



The Application of TQM in Kerala's Public and Private Manufacturing Organizations that Hold ISO 9000 Certification

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ABSTRACT

It is beyond dispute that manufacturing organizations, both governmental and commercial, are economically significant in emerging countries. Regardless of their size and annual revenue, many manufacturing companies in Kerala, both in the public and private sectors, hold ISO 9000 certification. In this study, the use of Total Quality Management (TQM) in Kerala's public and commercial manufacturing organizations that have earned the ISO 9000 certification is examined. The quantity of ISO 9000 certified public and private manufacturing organizations in Kerala that practice quality circles is specified. The study makes an effort to assess any variations in TQM practice across Kerala's private and public sector ISO 9000 certified manufacturing organizations. An extensive literature review and expert interaction resulted in the identification of a conceptual framework for the TQM factors in Kerala's industrial organizations. A valid and trustworthy survey was created to evaluate the level of TQM implementation in Kerala's public and private manufacturing organizations that hold ISO 9000 certifications. Thirty manufacturing organizations in Kerala's public and private sectors, each with 63 managers, were surveyed to acquire the primary data. SPSS was used for data analysis. The study validates the claim that Total Quality Management (TQM) is practiced in Kerala's private sector and private ISO 9000 certified manufacturing organizations indistinguishably from one another. The formulation of suggestions to enhance the application of Total Quality Management (TQM) in Kerala manufacturing organizations with ISO 9000 certification

Keywords: Total Quality Management, ISO 9000 certification, Kerala

1. INTRODUCTION

The public firms play a significant role as role models for other organizations in Kerala, India, by establishing better research and development facilities. The application of cutting-edge production techniques and effective process management and technology could make this achievable. The primary goal of private sector organizations is to maximize profits, which can only be accomplished by offering customers better products and services. Total Quality Management (TQM) is used in organizations to deliver higher-quality technology and apply the newest management techniques in order to increase customer satisfaction, dependability, productivity, market share, profitability, and even survival, all of which are directly impacted by the caliber of an organization's goods, services, and performance (Mohanty and Lakhe, 1998).

The first objective a company should think about when trying to enhance how it does business is compliance with ISO 9000 standards. Regardless of their organization type or size, the ISO 9000 certified organizations are expected to adhere to TQM standards. Organizations from the public and commercial sectors that adopt quality management concepts do so for a variety of reasons, according to the Corresponding Author *Dr. Mathew Joseph I in Volume 3, Issue 1. Adopting quality management practices is a necessary step for public sector organizations to deliver the finest goods and services to their stakeholders and customers. Organizations in the private sector practice TQM for their own survival and as a means of competitive advantage.

2. OBJECTIVES

1. To learn more about how Total Quality Management is applied in Kerala's ISO 9000 certified manufacturing companies.
2. To determine the degree to which Kerala's public and private manufacturing organizations that have earned the ISO 9000 certification use quality circles.

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3. To evaluate TQM usage in Kerala public manufacturing companies with ISO 9000 certification.
4. To examine TQM ISO 9000 certified practices in Kerala private manufacturing companies.
5. To determine whether TQM practices in Kerala's public and private manufacturing organizations that have earned the ISO 9000 certification differ in any way.

3.Hypothesis Ho: The commercial and public manufacturing organizations in Kerala that have received ISO 9000 certification do not significantly differ from one another in their use of total quality management.

H1: The commercial and public manufacturing organizations in Kerala that have received the ISO 9000 certification differ significantly in how they conduct total quality management.

3. LITERATURE EVALUATION

Total Quality Management (TQM) is a technique to improving the performance of the entire organization, according to Oakland (1993). It fundamentally involves a method for organizing, planning, and comprehending each action and varies depending on the person at each level. The integration of all organizational functions and processes to accomplish ongoing product and service improvement is known as total quality management (Omachonu and Ross, 1994). The authors of Saraph, Benson, and Schroeder (1989) sought to classify the essential elements of total quality management. A list of 78 TQM criteria was proposed as a result of the study that was done in the US. The study carried out in the United States was repeated in a later study carried out in the United Kingdom. The study identified several critical TQM components, including the function of divisional top management, quality policy, process management, product and service design, training, quality data and reporting, supplier quality management, the function of the quality department, and employee interactions.

To determine the extent to which the 22 important criteria defined by Ramirez and Loney (1993) were applicable in various nations, Youssef and Zairi (1995) studied the application of TQM in Middle Eastern enterprises. According to the study, senior management roles, dedication, assistance, and education were seen as crucial aspects in Middle Eastern nations. Thiagarajan and Zairi (1998) investigated the critical elements of Total Quality Management in Malaysian and Singaporean companies using the 22 critical factors developed by Ramirez and Loney (1993). They discovered that the senior management role and commitment, as well as customer satisfaction, were thought to be the most important. Sila and Ebrahimpour (2002) examined the TQM research studies conducted between 1989 and 2000 and offered a thorough analysis of the key success elements for TQM. 347 research studies yielded 25 factors, which were identified. [14][15][16][17] [18].

4.METHODOLOGY

Descriptive research is the type of research design used in the study. The study concentrated on medium- and large-scale manufacturing companies in Kerala, India, that were ISO 9000 certified. It was decided to identify several aspects of Total Quality Management by conducting a thorough research of the literature. To identify the essential elements of TQM applicable in the ISO 9000 certified public sector and private sector manufacturing organizations in Kerala, discussions with experts were held with eminent personalities in the fields of industrial engineering, production and operations management, and quality auditors. These discussions highlighted the application of Deming's principles in TQM.

A theoretical framework on TQM in Kerala manufacturing organizations is constructed for the study in light of a careful analysis of the literature from earlier investigations. To confirm the applicability of these identified TQM elements in the Kerala setting, content validity and face validity were evaluated. Employee involvement, teamwork, supplier teaming, continuous improvement, unity of purpose, top management commitment, customer focus, benchmarking, employee education and training, use of statistical process control tools, use of information about quality, and value analysis were the twelve TQM factors that were extracted.

Primary data obtained from managers and employees of thirty manufacturing companies in Kerala's public and commercial sectors that have received the ISO 9000 certification. 63 managers from the corporate sector and 63 managers from the public sector each provided a response. utilizing SPSS to analyze the data. Information displayed in tables and figures.

5.Results and Discussion

Circles of excellence

Based on an analysis of the question of whether ISO 9000 certified manufacturing organizations in Kerala adhere to the Quality Circle concept, it was discovered that 88 percent of managers in the public sector and 72 percent of managers in the private sector believe that their organizations do indeed follow the Quality Circle concept.

Opinion on the benefits of entering the Quality Circle, paragraph 6.2

According to 82 percent of the respondents, the main motivation for joining the quality circle in a TQM environment in both public and private sector ISO certified manufacturing organizations is to feel proud of helping the business advance. 14 percent of quality circle members cited making friends at work and fostering a welcoming environment as major reasons for participating, while 2 percent of managers said they did so to receive more recognition for their creative ideas. 2% of the managers believed that they entered the quality circle as a result of pressure from their superiors.

Relevance of the Quality Circle in Manufacturing Organizations, Section 6.3

The following table displays managers' perceptions of the value of the quality circle in manufacturing organizations. The response and variable are ranked.

6.RESULTS:

.A strategy plan that outlines the distinct organizational goals is necessary for the implementation of Total Quality Management to be successful. This strategy improves employee engagement and organizational performance through a sustained effort to establish and maintain a new organizational culture.

Top management needs to be dedicated to using whole quality management and show that commitment through all of their actions. For the implementation of high-quality initiatives, the top management should allot sufficient resources.

TQM emphasizes that everyone, not just the quality control division, is responsible for quality. So that there is a talent pool accessible to work on the group assignment, TQM quality teams should be made up of people from various functions.

In organizations that practice TQM, effective leadership is absolutely essential. A dynamic organizational culture that encourages harmony, trust, and dedication among the employees should support and empower the workforce.

It's crucial to give staff encouragement and incentive. The rewards given would raise the employees' contentment and self-esteem.

A new culture with a feeling of shared values, organizational trust, and teamwork must be created in the TQM organization in order to achieve continuous improvement in the organization.

Organizations that practice TQM are required to have a collaborative culture. The decision-making process should be decentralized to give employees more control.

7.CONCLUSION

This study has made an effort to determine how the fundamental components of Total Quality Management are applied in the state of Kerala's chosen ISO 9000 certified manufacturing organizations. Through this study, it has been determined that there are no appreciable differences in TQM practice between Kerala's private sector and public sector manufacturing organizations that have received ISO 9000 certification. The fundamental goal of manufacturing companies is to offer superior products at fair prices. This could be accomplished by increasing organizational productivity without sacrificing quality. Manufacturing businesses must apply TQM consistently across all divisions and components of the organization in order to achieve sustained competitive advantage.[13] [14] [15] [16] [17] [18] .

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