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Improvement of Product Quality Performance Thought Implementation of Total Quality Management

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ABSTRACT

Total Quality Management (TQM) is a thorough strategy for raising product quality performance that has attracted a lot of interest and been used in a number of industries. This essay examines the application of TQM and how it affects improving product quality. To increase quality and customer happiness, TQM places a strong emphasis on employee involvement, continuous improvement, and a customer-centric mentality. The main TQM tenets and approaches are explored in the article, including process management, statistical analysis, and employee empowerment. Additionally, it covers how leadership and organizational culture may promote a TQM-focused atmosphere.

The study's summary of effective TQM procedures and their potential for long-term success in improving product quality performance comes as its conclusion. Through the application of TQM, firms can experience sustained growth, competitiveness, and customer loyalty by coordinating processes, people, and technology towards a unified quality goal.

Keywords- Product quality, customer happiness, ongoing improvement, employee empowerment, leadership, organizational culture, process management, and statistical tools

1. INTRODUCTION

Organizations are under increasing pressure to create products of extraordinary quality that meet or exceed client expectations in today's fiercely competitive and dynamic business environment. Maintaining success and achieving a competitive edge now heavily depend on the pursuit of outstanding product quality performance. Total Quality Management (TQM) is one strategy that has been highly successful in accomplishing this objective.

A complete management philosophy called total quality management seeks to integrate quality standards into every facet of an organization's activities. By incorporating a comprehensive and methodical approach to ongoing improvement and customer satisfaction, it goes beyond conventional quality control techniques. TQM places a strong emphasis on the active participation of all employees in the pursuit of quality excellence, from top management to frontline staff. A fundamental transformation in organizational culture is necessary for the implementation of TQM, as the emphasis switches from finding and fixing errors to avoiding them altogether. The culture of learning, innovation, and responsiveness to customer needs is fostered by this proactive approach to quality management.

It is important to recognize that putting TQM into practice has its share of difficulties. During the transformation process, organizations frequently face challenges, which can range from resource limitations to resistance to change. As a result, this article will also discuss potential obstacles and provide solutions for getting through them.

2. PROBLEM IDENTIFICATION

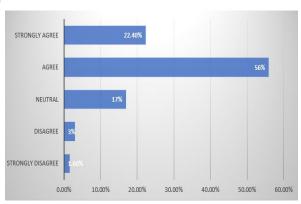
Even though the significance of product quality is well acknowledged, many businesses still struggle to consistently deliver goods that meet or even surpass customer expectations. This problem is frequently caused by a number of difficulties that make it difficult to attain ideal performance in terms of product quality. By addressing these issues and putting Total Quality Management into practice, organizations may significantly increase their performance in terms of product quality, customer satisfaction, and overall success. Organizations may develop a culture of excellence, continuous improvement, and customer-centricity that pushes their products to new heights of quality and competitiveness by proactively identifying and addressing these obstacles.

3. OBJECTIVES

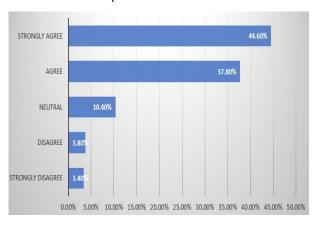
The primary objectives of implementing Total Quality Management (TQM) for improving product quality performance are as follows:

- Consistently raising product quality is TQM's main objective. Organizations strive to reduce flaws, mistakes, and deviations from specifications by putting strong quality management processes into place, resulting in goods that meet or exceed customer expectations.
- TQM places a strong emphasis on a customer-centric strategy that places an emphasis on comprehending client demands, preferences, and feedback.
- TQM encourages a culture of ongoing development for all functions and processes. To increase product quality and general effectiveness, organizations actively seek out improvement areas, adopt best practices, and execute improvements.
- The benefit of having involved and empowered employees at all levels is acknowledged by TQM.
- Organizations use TQM to streamline and improve their processes in an effort to reduce waste, inefficiencies, and variability. Consistent and
 predictable product outcomes are made possible by standardizing processes and utilizing data-driven strategies.
- TQM involves suppliers and collaborators outside the organization's walls.

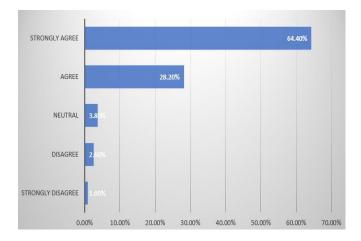
4. RESULT AND DISCUSSION



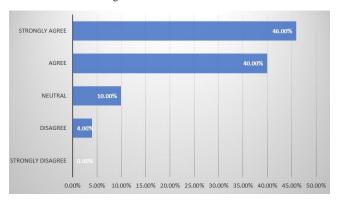
Graph 1: graph between response and Likert scale for Leadership.



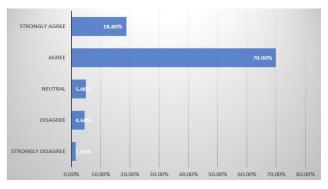
Graph 2: graph between response and Likert scale for Organizational structure.



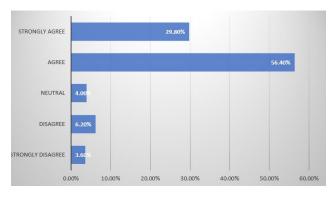
Graph 3: graph between response and Likert scale for Planning.



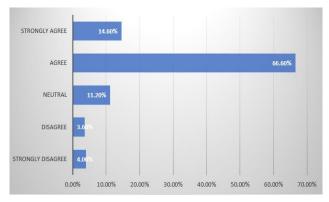
Graph 4: graph between response and Likert scale for Training Education.



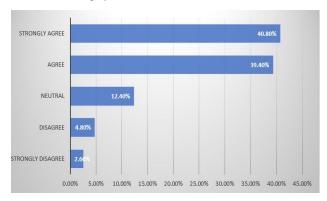
Graph 5: graph between response and Likert scale for Communication.



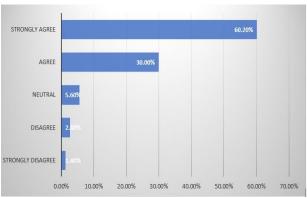
Graph 6: graph between response and Likert scale for Teamwork.



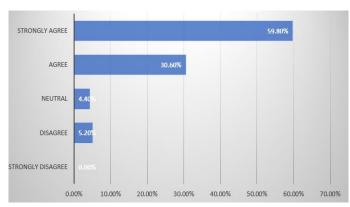
Graph 7: graph between response and Likert scale for Employee involvement



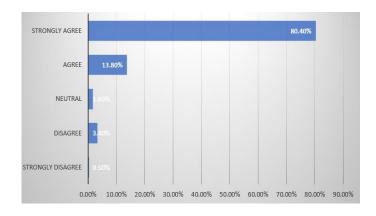
 $\label{prop:continuous} \textbf{Graph 8:} \ \text{graph between response and Likert scale for Continuous improvement.}$



Graph 9: graph between response and Likert scale for Measurement and evaluation.



Graph 10: graph between response and Likert scale for Customer focus.



Graph 11: graph between response and Likert scale for Total customer satisfaction.

5. CALCULATION

Table 5.1: Number of scale

Strongly disagree	1
Disagree	2
Neutral / don't know	3
Agree	4
Strongly disagree	5

Mean -

Leadership: 1*8+2*15+3*85+4*200+5*112 /500 =3.94.

Organizational structure: 1*17+2*19+3*52+4*189+5*223 /500 =4.164

Planning: 1*5+2*13+3*19+4*141+5*322 /500 =4.524

Training education: 1*0+2*20+3*50+4*200+5*230 /500 =4.28

Communication: 1*8+2*23+3*25+4*350+5*94 /500 =3.998

Teamwork: 1*18+2*31+3*20+4*282+5*149 /500 =4.026

Employee involvement: 1*20+2*18+3*56+4*333+5*73 /500=3.842

Continuous improvement: 1*13+2*24+3*62+4*197+5*204 =4.11

Measurements and evaluation: 1*7+2*14+3*28+4*150+5*301/500 = 4.4488

Customer focus: 1*0+2*26+3*22+4*153+5*299 /500 =4.459

Total customer satisfaction: 1*3+2*17+3*9+4*69+5*402 /500 =4.7.

Although each TQM variable is important, some are given higher priority than others. The aforementioned statistics were gathered and calculated to show that TQM factors are applied to industry and are effective, yet respondents' perspectives on TQM application vary. Some survey participants express both agreement and disagreement, a lack of bias, or ignorance toward the TQM standards applied in businesses. Depending on the circumstances at the company or with another organization, everyone has different possibilities.

6. CONCLUSION

The majority of people are content with their job goal of customer satisfaction, which is necessary for any company or organization, according to research

However, all criteria are correctly applied here and give a steady company with the highest annual turnover. Other factors have an average rating score. Additionally, paying less attention to lesser rating indicators leads to happier employees and higher output capacity.

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