innovative ideas and suggestions (M=3.76, ±SD=.752), employees have authority in their positions to make necessary actions when needed (M=3.86, ±SD=.891) and management involves employees in the decision-making process (M=3.43, ±SD=.730). The above discussions imply employee empowerment is integral to applying TQM to improve

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 competitiveness and sustainable growth in firms and that employees must not be controlled but empowered, stimulated to innovate and be involved in decision-making.

**Table 7: Customer Satisfaction**

| Statements   | N   | Min | Max | Mean | ±SD   |
|--|-----|-----|-----|------|-------|
| Priority attention has been given to fulfilling customer needs by my firm                                    | 189 | 1   | 5   | 3.24 | 1.068 |
| There is a regular quality meeting with customers to keep them updated                                       | 189 | 1   | 5   | 3.67 | 1.042 |
| My firm has implemented a systematic approach to add value to its services to increase customer satisfaction | 189 | 2   | 5   | 3.57 | 1.006 |
| Valid N (listwise)   | 189 |     |     |      |       |

**Source: Fieldwork (2023)**

Table 7 shows how TQM customer satisfaction can be used to improve competitiveness and sustainable growth. Most respondents agreed that priority attention is given to fulfilling customer needs by the firm (M=3.24, ±SD=1.068). That notwithstanding, the majority also agreed that there should be regular quality meetings with customers to keep them updated (M=3.67, ±SD=1.042) and the firm must implement a systematic approach to add value to its services to increase customer satisfaction (M=3.57, ±SD=1.006). Giving priority to customers remains very important to the growth of every firm. It is, therefore, no exaggeration that customers are given attention and updated on quality through meetings.

Qualitatively, most of the respondents were also of the opinion that TQM is mainly customer focused regardless of the perspective one decides to look at it. Selected comments have been outlined below;

*“I must confess TQM is a champion concept right now because the principles of TQM embody every aspect of the organization, and it is mainly geared towards elevating the importance of the customer through the institution of quality practices, which in the end benefits and satisfies the customer.”*

*“Yes, I agree, TQM is very, very important when it comes to production in all manner of sense because it seeks to achieve a near perfect production system where there is the reduction of waste and at the same time product quality is maintained...”*

However, it was noted that the firms do not strictly follow the quality management procedures they themselves have put in place. Selected excerpts from their responses have been given below;

*“Yes, we have implemented quality practices in our work here. We ensure that every material we use is of the highest quality, and we don’t take anything substandard from our suppliers. We always do it to ensure that the end product is the best we can offer the customer...”*

*“We have something like that, but you know our people and how we do our things. We don’t follow it like that...sometimes we undertake production planning, train our workers on how to ensure quality standards are maintained, but like I said, its not consistent practice here.”*

From the responses, it could be concluded that most of the surveyed apparel manufacturing firms have adopted some form of quality management practices. When asked about their motivation for using TQM, the responses point in one direction: to satisfy the customer. Sample responses have given below;

*“Normally, we do that to satisfy the customer because sometimes we need to put in extra efforts to deliver a particular style all intended to satisfy the specific needs and desires of the customer...”*

*“...most importantly, we aim to reduce cost by reducing the number of defects in production...”*

From the responses, it could be concluded that the motivation for implementing TQM in the apparel manufacturing industry is basically to satisfy the customer. Customer satisfaction is one of the cardinal principles of TQM implementation.

## **CONCLUSION AND IMPLICATIONS**

With the implementation of TQM principles, the quality of products is likely to improve. This can potentially lead to higher customer satisfaction and loyalty, leading to a better brand reputation and more significant market share. Again, TQM can lead to more efficient processes by encouraging continual improvement. This can help in reducing waste, lowering costs, and improving productivity. Also, by focusing on quality, apparel manufacturers can differentiate themselves from their competitors. This can potentially open up new markets and opportunities.

Regarding policy implications, the government must update industrial policies to encourage the adoption of TQM principles. This could include incentives for businesses adopting TQM principles, such as tax breaks or access to low-interest loans. Additionally, regulations may need to be implemented to ensure quality standards across the industry. Furthermore, implementing TQM may require changes to labour policies to ensure that workers are adequately compensated for their increased skills and responsibilities. This could include revisions to minimum wage laws, overtime regulations, and working condition standards. As TQM implementation can significantly improve the quality of products, it can make Ghana’s apparel sector more competitive internationally. Hence, a need to revise trade policies, including negotiating more favourable trade agreements to open up new markets for high-quality Ghanaian apparel.



Also, many apparel manufacturing businesses in SMEs lack the resources to implement TQM. Thus, there is a need to create or modify policies to offer financial, technical, and consultative support for these businesses to transition into TQM. TQM often includes principles of environmental sustainability. Thus, policies must be revised to align with these principles, possibly including stricter environmental standards and incentives for sustainable practices. In conclusion, implementing TQM in Ghana's apparel manufacturing sector can bring many benefits, but it also comes with considerable challenges. Careful planning, cultural sensitivity, resource allocation, education and training, and a long-term commitment are all necessary for successful implementation.

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