

The reality of Applying Principles of Total Quality Management and its Role in Improving the Job Performance of Employees in Government Sector Institutions

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Abstract

organizations have become interested in human resources and employee performance and improving it by applying the principles of Total Quality Management (TQM). Achieving TQM in any organization may require developing the performance of all employees in this organization, both leaders and subordinates, as they are the main starting point for achieving total quality, as they are the important source for achieving the quality of the organization. This research explores the impact of Total Quality Management (TQM) principles on employee job performance, focusing on the case of the Saudi Electricity Company. Findings indicate a strong correlation between TQM implementation and improved job performance, with management commitment and employee role clarity playing significant roles. The study underscores the importance of organizational leadership, culture, and continuous training in fostering a TQM-driven environment. Recommendations include raising awareness among leaders about TQM benefits and maximizing employee potential. Future research avenues include comparative studies across sectors and identifying obstacles to job performance improvement in the public sector.

Keywords: Total Quality Management (TQM), employee job performance, organizational leadership, organizational culture, management commitment.

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تطبيق مبادئ إدارة الجودة الشاملة ودورها في تحسين الأداء الوظيفي للموظفين في مؤسسات القطاع الحكومي

الملخص

يستكشف هذا البحث أثر مبادئ إدارة الجودة الشاملة على أداء الموظفين الوظيفي، مع التركيز على دراسة حالة الشركة السعودية للكهرباء. تشير النتائج إلى وجود علاقة وطيدة بين تطبيق إدارة الجودة الشاملة وتحسين الأداء الوظيفي، حيث يلعب التزام الإدارة ووضوح أدوار الموظفين دوراً هاماً. وتؤكد الدراسة على أهمية القيادة والثقافة التنظيمية والتدريب المستمر في تعزيز بيئة عمل قائمة على إدارة الجودة الشاملة. وتشمل التوصيات رفع مستوى الوعي بين القادة بفوائد إدارة الجودة الشاملة وتعظيم إمكانات الموظفين. وتشمل مجالات البحث المستقبلية إجراء دراسات مقارنة بين القطاعات وتحديد معوقات تحسين الأداء الوظيفي في القطاع العام.

الكلمات المفتاحية:

إدارة الجودة الشاملة، أداء الموظفين الوظيفي، القيادة التنظيمية، الثقافة التنظيمية، التزام الإدارة.

INTRODUCTION

Over time, and in order to keep pace with the rapid developments of organizations and products in global markets and capture the largest market share, the concept of quality has evolved from focusing on the product only in the final stage to focusing on everything related to the product to ensure the production of high-quality products that help organizations achieve a competitive advantage. Therefore, organizations have become interested in human resources and employee performance and improving it by applying the principles of Total Quality Management (TQM).

Achieving TQM in any organization may require developing the performance of all employees in this organization, both leaders and subordinates, as they are the main starting point for achieving total quality, as they are the important source for achieving the quality of the organization. This development goes hand in hand with the application of TQM, which seeks to achieve the expected results with the least effort and the shortest possible time, and this achieves an increase in productivity and an improvement in the level of quality for the organization, which is what all organizations work for (Salem et al., 2013: 195).

The concept of TQM has evolved because of the efforts of a number of experts, including (Deming). These experts have gained the support of a few supporters in the United States, but in Japan the situation has been the opposite, as the Japanese have been quick to embrace these concepts with unprecedented enthusiasm, even to the point of naming the annual award for industrial excellence after (Deming), who formulated the philosophy that forms the basis of TQM (Bukhoosh, 2013: 95). It is difficult to apply the TQM approach in organizations

without the availability of a number of necessary requirements for its implementation, including the support and approval of senior management, where senior management must be convinced of the necessity of continuous development and then use total quality. The organizational culture and work environment must be prepared, as the success of TQM is dependent on preparing the organization to a working environment and making the organizational culture consistent with the application of TQM. Continuous training and education must be provided to the employees of the organization (Ghazel and Al-Alawi, 2016: 422).

The importance of applying total quality is that it is one of the most important basic approaches to improving the performance of business organizations and providing high quality, which results in achieving customer satisfaction. The nature of global competition imposes on any organization to understand what the customer wants and meet his needs upon request and at the lowest cost, and to provide the product with high quality and on an ongoing basis, and to anticipate the future desires of customers, keep pace with technological developments in the world. Therefore, every organization must apply TQM (Shattah, 2015: 55).

TQM involves the efforts of employees in all departments and levels of the organization to provide high-quality products with continuous improvement. The importance of TQM in organizations is due to the fact that it has a significant impact on the confidence and job attitudes of employees. If their views and ideas are taken into account during the development of organizational goals, strategies, and mission, employees are more likely to help their organizations. The employee's

emotional commitment also has a significant impact on his performance (Khan et al., 2019, 864).

TQM is based on continuous planning and improvement that never ends, no matter how efficient and effective the job performance is. The concept of job performance has received a great deal of attention in administrative studies in general, due to the importance of the concept at the level of the individual and the organization, and the overlap and diversity of factors that affect performance. Job performance refers to the employee's implementation of his work and responsibilities that the organization that his job is linked to entrusts him with, and means the results that the employee achieves in the organization (Farak and Miftah, 2016: 312: 314).

A study by Ayoub, (2023), has proven that there is an effect of the reality of applying the principles of TQM in improving the job performance of employees in the Saudi Al-Haramain Medical Devices Corporation, as the results showed that there is an awareness among the employees of the importance of the dimensions of total quality, as evidenced by the progress that came after focusing on the customer, which came first, followed by continuous improvement, which are two dimensions of TQM.

Based on this, it can state that, using the principles of TQM has a positive impact on improving the job performance of employees in any government or private organization. Therefore, more attention should be given to applying the principles of total quality and focusing on the most important dimensions of total quality and developing a team spirit to succeed in the philosophy of TQM.

METHODOLOGY

Employee performance stands as a critical metric for organizational success, prompting a growing interest in administrative approaches aimed at enhancing job performance levels. Among these approaches, Total Quality Management (TQM) has emerged as a prominent strategy. However, while some studies suggest a positive relationship between TQM implementation and job performance improvement, others highlight significant obstacles hindering the application of TQM principles. These obstacles include weak management commitment, insufficient resources, resistance to TQM principles, low morale, and ineffective planning.

Research Questions:

- What is the status of Total Quality Management (TQM) implementation at the Saudi Electricity Company?
- What are the existing levels of job performance among employees at the Saudi Electricity Company?
- Is there a statistically significant correlation between the implementation of Total Quality Management principles at the Saudi Electricity Company and the enhancement of employee job performance?

Field study procedures

This field study aims to assess the implementation of Total Quality Management (TQM) principles within the Saudi Electricity Company and investigate their correlation with employee job performance.

Study Approach:

The study adopts a descriptive analytical method, focusing on systematic data collection, classification, and analysis to draw

significant conclusions and generalize findings regarding TQM application and its impact on job performance (Al-Muqadhli, 2017).

Population and Sampling:

Population: All employees of the Saudi Electricity Company.

Sample: 110 employees selected to represent diverse gender and educational backgrounds.

Sample Characteristics:

Gender distribution: 60.0% male, 40.0% female.

Educational qualifications: 72.7% bachelor's degree, 15.5% diploma, 11.8% postgraduate.

Years of experience: 26.4% less than 5 years, 57.3% 5 to less than 10 years, 16.4% 10 years or more.

Developed questionnaire based on theoretical literature and prior studies.

Two main parts:

Part 1: Demographic data (gender, education, experience).

Part 2: Assesses TQM principles (10 items) and job performance (10 items) using a Likert five-point scale.

Reliability and Validity:

Internal Consistency: High Pearson correlation coefficients for TQM (ranging 0.523** to 0.736**) and job performance (ranging 0.679** to 0.815**).

Construct Validity: Strong correlation coefficients between each axis's total score and overall questionnaire score (ranging 0.872** to 0.925**, significant at $\alpha = 0.01$).

Stability: High Cronbach's alpha coefficients for TQM (0.949), job performance (0.931), and overall (0.917), confirming questionnaire reliability.

Statistical Methods:

Used frequency analysis, arithmetic averaging, Pearson correlation coefficients, Cronbach's alpha reliability coefficients, and a range equation to interpret Likert scale responses (5 for Strongly Agree to 1 for Strongly Disagree).

Research Objectives:

- To assess the current implementation status of Total Quality Management principles at the Saudi Electricity Company.
- To evaluate the levels of job performance among employees at the Saudi Electricity Company.
- To investigate the presence of a statistically significant correlation between Total Quality Management principles implementation and job performance enhancement at the Saudi Electricity Company.

Significance of the Study:

Theoretical Significance:

- This study may shed light on the importance of applying TQM principles within the Saudi Electricity Company, strengthening organizational practices.
- It may prompt the development of regulations and legislation aimed at improving employee job performance within the company.

Practical Significance:

- The findings of this study can inform recommendations and proposals for the effective application of TQM principles within the company.
- The study results may facilitate the development of a model for implementing Total Quality Management across public sector institutions in Saudi Arabia.

RESULTS AND DISCUSSION

The current study investigates the implementation of Total Quality Management (TQM) principles at the Saudi Electricity Company and evaluates its impact on employee job performance. The study aims to establish a statistically significant correlation ($\alpha = 0.05$) between TQM implementation and enhanced job performance among employees.

Question 1: Reality of Applying TQM Principles

To assess the reality of applying TQM principles, the arithmetic mean and standard deviation were computed for each statement in the first axis, "Applying the principles of total quality management at the Saudi Electricity Company". Results are presented in Table (1):

Table (1): Frequencies, percentages, arithmetic means, and standard deviations

Statement	Degree response	Arithmetic mean	Standard Deviation	Ranking
1	High	3.92	0.940	4
2	High	3.44	1.07	10
3	High	4.16	0.841	2
4	High	3.85	0.826	6
5	High	3.87	0.879	5
6	High	4.17	0.715	1
7	High	3.94	0.805	3
8	High	3.65	0.933	8
9	High	3.80	1.09	7
10	High	3.45	1.13	9

The results indicate a high perception of TQM application (mean = 3.82, SD = 0.588) among employees. Statements related to management's commitment and service effectiveness received the highest ratings, suggesting strong leadership engagement in quality management practices.

The high ratings suggest that employees perceive strong management commitment to TQM principles, fostering an environment where quality and service effectiveness are prioritized. This finding aligns with prior research (Jumaa, 2014), affirming the company's systematic approach towards achieving administrative goals through quality management.

Question 2: Job Performance Levels

To assess job performance levels, the arithmetic mean and standard deviation were calculated for each statement in the second axis, "Levels of job performance at the Saudi Electricity Company". Results are presented in Table (2):

Table (2): Frequencies, percentages, arithmetic means, and standard deviations

Statement	Degree of Response	Arithmetic mean	Standard Deviation	Ranking
1	Weak	3.30	1.28	10
2	High	4.10	0.908	3
3	V.High	4.42	0.839	1
4	High	3.87	0.996	6
5	V.High	4.28	0.814	2
6	High	3.89	0.922	5
7	High	3.72	1.06	8
8	High	3.42	1.12	9
9	High	3.85	1.05	7
10	High	4.02	0.977	4

The results indicate high job performance levels (mean = 3.89, SD = 0.756) among employees. Statements emphasizing employee perception of effective performance management received the highest ratings.

The high ratings suggest a strong perception of job performance levels among employees, indicating effective management practices that enhance employee productivity and role clarity within the organization. This finding is consistent with Ayoub's research (2023), highlighting a trend towards employee development under TQM.

Question 3: Correlation between TQM Application and Job Performance

To examine the correlation between TQM application and job performance, Pearson correlation coefficient was calculated. The results indicate a significant positive correlation ($r = 0.620^{**}$, $p < 0.05$) between TQM application and job performance. This suggests that higher levels of TQM implementation are associated with improved job performance among employees.

The positive correlation supports the hypothesis that effective implementation of TQM principles enhances job performance by fostering a culture of continuous improvement and employee empowerment. This finding corroborates Abu Shiri's findings (2018) and aligns with Sadikoglu and Olcay's research (2014), indicating a strong relationship between TQM practices and various performance metrics.

The study found that sample employees perceived the implementation of Total Quality Management (TQM) principles at the Saudi Electricity Company as "high". Specifically, phrases related to management's interest in quality compared to competitors and ensuring the effectiveness of services ranked highest. Similarly, employees perceived job

performance levels as “high”, with phrases regarding employee performance and awareness of their role ranking prominently. Moreover, a positive and direct relationship between TQM implementation and employee job performance improvement was identified, with a correlation coefficient of (.620).

CONCLUSION AND RECOMMENDATIONS

In conclusion, this research underscores the importance of Total Quality Management (TQM) principles in enhancing employee job performance within the Saudi Electricity Company. The findings reveal a strong perception among employees regarding the high implementation of TQM principles, particularly in terms of management's commitment to quality and employee performance levels. Moreover, the study establishes a positive correlation between TQM implementation and employee job performance improvement, highlighting the significance of aligning organizational practices with TQM principles.

Moving forward, it is imperative for organizational leaders to prioritize TQM processes and foster a culture of continuous improvement. Efforts should focus on raising awareness among administrative leaders about the benefits of TQM and leveraging the potential of qualified employees to achieve organizational objectives. Additionally, there is a need to refine administrative methods and approaches in accordance with TQM principles, drawing from successful experiences in other sectors.

Furthermore, future research endeavors should explore additional factors influencing job performance in various sectors and identify obstacles hindering performance improvement in public sector institutions. By addressing these challenges and continuing to integrate TQM principles into organizational practices, businesses can enhance their competitiveness, achieve sustainable growth, and ensure long-

term success in today's dynamic market environment.

Research Recommendations:

The study suggests the importance of raising awareness among administrative leaders in different sectors about the significance of implementing and enhancing TQM processes. Efforts should focus on spreading awareness about maximizing the benefits of qualified employees to align with senior management goals. Furthermore, administrative methods and approaches should be renewed in line with TQM principles, drawing from sectors that have successfully improved employee performance.

Proposed Future Studies:

Future research avenues include conducting similar studies in different environments, regions, and professional communities within government institutions in the Kingdom. Additionally, studies aimed at identifying job performance levels in various sectors with different variables should be pursued. Furthermore, there is a need for research focusing on identifying obstacles to improving job performance in public sector institutions and developing strategies to overcome them.

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