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MANAGEMENT ON EMPLOYEE'S
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A Study on the Impact of Total Quantity Management on Employee's Performance

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Abstract – Total Quality Management (TQM) is increasingly lambasted by management gurus and the business media for a lackluster impact on the bottom line. The question of whether the adoption of TQM improves employee's performance has been discussed for several years. However, most research has examined large organizations, and it has been recognized that TQM studies on small and medium enterprises (SMEs) is limited. This paper presents a study of the impact of total quantity management on employee's performance.

INTRODUCTION

Total Quality Management (TQM) is a management approach that originated in the 1950's and has steadily become more popular since the early 1980s. Total quality is a description of the culture, attitude and organization of a company that strives to provide customers with products and services that satisfy their needs.

The International Standard for Quality management ISO 9001:2008 adopts a number of management principles that can be used by top management to guide their organizations towards improved performance. These eight principles form the basis for the quality management system standard ISO 9001:2008.

Since the organizations depend on their customers, they should understand current and future customer needs, should meet customer requirements and should try to exceed the expectations of customers. An organization attains customer focus when all people in the organization know both the internal and external customers and also what customer requirements must be met to ensure that both the internal and external customers are satisfied.

The International Organization for Standardization (ISO) created the Quality Management System (QMS) standards in 1987. They were the ISO 9000:1987 series of standards comprising ISO 9001:1987, ISO 9002:1987 and ISO 9003:1987; which were applicable in different types of industries, based on the type of activity or process: designing, production or service delivery.

The standards are reviewed every few years by the International Organization for Standardization. The version in 1994 was called the ISO 9000:1994 series; consisting of the ISO 9001:1994, 9002:1994 and 9003:1994 versions.

The last major revision was in the year 2008 and the series was called ISO 9000:2000 series. The ISO 9002 and 9003 standards were integrated into one single certifiable standard: ISO 9001:2000. After December 2003, organizations holding ISO 9002 or 9003 standards had to complete a transition to the new standard.

ISO released a minor revision, ISO 9001:2008 on 14 October 2008. It contains no new requirements. Many of the changes were to improve consistency in grammar, facilitating translation of the standard into other languages for use by over 950,000 certified organizations in the 175 countries that use the standard.

The ISO 9004:2009 document gives guidelines for performance improvement over and above the basic standard ISO 9001:2000. This standard provides a measurement framework for improved quality management, similar to and based upon the measurement framework for process assessment.

The Quality Management System standards created by ISO are meant to certify the processes and the system of an organization, not the product or service itself. ISO 9000 standards do not certify the quality of the product or service.

In 2005 the International Organization for Standardization released a standard, ISO 22000,

meant for the food industry. This standard covers the values and principles of ISO 9000 and the HACCP standards. It gives one single integrated standard for the food industry and is expected to become more popular in the coming years in such industry.

KEY CONCEPTS NEEDED IN THE TQM EFFORTS:

- Quality is defined by customers' requirements.
- Top management has direct responsibility for quality improvement.
- Increased quality comes from systematic analysis and improvement of work processes.
- Quality improvement is a continuous effort and conducted throughout the organization.
- Use of the seven basic tools of quality to analyse quality-related issues.

Since the 1980's, when the Total Quality Management (TQM) concept was first defined, practitioners and researchers tried to give more definitions to defend this business philosophy, the first organic ground based system that emphasizes a systems approach to quality. TQM is a set of techniques, principles, processes, and best practices that over time have been proven effective. TQM utilizes techniques that improve as well as get better product quality and processes and thereby help a firm improve competitive performance. Proponents of TQM argue that the philosophy can be applied to any organization. The effectiveness of TQM as a system for organizational improvement has been widely reviewed in the literature. TQM is an important management tool, which can offer business with stability, growth, and prosperity. In order to achieve the requirement of quality, firms have to put the effort on the implementation of TQM. Therefore, firms will introduce quality management practice to integrate internal information communications with TQM philosophy effectively. In addition, the application of TQM mechanisms is also important to develop the relationship between organizations and their suppliers. Moreover, the application of TQM can also increase the satisfaction of the customer by providing preeminent products or services. Evidence concerning the impact of TQM on business performance is based on a wide range of indicators that differ across studies and are in some cases are contradictory, especially regarding financial performance, which is measured in terms of ROA (return on assets) or ROI (return on investment). There are many studies have investigated the link between TQM and employee's performance, however, that studies have concentrate on large organizations and that could give a light on recognizing that TQM studies on small and medium enterprises (SMEs) is limited.

OBJECTIVES OF THE STUDY

The objectives of the current research are as follows:

- To examine the association between total quality management (TQM) practices and performance, i.e. quality, business, and organizational performance. The quantitative data were obtained through a survey.
- The study reports that successful adoption and implementation of TQM practices results in improving the performance of employees.

HYPOTHESIS OF THE STUDY

This study supports the hypothesis that TQM practices positively impact the performance. TQM tools and techniques (Incentive and Recognition System, Process, Monitoring and Control and Continuous Improvement) and Behavioral factors (Fact based-management, top management's commitment to quality, employee involvement and customer focus) contribute to the successful implementation of TQM.

REVIEW OF RELATED LITERATURE

As per Deming (2011) without measuring something, it is improbable to enhance it. Hence to upgrade performance, one ought to confirm the degree of TQM implementation and measure its effect on business performance.

Solis et al. (2011) found that quality management significantly leads to business performance improvements (Quality citizenship, Quality results, Customer orientation, and Quality assurance).

In this study, business performance indicators include an increase in total sales, market share and net profit of the organization. So, regarding TQM and business performance relationship, this study further proposes: H2: TQM practices have a positive impact on the Business performance of the organization.

During the last three decades, Total Quality Management (TQM) has been receiving far-flung acceptance by the diverse sectors of the economy such as manufacturing, service (Feng et al., 2010), Government, health care, banking and education. This TQM phenomenon is wide-reaching. Noronha (2012) provided that perhaps few would disagree that no other management issue since Frederick Taylor's Scientific Management at the beginning of the century has created such a profound impact as what the TQM movement has achieved .

When looking at the relationship between TQM practices and employee's performance, although most of the recent studies show the positive relationship between TQM practices and firm performance in manufacturing and service sector

however, these studies generally lack statistical and methodological rigor as the researchers acknowledge the relatively small and non-representative sample size employed.

Saraph et al. (2012) proposed Seventy eight items that were grouped in to eight critical TQM practices: 1)role of divisional top management and quality policy, 2)process management, 3)product and service design, 4)training, 5)quality data and reporting, 6)supplier quality management , 7)role of the quality department and 8)employee relations.

To measure quality management, Lu & Sohal (2013) used nine TQM practices:1)Top management commitment, 2)Strategic quality management, 3)Process quality management, 4)Design quality management, 5)Education and Training, 6)Information and Analysis, 7)Benchmarking, 8)Resources and 9)Statistical process control).

Performance measurement is very essential for the valuable management of an organization. Scholars have used different performance types such as financial, business, innovative, operational and quality performance while examining the association between TQM practices and performance (Zehir et al., 2012).

According to Deming (2011), major determinant of success in competitive environment is quality. Feng et al. (2010) argued that in today's concurrent market place, firms must focus on improving quality and innovativeness.TQM implementation generally has strong and positive relations with Quality performance (Brah et al., 2012).

Kaynak (2013) revealed that TQM is relevant to the indicators of quality performance. Similarly, Kumar et al. (2009) found improvement in process, product and service quality resulting from TQM practices.

All these studies have statistically significant results ($p < 0.01$) with positive Pearson's correlation coefficient (r) ranging from .420 to .559. So, this study aims to clarify the effects of TQM practices on quality performance. The indicators for quality performance in this study are defects rate, rework, cost per product, customer complaint, cycle time and delivery time. Hence, this study proposes the first hypothesis:

H1: TQM practices have a positive Impact on quality performance of the organization.

RESEARCH METHODOLOGY

A total 250 manufacturing-related medium and large sized companies were selected. A structured questionnaire was adapted for the study. Data were obtained through survey questionnaires, which were sent to the respective organizations through mail. A

total of 250 questionnaires were sent to the production and quality staff (quality managers, Area mangers, general manager, directors, and administrative partners) of the 250 selected manufacturing firms. Questionnaires were numbered as they were sent to the respondents so that non-respondents to be traced and follow-up to be done. Follow-up was done through telephone calls and e-mails to those who had not responded after two weeks. Out of 250 questionnaires, only 171 questionnaires were received, hence response rate of study is recorded as 68.2%. Of the 171 questionnaires, 21 questionnaires were rejected due to incomplete responses. So, 150 valid and useable questionnaires have been used to conduct final data analysis.

The firms represented the sample, varied in size (as measured by the number of employees, ranging from less than 500 to more than 1,000 workers); assets (less than 50 to more than 500 Million Rupees) and industry type (Textile 37.3%; Fertilizers 1.3%; Pesticides 2.0%; FMCG 5.3%; Chemicals 10.7%; Electronics 14.0%; Pharmaceuticals 6.0%; Others 23.3%). Category of "others" included footwear, accessories, plastic, rice mills, wheat mills etc. Regarding level of TQM adoption; only 6% responses are from the firms that have TQM adoption level of less than 60%. Majority of the firms (67 %) have TQM adoption level of between 71%-90%.

There are the following research questions of this study:

1. Do TQM practices affect the quality performance of manufacturing firms in terms of improved products and services quality, process and productivity?
2. Do TQM practices affect the business performance in terms of profitability, market share and total sales in Manufacturing sector?
3. Do TQM practices affect the organizational performance in terms of improvement in employees' attitude towards quality, improvement of the flow of information among departments, reduction in absenteeism, reduction in tardiness rate, improvement in skill's level in Manufacturing sector?
4. Does the extent of TQM adoption varies as per industry type, company size and assets possession in Manufacturing sector?

Therefore, this paper aims to empirically examine the relationship between TQM practices and its impact on the performance of employees. Specifically, this study seek to scrutinize the extent to which TQM

practices and performance is correlated and how TQM practices affects various levels of performance (quality, business and organizational performance).

CONCLUSION

The present study sought to examine the impact of TQM practices on the performance of employees. The results of this study support our hypotheses that greater degree of implementation of TQM practices results in higher-quality performance (H1), business performance (H2) and organizational performance (H3).

Survey results show that 26.4% changes in organizational performance are significantly associated with TQM practices. These results support the findings of prior researches (Demirbag et al., 2010; Rahman, 2010) by showing that TQM practices enhances organizational performance in terms of improvement in employees' attitude towards quality, improvement of the flow of information among departments, reduction in absenteeism, reduction in tardiness rate, improvement in skill's level.

The results further show that 13.3% improvement in quality (product based, user based, and manufacturing quality) and 12.7% changes in business performance (total sales, market share and net profit of the organization) are strongly attributed due to high implementation of TQM practices.

The results of this research formulate a number of important additions to the existing TQM literature. First, this study suggests that there is no significant difference among industries in the implementation of TQM practices. The results of our study support that all types of industries use TQM practices on common proposition henceforth substantiating the evidence. Second, the results show that the extent of implementation of quality management practices increases as the size of organization increases. The finding argues that as size of organization increases (in term of number of employees and volume of total assets), level of TQM implementation increases i.e. Corporate organizations tend to implement TQM practices to a greater extent in comparison to medium level organizations. This research reveals that the organizations dealing in international businesses readily adapt quality management practices as compared to the organizations dealing in local businesses due to the intensity of competition.

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