

A Study on Total Quality Management to Increase the Productivity of the Organization

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Abstract

TQM is a set of management practices throughout the organization, geared to ensure the organization consistently meets or exceeds customer requirements. TQM places strong focus on process measurement and controls as means of continuous improvement. At its core, Total Quality Management (TQM) is a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services and the culture in which they work. A core concept in implementing TQM is Deming's 14 points, a set of management practices to help companies increase their quality and productivity.

Key words-TQM- organization -consistently-Productivity

1. Introduction

Due to the rapid expansion of the global economy, businesses are under increasing pressure to achieve and maintain functional distinctiveness in order to improve their overall performance and competitiveness. Internationally, organizations also frequently deal with shifting organizational cultures, a competitive market, a bigger focus on improvements in quality, consumer loyalty, high-tech innovation and unpredictability in politics and the economy. Today organizations can never depend on their current business forms in remarkably competitive marketplace. In order to maintain their successful operations over the years, they must accept and implement new operation management practices. Organizations have been forced to pursue enduring quality and quality management in order to increase their competitive edge due to the intensifying global economic rivalry and other external factors. Total Quality Management (TQM), which has received considerable attention from both business and academia over the last 20 years, stands out as one of the most well-known styles of modern operations management practice. [1, 2] TQM plays a crucial role in the economic growth and development of societies since it is the one who develops, promotes, and disseminates new ideas and knowledge. TQM improves their processes and services through the successful implementation of quality

2. Review of literature

Ramkumarverma 2023-This article is intended to narrow the gap that exists in the literature. First, the information available on each TQM implementation and innovation performance proves that studies dedicated to these concepts are repetitive and abundant; However, their relationship issues are less researched and only a few studies, in the strict sense of the word, have tackled this. In addition, the findings of this study are still inconclusive.

Venan Patel(2023) While several studies support the positive impact of TQM practices on innovation performance, other researchers question the role of TQM practices in improving innovation performance. Therefore, it is recommended that this relationship be reset to gain more insight into the matter.

Deepaukkumar (2022)-The author's knowledge, most of the previous studies did not rely on any particular theory to explain the relationship between TQM practices and innovation performance, therefore, this study uses Resource Based Theory and Total Quality Management as the basis for introducing the research model proposed in this study.

Ansari and Sohal (2021)-recommend investigating this relationship (i.e., TQM practices and innovation performance) through other mediating practices or techniques to determine innovation performance. Since the concept of innovation is captured by innovation capability, as an antecedent of innovation performance, it is necessary to investigate the relationship between TQM and innovation performance through innovation capability

3. OBJECTIVES OF THE STUDY

PRIMARY OBJECTIVES

To study the effectiveness of total quality management in the company

SECONDARY OBJECTIVES

- ❖ To study the importance of quality control system.
- ❖ To study workers, view regarding the need for quality control.
- ❖ To study about the environment of quality control system
- ❖ To study the impact of managers in quality control system
- ❖ To suggest measures for improving the quality control system if necessary.

STATEMENT OF THE PROBLEM

Give a man a fish, and you have given him meal. Teach the man to fish, and you have given him a "livelihood". This ancient Chinese Proverb seems to describe the underlying rationale of all training programmes. No Organization can survive, let alone make a mark, if its employees are not competent in terms of knowledge, skills and attitudes. Competent employees are as much the necessity of a non-profit Organization as of profit-making organization. Human Resource Plays a vital Role in the optimum utilization of all other resources to achieve Total Quality Management. Hence, a Profit-making organization must first think of developing its Total Quality Management

NEED FOR THE STUDY

Quality Control System form the core of entity called "Internal service" or better known as "Total Quality Management". It is the systematic development of the attitude, knowledge and skill behavior pattern required by an individual in order to perform adequately when given a task or a job. A Training need exists when a work performance problem can be traced directly to a skill efficiency. This suggests that there is a "gap" between the employee's level of competence and a target performance level as defined.

NATURE OF THE STUDY

The study starts with exploratory research and ends with conclusive research. The methodology involved in this design is qualitative to some extent quantitative in nature. Research, which helps in gaining familiarity with a phenomenon by secondary data and meeting with knowledgeable experts, is exploratory research. Research that helps in providing conclusion to a problem by analyzing it, using questionnaire, survey and by experimental case study is conclusive research.

TOOLS FOR ANALYSIS

In this study, exploratory research is used to gain familiarity with variables involved in the TQM system. Conclusive research is used to analyze the effectiveness of TQM system in the company using questionnaire with some statistical tools.

DATA ANALYSIS

WORKERS VIEWS ON INFLUENCE OVER TQM

Sl. No.	Worker's opinion	Number of respondents	Percentage of respondents
1.	Always	80	64
2.	Occasionally	35	28
3.	Never	10	8
Total		125	100

Source: Primary data

It probed to find out the reason for improving total quality of the products, these respondents' opinion that the supervisor recognizes the intelligence and competence of the group workers he rather considers all of them are intelligent and competent person to improve the quality. This opinion however is not in conformity with the opinion expressed by the majority of the sample workers. It appears that this opinion is a manifestation of satisfaction among these workers with the existing TQM climate in the company. In order to test the validity of the above analysis the following null hypothesis has been constructed. There is no association between the age of the respondents and influence on TQM.

The table clearly illustrates that there is no association between the age group of the respondents and influence on supervisors. The chi-square test proved this fact. Since the calculated value is lower than table value the null hypothesis is accepted at 5% level of significance.

Null Hypothesis:

Workers influence on supervisor among the education group of the respondents;

Workers Influence on Supervisors to Maintain Quality of The Product Among the Age Group of The Respondents

Influence group	Age	Satisfactory	Moderate	Dis-satisfactory	Total
Below 30 Years		34	13	4	51
31 – 40		34	20	4	58

41 and above	12	2	2	16
Total	80	35	10	125

Source: Primary Data

Degree of Freedom = 4 5% Significance

Calculated Value = 3.47 Table Value = 3.49

In order to verify the validity of the responses given by the respondents, the following hypothesis has been formed and tested with the help of chi-square test. "There is no association between the respondent's views on influence on TQM and education". The null hypothesis is tested by the application of Chi-Square test. From the table (3.17), it is clear that there exists no association between the respondent's views on influence on supervisors and education. Since the calculated value is lower than the table value, the formulated null hypothesis is accepted. In order to find out the workers views regarding the influence on and experience, the analysis is made among the education group with the help of chi-square test and their views were collected and incorporated.

Hypothesis:

"There is no association between the workers influence on TQM and experience".

This chi-square test proved the fact that there exists no association between experience and influence on TQM. Since the calculated value is less than the table value, the researcher has to accept the null hypothesis at 5% level of significance.

WORKERS INFLUENCE ON SUPERVISORS MAINTAIN QUALITY OF THE PRODUCT AMONG EDUCATION GROUP

Influence Education level	Satisfactory	Moderate	Dis-satisfactory	Total
Upto SSLC	55	23	6	84
HSC	19	11	3	33
Graduates	6	1	1	8
Total	80	35	10	125

Source: Primary Data

Degree of Freedom = 4 5% Significance

Calculated Value = 1.75 Table Value = 9.49

WORKERS INFLUENCE ON SUPERVISORS AMONG THE EXPERIENCE GROUP

Influence Experience	Satisfactory	Moderate	Dis-satisfactory	Total
Upto 5	37	13	2	58
6 – 10	24	19	6	49
11 – 15	6	3	1	10
16 – 20	5	0	1	6
21 and above	8	0	0	8
Total	80	35	10	125

Source: Primary Data

Degree of Freedom = 8 5% Significance

Calculated Value = 15.746 Table Value = 15.5

To test whether the designation group has relation to the influence on Total Quality Management the following hypothesis has been constructed.

“There is no association between the designation of the worker and influence on TQM”.

This chi-square test proved the fact that there exists no association between experience and influence on TQM. Since the calculated value is higher than the table value, the researcher has to accept the null hypothesis at 5% level of significance (Table 3.19).

It is inferred from the above analysis that the high designation group of workers is recognized by the supervisor to improve the quality of the organization. In other words, the high designation workers are having influence over the quality management.

4. CONCLUSION

TQM is a management system that promotes quality as a business strategy and is oriented to customer satisfaction by involving all members of the organization. TQM is an approach in running a business that tries to maximize an organization's competitiveness through continuous improvement of its products, services, workforce, processes, and environment. TQM is functional management with an approach that is continuously focused on improving quality, so that its products comply with the quality standards of the people served in the implementation of community development. The concept departs from management as a process or series of activities to integrate owned resources, which must also be integrated with the gradual implementation of management functions, so that work can be realized as a quality production activity. This management concept opens the way to a paradigm of thinking that emphasizes customer satisfaction, innovation and continuous improvement of service quality. TQM functions effectively in various organizations, namely as a management system to improve product quality or outcome so that it can be accepted by customers and can avoid fatal errors. TQM aims to provide satisfaction to customer needs as efficiently as possible. The main goal of TQM is to improve the quality of work, improve productivity and efficiency to satisfy all stakeholders. The strategy that needs to be done in improving quality management is to strengthen the company's human resources. Try to make HR able to take advantage of technology. As discussed at the beginning where the 4.0 industrial revolution will allow humans to interact with objects that have a technological system in it so humans must be able to apply all these technologies.

References

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